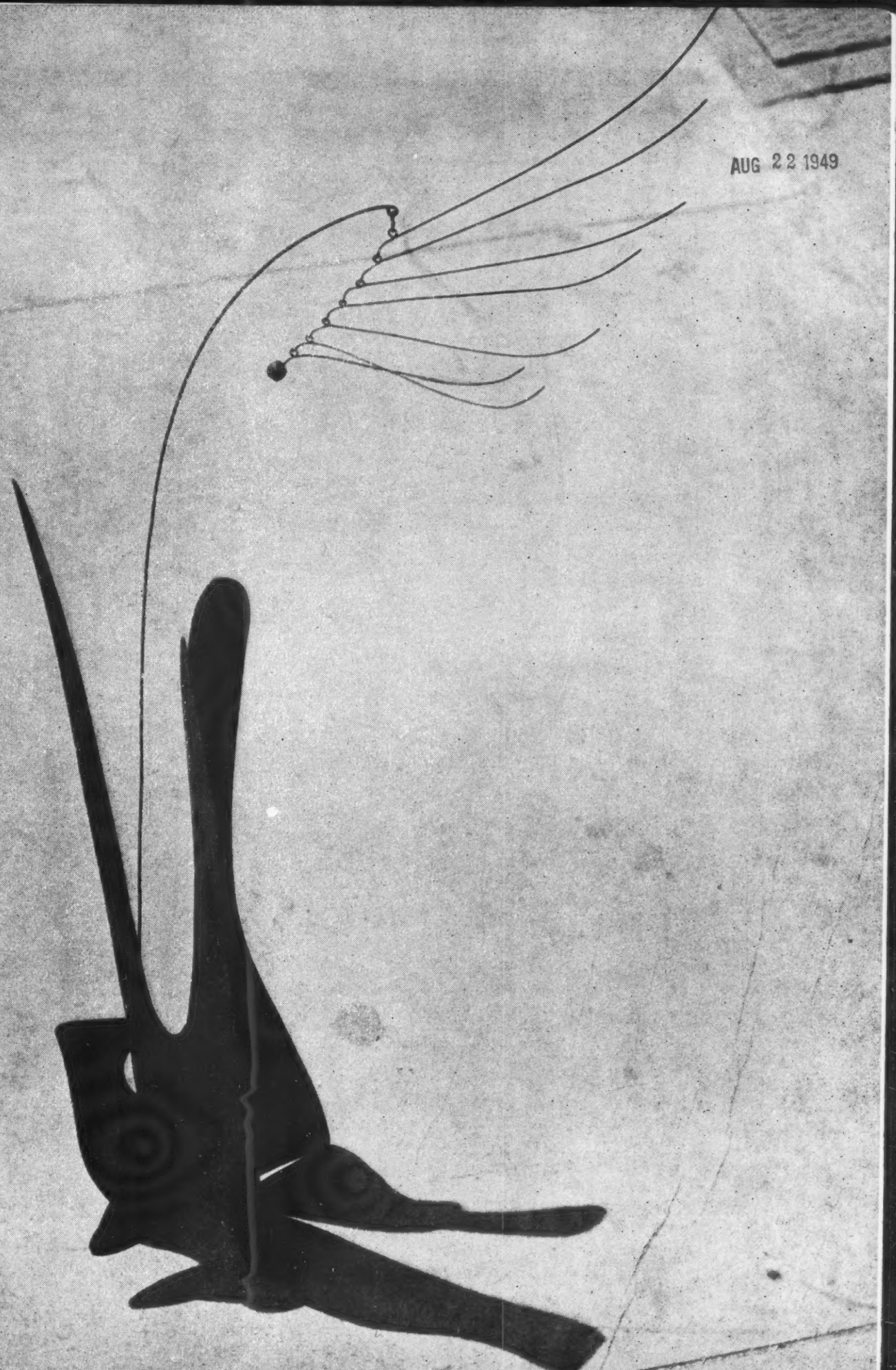

THE ARCHITECTURAL REVIEW VOLUME CVI NUMBER 632 AUGUST 1949 THREE SHILLINGS AND SIXPENCE

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Traductions Übersetzungen Переводы

THE ARCHITECTURAL REVIEW AUGUST 1949

Août 1949

Page 77: *Juges VI*, 34, *par Nikolaus Pevsner*. Dans cet essai écrit à l'occasion de la parution du nouveau livre de Sigfried Giedion intitulé 'La Mécanisation se met au Gouvernail,' Nikolaus Pevsner passe en revue l'œuvre accomplie par le Dr. Giedion depuis la publication de la thèse qu'il formula pour son doctorat en 1922, et démontre combien ses idées ont évolué, depuis l'attitude adoptée originairement par lui en tant qu'élève de Wölfflin lorsqu'il croyait que comme historien d'art il ne devait s'intéresser qu'à la matière visuelle, jusqu'à sa manière de penser actuelle. Après avoir manifesté que la doctrine de 'l'élément constitutif,' formulée dans un autre livre du Dr. Giedion—'L'Espace, le Temps et l'Architecture'—sinon de fait trompeuse, est de nature à donner lieu à des équivoques, le Dr. Pevsner fournit un commentaire sur 'La Mécanisation se met au Gouvernail,' chapitre par chapitre, et trouve que ce livre est entièrement dénué du défaut mentionné. A citer ses propres paroles: 'c'est le livre le plus poignant au sujet du dessin que je n'aie jamais lu.' Selon lui, une partie du charme de l'œuvre en question provient du conflit présupposé par l'attitude personnelle du Dr. Giedion envers la mécanisation en général.

Page 86: *Les 'Broads' en tant que Parc National, par John Arrow*. Les 'Broads' (Région de lacs et de marécages) du Norfolk, possèdent déjà beaucoup des qualités nécessaires pour former un Parc National, telles qu'elles sont définies dans la législation nouvelle que le Gouvernement est actuellement en train d'étudier. Ainsi que Lionel Brett l'a fait ressortir dans le numéro de juin de LA REVUE, cette région se prêterait bien à l'application du principe des usages multiples. Cependant, en vue de l'obligation qui incomberait à la 'National Parks Commission' de développer les aménités des 'Broads' pour le bénéfice des visiteurs, touristes et autres, le danger existe qu'en agissant ainsi, elle ne détruise cette caractéristique spéciale des 'Broads'—c.à.d. leur nature sauvage et solitaire. Cet article examine la manière dont les améliorations nécessaires pourraient être menées à bout sans entraîner cette conséquence néfaste.

Page 105: *Le Frontalier, par Philip Johnson*. Frank Lloyd Wright critiqua récemment le Musée d'Art Moderne de New-York pour avoir favorisé ce qu'il appelle des 'artistes au pochoir' et des 'fascistes.' Le Directeur du Département d'Architecture et de Dessin du Musée en question lui donne maintenant la réplique, et suggère qu'il y a peut-être de la place dans le monde tant pour les formes exubérantes de Wright que pour le 'prisme pur' de Le Corbusier.

Page 111: *L'Architecture et la Révolution Française, par Helen Rosenau*. Ledoux a, pour ainsi dire, joui récemment d'une vogue en Angleterre. Jean Jacque Lequeu est un nom moins familier. Dans cet article, le Dr. Rosenau rapporte ce qui est connu de lui et analyse les sources de son style. Elle suggère qu'une grande partie de ce que lui et Ledoux possèdent en commun peut être attribué à l'influence d'un autre architecte de la période de la Révolution, Jean-Jacques Boullée.

Page 117: *Les Stabiles de Calder*. Nous reproduisons ici des illustrations de quelques-unes des œuvres récentes du sculpteur américain Alexander Calder, suivies d'un bref commentaire critique.

Page 119: *Réévaluation—Trois Collèges d'Oxford, par Nikolaus Pevsner*. Dans ce quatrième article de la série de réévaluations paraissant dans LA REVUE, Nikolaus Pevsner prend en considération un Collège d'Oxford typique, et dans une tournée d'inspection, il démontre, au moyen d'illustrations, que le dessin du Collège est la conséquence des prédilections tout spécialement anglaises quant à la forme. Dans l'introduction, la Rédaction profite de l'occasion fournie par la réception d'une lettre d'un lecteur de LA REVUE pour définir de nouveau les objets et principes de cette série de réévaluations.

Page 126: *Ferronnerie Ancienne, par Marcus Whiffen*. Dans ce premier numéro d'une série de quatre courts articles rédigés par divers commentateurs sur les anciens usages architecturaux du fer, Marcus Whiffen écrit au sujet de l'emploi de la fonte pour les fenêtres à réseau dans la dernière partie du dix-huitième, et la première partie du dix-neuvième siècle.

August 1949

Seite 77: *Buch der Richter VI*, 34 *von Nikolaus Pevsner*. In seinem Bericht über Sigfried Giedions neues Buch 'Der Sieg der Mechanisierung' schildert Pevsner Giedions Entwicklung von seiner Doktorarbeit im Jahre 1922 bis heute. Er zeigt, wie dieser Wölfflin-Schüler von der Annahme, dass er sich als Kunsthistoriker ausschliesslich mit Sehgeschichte zu beschäftigen habe, zu seinem heutigen Standpunkt gekommen ist. Nachdem Pevsner dargelegt hat, wie Giedions Ansichten über den Stil des 19-Jahrhunderts in 'Raum, Zeit und Architektur' irreführend sind, untersucht er in 'Der Sieg der Mechanisierung' ein Kapitel nach dem andern und findet, dass dieses 'überzeugendste Buch über Industrie und Kunst, das ich je gelesen habe,' von solchen Unklarheiten ganz frei ist. Er lässt durchblicken, dass der Reiz dieses Buches in dem menschlichen Konflikt begründet sei, der Giedions Haltung dem Mechanisierungsprozess gegenüber bestimmt.

Seite 86: *Die Broads als Nationalpark von John Arrow*. Die Broads in Norfolk besitzen verschiedene der Eigenschaften, die man heute als wesentlich für einen Nationalpark betrachtet. Wir verweisen auf die diesbezüglichen Ausführungen von Lionel Brett in der Juni-Nummer der ARCHITECTURAL REVIEW. Aber während es die Aufgabe der National-Park-Kommission ist, besonderen Wert auf die Vorzüge der Broads vom Standpunkt des Ausflüglers zu legen, besteht die Gefahr, dass sie gerade das zerstören könnten, was den besonderen Reiz der Broads ausmacht: ihren wilden und einsamen Charakter. In diesem Aufsatz werden Vorschläge gemacht, wie notwendige Verbesserungen durchgeführt werden können unter Vermeidung dieses verhängnisvollen Resultats.

Seite 105: *Der Pfadfinder von Philip Johnson*. Frank Lloyd Wright hat kürzlich das Museum of Modern Art in New York angegriffen, weil es Architekten bevorzuge, die er als 'Schablonenzeichner' und 'Fascisten' bezeichnet. Der Direktor der Abteilung für Architektur und Kunstindustrie setzt sich mit Wrights Ansichten auseinander und weist darauf hin, dass für beides Raum vorhanden sei: für Wrights Formfülle und für Corbusiers Askese.

Seite 111: *Die Architektur und die französische Revolution von Helen Rosenau*. Von Ledoux ist in England neuerdings häufig die Rede, Jean Jacque Lequeu dagegen ist sehr viel weniger bekannt. Helen Rosenau stellt in ihrem Aufsatz alles zusammen was wir über ihn wissen und untersucht den Ursprung seines Stils. Sie weist darauf hin, dass viel Gemeinsames zwischen ihm und Ledoux auf den Einfluss eines anderen Architekten der französischen Revolution zurückgeht, auf Jean-Jacques Boullée.

Seite 117: *Calders Ruhende und bewegte Kunst*. Abbildungen der jüngsten Arbeiten des amerikanischen Bildhauers Alexander Calder und kurzer kritischer Kommentar.

Seite 119: *Neuwertungen: Drei Oxford Colleges von Nikolaus Pevsner*. In diesem vierten Aufsatz in der Serie von Neuwertungen der ARCHITECTURAL REVIEW beschreibt Nikolaus Pevsner ein typisches College in Oxford und weist an Hand von Abbildungen nach, dass die scheinbar zufällige Anlage das Ergebnis eines spezifisch englischen Formwillens ist. In der Einleitung knüpfen die Herausgeber an einen Brief eines Lesers an, um Grundsätze

und Aufgaben der ganzen Serie noch einmal darzulegen.

Seite 126: *Frühes Gusseisen von Marcus Whiffen.* In dieser ersten von vier kurzen Abhandlungen von verschiedenen Verfassern über die Verwendung von Eisen in Architektur schreibt Marcus Whiffen über die Benützung von Gusseisen in Fenstermasswerk im späten 18. und frühen 19. Jahrhundert.

Август 1949 г.

КРАТКОЕ СОДЕРЖАНИЕ СТАТЕЙ

Стр. 77. **НИКОЛАЙ ПЕВЗНЕР.** КНИГА СУДЕЙ VI, 34

В этом очерке по случаю издания новой книги Зигфрида Гидиона, *„Механизация Становится во Главе"* („Механизейшен тейкс Команд"), Николай Певзнер делает обозрение достижений д-ра Гидиона со времени опубликования его докторской диссертации в 1922 г., и указывет, как его подход эволюционировал с тех пор, как он был учеником Волфлина, когда он считал что, как историк искусства, он должен интересоваться исключительно видимыми предметами, то к чему он пришел теперь. Продемонстрировавши в „Пространстве, Времени и Архитектуре", теорию д-ра Гидиона об „основном факте", которая хотя и не обсолютно ошибочна, но может привести к двусмысленности, д-р Певзнер разбирает книгу Гидиона *„Механизация Становится во Главе"* („Механизейшен тейкс Команд") главу за главой. Описывая ее, как „самую захватывающую книгу о планировании, которую он когда либо читал", он находит работу д-ра Гидиона почти совершенно свободной от этой ошибки. Д-р Певзнер высказывает мысль, что некоторая доля очарования его книги является результатом конфликта, который вытекает из отношения самого д-ра Гидиона к процессу механизации.

Стр. 86. **ДЖОН ЭРРОУ.** РАВНИНЫ НОРФОКА (НОРФОК БРОДС), как НАЦИОНАЛЬНЫЙ ПАРК

Равнины Норфока (Восточно-прибрежная провинция Англии) обладают многими из тех качеств, которые требуются в Национальном Парке, как это определено законом, который в настоящее время обсуждает Парламент, и как указал Ляйонел Брэтт, в июньском номере Архитектюрал Ревью, равнины Норфока являются вполне подходящими для применения принципа многочисленного употребления. В то время, как это должно было бы быть обязанностью Коммиссии о Национальных Парках развивать существующие прелести этих равнин для людей, проводящих там свои каникулы, существует опасность в том, что, старясь доставить все эти удовольствия отдыхающей публике, они могут уничтожить как раз то, что составляет особую ценность открытых равнин — а именно, их дикость и уеденённость. Автор этой статьи разбирает, какие необходимые улучшения можно было бы ввести без того, чтобы испортить очарования этих равнин.

Стр. 105. **ФИЛИПП ДЖОНСОН.** ЧЕЛОВЕК НА ГРАНИЦЕ

Франк Ллойд Райт недавно атаковал Музей Современных Искусств Нью Иорка за то, что они относятся с пристрастием к архитекторам, которых франк Ллойд Райт считает, „людьми шаблона" и „фашистами". В этой статье Директор Отдела Архитектуры и Проектирования Нью Йоркского Музея отвечает ему, высказывая мысль, что, в конце концов, на этом свете можно найти достаточно места, как для пышных форм Райта, так и для ростой строгости Корбюзьера.

Стр. 111. **ЕЛЕНА РОЗЕНО.** АРХИТЕКТУРА И ФРАНЦУЗСКАЯ РЕВОЛЮЦЯ

Леду недавно вошел в моду в Англии. Имя же Жан-Жак Лекё гораздо менее известно. В этой статье д-р Розено говорит все, что извесно о нем и анализирует источники его стиля. Она подает мысль, что многое из того, что имеется общего между Леду и Лекё, может быть обязано влиянию другого архитектора периода французской Революции, Жан-Жак Буйе.

Стр. 117. **КАЛДЕР МОБИЛЕС И СТАБИЛЕС**

Иллюстрации некоторых из недавних работ американского скульптора Александра Калдера с коротким критическим комментарием.

Стр. 119. **НИКОЛАЙ ПЕВЗНЕР.** ПЕРЕОЦЕНКА, ОКСФОРД КОЛЛЕДЖ

В этой четвертой серии Архитектюрал Ревью о переоценках, Николай Певзнер рассматривает типичный Колледж Оксфорда и, в иллюстрированном обзоре, показывает, что его планировка является результатом специфически английского тяготения к чистоте форм. В предисловии редакция пользуется случаем, предоставленным письмом читателя Архитектюрал Ревью, подтвердить цели и принципы серий статей о переоценках.

Стр. 126. **МАРКУС ВИФФИН.** РАННИЕ ЖЕЛЕЗНЫЕ ИЗДЕЛИЯ

В этой первой из четырех коротких заметок, написанных различными людьми на тему об употреблении железа в ранней Архитектуре, Маркус Виффин пишет о применении чугуна для оконных ажурных работ в конце восемнадцатого и начале девятнадцатого века.

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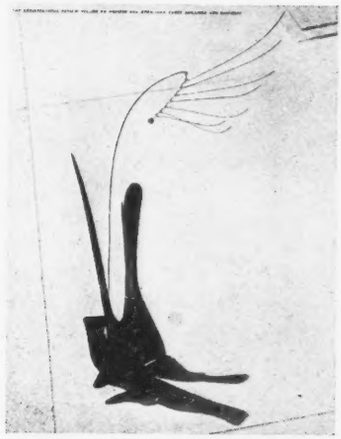

The Cover It is nearly twelve years since an exhibition of the work of Alexander Calder was held in England, and during that period his art has developed in directions which could not then have been foreseen. Believing that these developments—and the monumentally conceived 'stabiles' in particular—hold lessons for all concerned in 'putting the content back' into art (which of course includes architecture) the REVIEW presents on pages 117-118 a selection of Calder's recent work. The mobile on the cover, *Cockatoo*, is in the collection of Mr. and Mrs. C. Earle Miller, Downington, Pennsylvania.

The Authors *John Arrow.* Born 1907 in Toronto. Educated at Brentwood School and St. John's College, Cambridge. F.R.S.A. Was for 6 months secretary of Overseas Planning Committee at the M.O.I., and thereafter Director of the Overseas General Division. Has known Broadland intimately for 25 years, and lives there. Is secretary of the Broadland Protection Society. *Philip C. Johnson*, architect. Director of the Department of Architecture and Design of the Museum of Modern Art, New York. Has designed a number of private houses, and is regarded in America as the champion of 'contemporary formalism' as distinct from Frank Lloyd Wright's championship of the 'organic.' His published works include 'The Life and Work of Mies van der Rohe,' and (with Henry-Russell Hitchcock) 'The International Style: Architecture since 1922' (1932). *Helen Rosenau.* Studied in Germany, France, Italy and at the London School of Economics. Ph.D., London and Hamburg. Her special field is the sociology of architecture. Holds a London University research grant, and is an Extra Mural lecturer. Her published work includes 'Design and Mediaeval Architecture'; 'The Painter J.-L. David'; 'A Short History of Jewish Art.' Her study of Lequeu in this issue is part of a wider one on the social elements in eighteenth century architecture.

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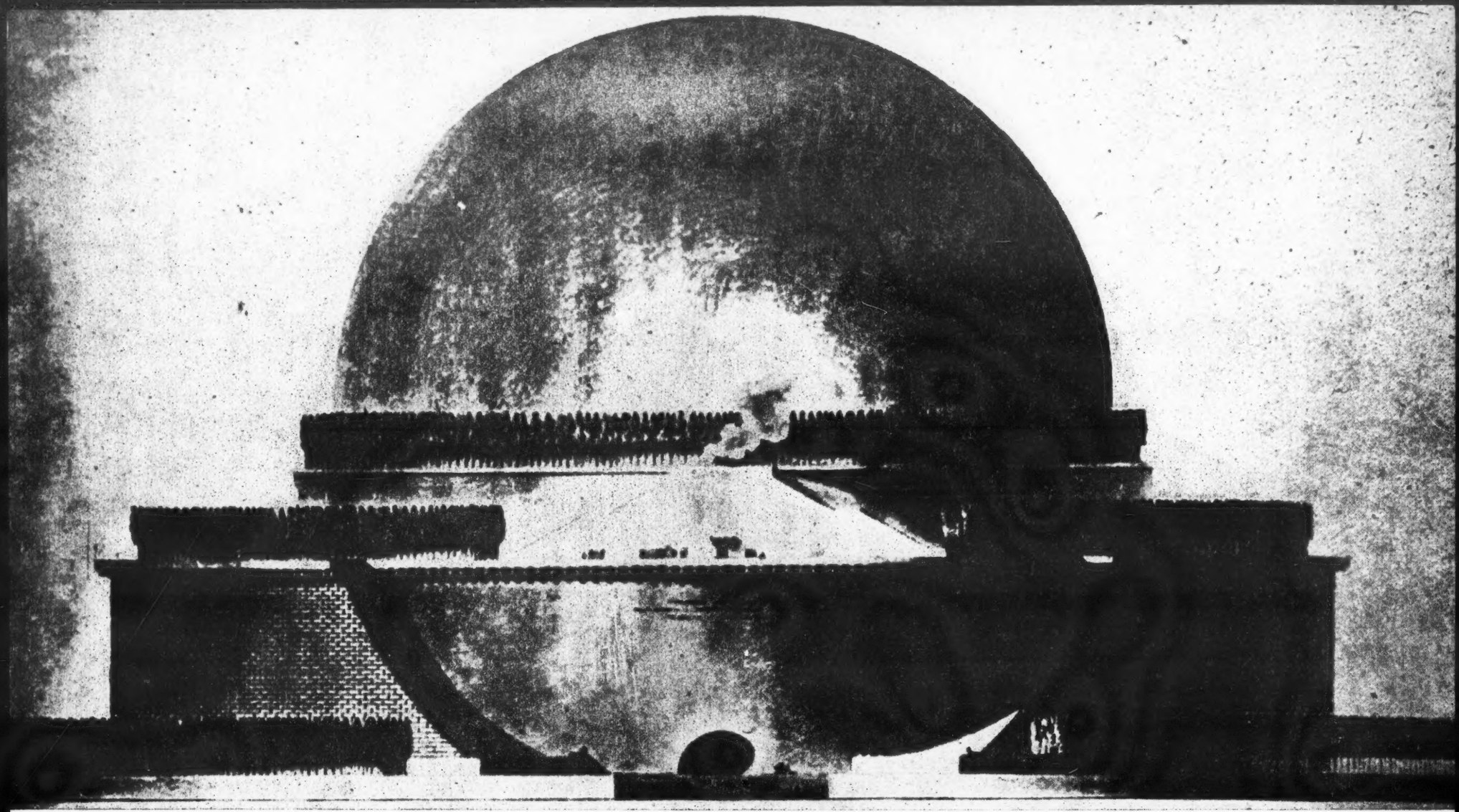
THREE SHILLINGS AND SIXPENCE



HOMAGE TO NEWTON *Of the major French architects at work during the period of the Revolution, it is Ledoux who has received the lion's share of attention in recent years. Few would dispute his claim to an imagination fertile in eccentricities, to a mind well in advance of his time in matters which may loosely be grouped under the heading of sociology, and to a really masterly, if at times wilful, handling of materials and volumes. The work of his contemporary, Jean Jacque Lequeu is, on the other hand, relatively little known and, in an article on pp.* 111-116, *Mrs. Helen Rosenau discusses his published and executed designs against the background of histories. However, rather than Ledoux or Lequeu, the author believes that further research will reveal Jean-Jacques Boullée to have been 'one of the originators of the remarkable style which is now usually called that of the French Revolution,' and a later article will describe his work. The drawing above shows a proposed cenotaph to Newton, designed by Boullée about 1787, the year in which Marat's translation of the* Opticks *first appeared. The feeling for geometry, for scale (emphasized by the multiple rows of trees planted in three tiers and by the rusticated base walls) and above all the remarkable sense of theatre, make this concept outstanding among the many unexecuted dreams of these* fin de siècle *architects.*

Nikolaus Pevsner

JUDGES VI, 34

But the spirit of the Lord came upon Gideon and he blew a trumpet.

AMONGST ALL ARCHITECTURAL CRITICS writing in America or for America Lewis Mumford and Sigfried Giedion are the two most powerful. However different in many respects—Mumford an American indeed, Giedion Swiss with a German cultural background; Mumford placid, Giedion restless—the source of their power and influence is yet essentially the same. Whatever architectural or semi-architectural topic they write about, they always reach beyond architecture into civilization as a whole, and more specifically, the future of our own civilization. Their books, besides being works of scholarship, are trumpet-blasts.

But the combination of historiography and propaganda has its dangers, and Dr. Giedion has not always escaped them. What has established him in his precarious and fascinating position is a matter of peculiar personal experiences. He took his degree with Wölfflin, of all art historians of the twentieth century the one most convinced that art history is history of visual matters exclusively and should not be disturbed by any *Kulturgeschichte* or *Geistesgeschichte* or *Sozialgeschichte*—history of culture representing the trend of the nineteenth century which culminated in Wölfflin's own master Burckhardt, history of thought representing what came to the fore with the most inspiring art historians slightly his younger, with Dvořák and Pinder, and social history representing what began to haunt those who only started when he was sixty. Dr. Giedion's doctor thesis called *Late-Baroque and Romantic Classicism* was a brilliant essay in Wölfflin's method. It decided once for all that the Neo-Classical tendency of about 1760-1830 is not a genuine style but the fashion in which first the Late Baroque and then the Romantic Movement chose to clothe their architectural creations. Its chapter headings are Wall, Space, Sequence of Rooms. Neither the Industrial Revolution nor the French Revolution are to be found in it; for they are not concerned with the eye.

This remarkable first book came out in 1922. In 1928 it was followed by *Building in France—Building in Iron—Building in Concrete*. In the same year CIAM was founded, and Dr. Giedion became its secretary. *Building in France* is the very opposite of *Classicism*. Its typography is by Moholy Nagy, as militant as its text, which tries to establish a new history of nineteenth century architecture from the Halle au blé to Perret and Tony Garnier. Much of the book went into Dr. Giedion's first American publication, *Space, Time and Architecture*, a *magnum opus* not only in bulk. It was published in 1941 and has now reached its sixth impression. Its qualities are well known. It combines a superb intelligence in the ordering of facts with a genius in the *illustration juste*. And as to details, we are all indebted to Dr. Giedion for his chapters on iron architecture, the international exhibitions, the balloon frame, the St. Louis waterfront, the Chicago School, and so on.

There is, however, one *caveat* which, I think, should be put against *Space, Time and Architecture*. If in *Classicism* Dr. Giedion had been the historian of æsthetic phenomena entirely, in *Space, Time and Architecture* he sometimes tends to forget that architecture has its æsthetic as well as its technical and functional sides. In fact his account of nineteenth century architecture which occupies more than half the book is not really an account of nineteenth century architecture at all, although many, students especially, let themselves be deluded into thinking so. It is the history of one tendency made to appear as if it were the whole. To show how this is meant I prefer to take one of the rare examples of the same ambiguity in Dr. Giedion's new book, the book which forms the occasion for this attempt at an appreciation of his work. On page 324 he writes about English furniture of the Sheraton period: 'The chairs . . . are graceful, but no more. Their constituent content is not in proportion to the esteem in which they are held.' Should we take it then that the constituent content of a piece of furniture has nothing to do with its æsthetic qualities? It seems indeed that this is what Dr. Giedion means; for he goes on to describing as 'the most interesting furniture' of the late eighteenth century such pieces as dressing stands with their ingenious interior fittings and mechanical devices, the forerunners of that nineteenth century patent, multi-purpose and collapsible furniture which he discusses at great length and with great gusto and which he calls 'the constituent furniture of the nineteenth century.'

The term *constituent facts* of a period corresponds to what others have called the essentials or the leading ideas of a period. Non-essential facts he calls transitory.

Now, to return to *Space, Time and Architecture*, is it true that the constituent facts about architecture of the nineteenth century are entirely Dr. Giedion's iron, glass and concrete story, and that Schinkel's, Butterfield's, Charles Garnier's, Voysey's, Mackintosh's buildings are among the transitory facts? Surely, Dr. Giedion is trying here to replace what is constituent in the sense of essential for an understanding of the style of the nineteenth century by what is constituent in the sense of essential for an understanding of the genesis of the *twentieth* century. Dr. Giedion enthrones one set of values—and very important values they are—at the expense of all other values, because they happen to be of the greatest interest to the present and future of architecture. This changeover from telling historical truth—the whole truth—to blasting a trumpet, be it ever so rousing a trumpet, is a sin in a historian.

The title of Dr. Giedion's new book *Mechanization Takes Command* makes it at once clear that he has not again committed this sin. This book, equally awe-inspiring in bulk as *Space, Time and Architecture* and equally thrilling—to me, I don't hesitate to say, the most thrilling book on matters of design I have ever read—deals with the development of machine production of things in everyday use, and a welter of problems arising out of it. But it is emphatically not a history of design or applied art or industrial art from 1800 to the present day, although it contains more factual material on it than we have ever seen assembled in one book. The passage which I quoted before on the cabinet-makers of the late eighteenth century is in that sense not at all characteristic of *Mechanization Takes Command*. Far more characteristic are the two chapters to which readers of THE ARCHITECTURAL REVIEW were treated in October, 1947, and January, 1948, the one on the development of the bath, the other on the importance of the *tapissier* in the nineteenth century (a transitory fact incidentally to Dr. Giedion). They also gave a good idea of the wide range of topics discussed.

Mechanization Takes Command begins with the fundamental significance of the concept of movement in Western civilization, from Aristotle and the medieval scholastics to the idea of progress as it dominated the late eighteenth and the nineteenth centuries. The inventiveness of the West is closely tied up with this, and the lure which the machine, the intricate tool, automata and so on have had on the Western mind for two or three hundred years. After this brief introduction we are taken straight into the details of the development of one particular product, the lock, from Egypt to Yale, and find ourselves absorbed in sliders and tumblers instead of Albert the Great and Nicolas Oresme. This history of a product is followed by the equally detailed history of a technique: the assembly line, beginning in the United States as early as 1783 with Oliver Evans.

Chapters four to six which now follow are more systematic. Chapter four on mechanization and the organic, describes the history of agricultural machinery (the first combine harvester was patented as early as 1836), the history of bread-baking and slaughtering and finally of artificial breeding and fertilization. The subject of chapter five—mechanization and human surroundings—is the history of furniture, brilliantly original, widely knowledgeable and presented with more philosophical insight than any specialized book I know on the subject. It is in this chapter that the reader is for the first time made fully aware of what Dr. Giedion in the very first paragraph of the book calls its theme and that of *Space, Time and Architecture*, namely 'the split between thought and feeling' which is the curse of the modern age. Heavy drapes, ottomans, poufs, represent one side of the history of furniture in the nineteenth century, the ingeniously constructed pieces of patent, transmutable, 'nomadic' and especially of railway furniture, the other. Chapter six is called Mechanization encounters the Household. The layout of kitchens, the development of the range, the vacuum cleaner, the washing machine are all dealt with, and finally in a separate chapter, the history of the bath.

Illustrations chosen with consummate skill range from Carpaccio to Mondrian and from an Islamic Maslak to a match-box in the shape of a crusader's tomb. They sometimes convey Dr. Giedion's points more incisively even than his text, for instance where to evoke the incongruity of the Victorian world he calls up Max Ernst's picture books, or where to convey the horrors of mechanized death, that is the Chicago slaughterhouse technique, he switches over from documentary photographs to the slashing of the eye in the surrealist film *Le Chien Andalou**.

The pages on the mechanization of death, that is the end of chapter four, followed by a few more on the mechanization of birth with the help of artificial insemination and incubator breeding, are the climax of the book. Every sentence here, pronounced completely dispassionately, is as crushing as *Brave New World* and *The Loved One*.

Having seen the 'median section of the cow showing the reproductive organs with nozzle of syringe inserted into the cervix' and a 'machine dragging a pig through a series of little knives, attached

*Occasionally, it must be admitted, his pictorial comparisons tend to carry him away. What, it may be asked, is the precise reason for showing Kandinsky and the cyclograph together, or Klee together with Gilbreth's motion studies? Klee's line, Dr. Giedion says rightly—and his analysis of Klee is the best I know—is 'a stroll for strolling's sake' (p. 111), but Gilbreth's lines were drawn for wholly utilitarian purposes. The parallel with Boccioni and Duchamp is much more legitimate. Yet even so, how are we to understand that Duchamp's art is 'interfused with the period' (p. 107). Are we to assume influence of science on art or *Zeitgeist?*

to adjustable springs—which will fit themselves to the form of the pig without very much trouble. Capacity eight pigs per minute,' we feel so close to the gas chambers of the Nazis that we are almost waiting for the prophet's voice to shake us into final submission: 'Woe to the sinful nation, a people laden with iniquity, a wicked seed, ungracious children,' but the prophet is not heard until the very end of the book is reached, and then, immediately after the comparatively innocuous considerations of twentieth century bathroom equipment, the clarion-call is dimmer.

Or is the lack of conviction of the last few pages due to other reasons? One no doubt is literary; Dr. Giedion speaks not with the voice of Isaiah. Here is his message:

'We must establish a new balance
between the individual and collective spheres
We must establish a new balance
between the psychic spheres within the individual
We must establish a new balance
between the spheres of knowledge
We must establish a new balance
between the human body and cosmic forces.'

That, nobody is likely to deny, is weak in the wording but also weak in the message. And it may well be that after tracing so consistently the development from the earliest tools to full mechanization, from the earliest thought on propaganda and management of a business to the complete subjugation of the individual by means of ingeniously played psychology, one feels so completely enwrapped in a relentless tragedy that any suggestion of a possible happy end would come as an anti-climax. A sentence such as 'In the future (mechanization) may have to be checked in some way' (p. 715) certainly does.

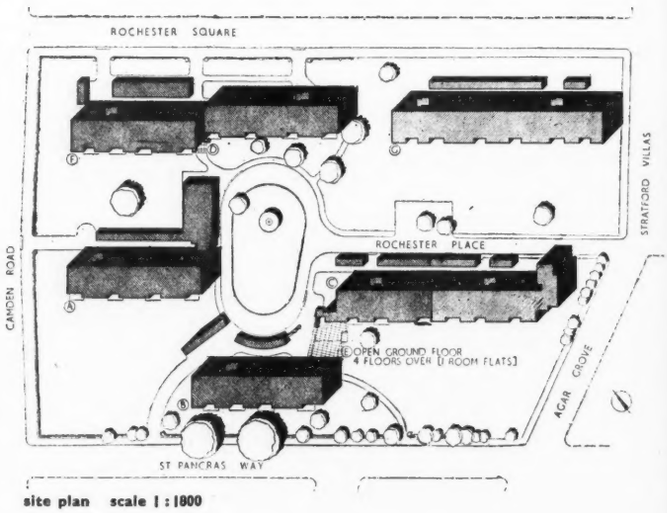
But perhaps there is yet a deeper reason for Dr. Giedion's greater power in describing than in fighting mechanization. He is not wholeheartedly against it, as the prophet must be to rouse the masses. He writes, 'One must discriminate between those spheres that are fit for mechanization and those that are not' (p. 720), and he never tells us precisely where his dividing line would run. Moreover, he could not possibly describe the intricacies of the Yale lock and patent furniture so interestingly, if he were not enthralled by these gadgets himself. From patent furniture he carries straight on to Breuer, Mies van der Rohe and Le Corbusier, and no one would dare to suggest that the work of these friends and fellow-fighters would appear fatal to him. Yet surely it is part and parcel of the process of mechanization. Again, he could not have reduced so persuasively the history of nineteenth century architecture to a matter of iron, glass, steel and concrete, if he had not had a primary instinctive liking for at least that degree of mechanization. The human conflict lurking behind all this is not the least fascination of *Mechanization Takes Command*.

Dr. Giedion tells us that more than seven years went into its preparation. It incorporates extensive first-hand research, and research carried out under peculiarly difficult conditions not only because of the war, but also because so many firms have destroyed their nineteenth century records and catalogues. Even the Patent Office at Washington decided to scrap many of its nineteenth century models in the last twenty-five years. And although Dr. Giedion did most of his preparatory work in America, his examples are by no means confined to that country. His command of European sources is staggering too ; French, German, Swiss, it is all the same to him. Britain also comes in continually, though perhaps a little less in comparison than it should. English inventiveness in the seventeenth century, the age of Hooke and Tompion, the English use of Coad stone about 1800 to replace sculpture (funeral monuments selected from catalogues), the English contribution to the discovery of oriental forms for European use (Sezincote, Brighton, etc.), and the English contraptions and gadgets in the years around 1851* might have found more consideration.

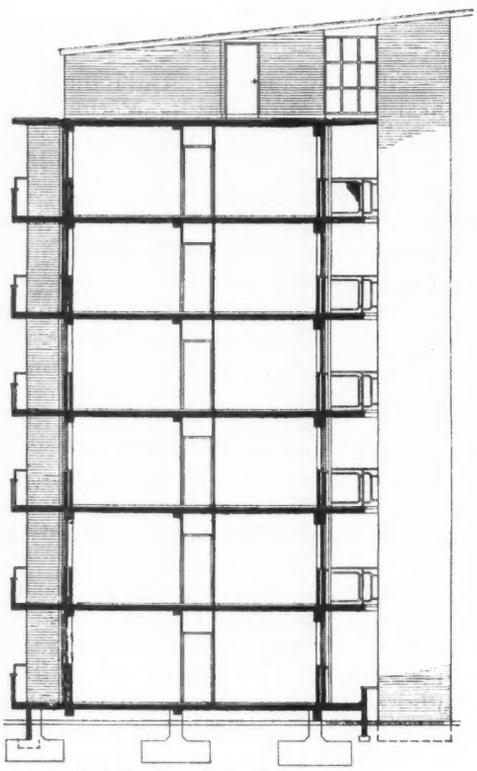
But then Dr. Giedion emphasizes all the way through that his aim was not and obviously could not be completeness. With exemplary modesty he declares that he only wanted to open a new field, not to cover it. In point of fact he has got nearer to covering it than would seem humanly possible.

*1851 Catalogue Vol. II, p. 754 (Furniture No. 241): Patent portable barrack, college, camp, and cabin furniture containing a chest of drawers, wash-stand, dressing-table and glass, iron bedstead with curtains and bedding, reclining chair, towel-horse, writing and dressing-case and having sufficient room in the drawers to contain a complete military outfit, the cases at the same time forming a wardrobe. Compare with this Dr. Giedion, e.g. pp. 393, 473.

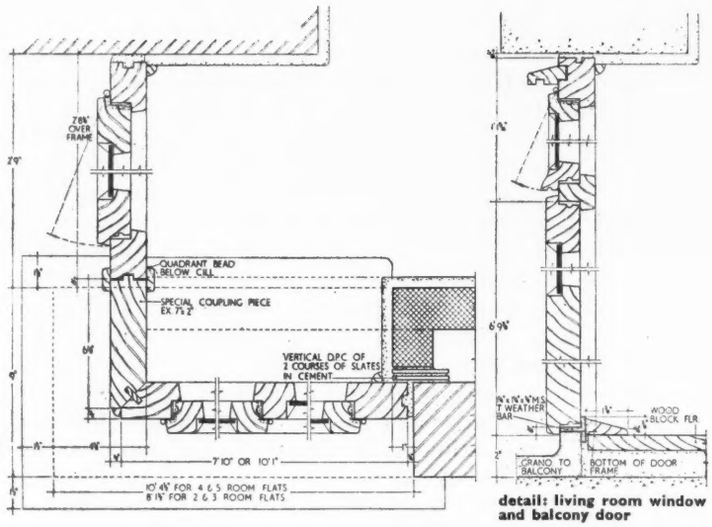
FLATS IN ST. PANCRAS



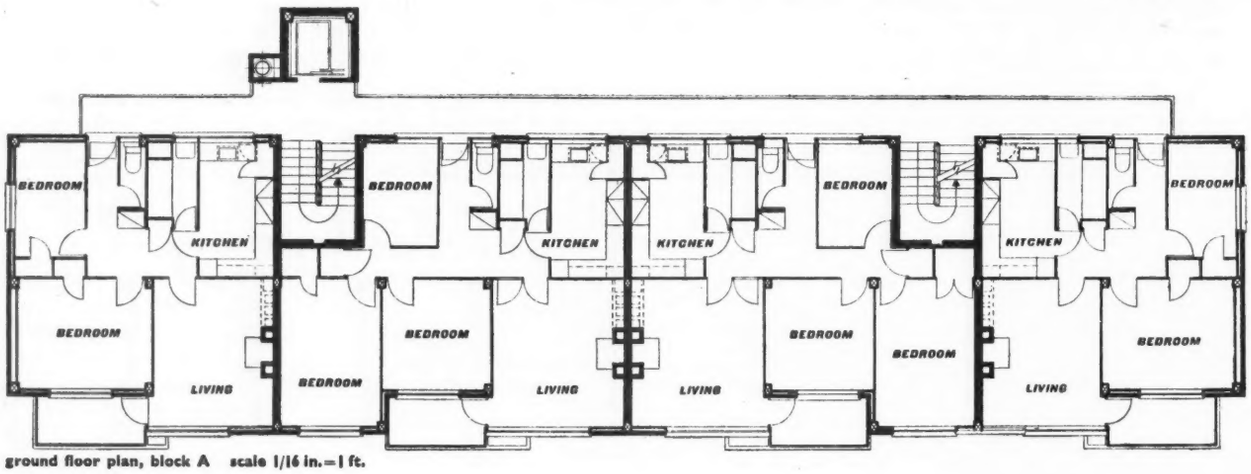
site plan scale 1 : 1800



section, block D scale 1/16 in. = 1 ft.



detail: living room window and balcony door



ground floor plan, block A scale 1/16 in. = 1 ft.

1

1, the four-storey block E of one-room flats, and the six-floor block C, seen from the south.

FLATS IN ST PANCRAS

NORMAN AND DAWBARN: ARCHITECTS

plan This housing scheme in St. Pancras Way provides 126 flats arranged in five blocks of six floors each and one block of four floors raised over a covered space. The accommodation comprises 12 one-room flats for old people, 18 two-room flats, 43 three-room flats, 30 four-room flats and 23 five-room flats; provision is made for future extension of block "C", and a complete additional block "G" to increase the total by 64 flats. Requirements stipulated by the Council included:—

- **a** One-room flats not to be segregated.
- **b** Each lift to serve not more than four flats per floor.
- **c** Constant hot water or independent water heaters; independent solid fuel heating in living rooms.
- **d** Laundry facilities, either by communal utility rooms in each block or a central communal laundry.
- **e** Space for organised games.
- **f** Generous windows.

the site abuts Camden Road, which is part of the "B" Ring Road in the L.C.C. plan. Rochester Place (partially closed) leads to a central roundabout. There are secondary entrances for refuse collection, fuel delivery, etc. The gross area of the site is 3.24 acres and the population density 147 persons per acre. Flat blocks are sited generally to give bedrooms and living rooms a south-west aspect. Pram stores are easily accessible for each block, and the sub-station and communal laundry are placed centrally. The surfaced playground is within the roundabout; open spaces are grassed; existing trees were preserved where possible.

construction The flat blocks are steel framed with reinforced concrete stanchion bases. Walls are 2½in. cavity, with 4½in. brick outer skin and 2in. breeze inner skin. Floors and roofs are reinforced concrete hollow tile; cantilevered galleries and balconies are solid reinforced concrete. Partition walls are 2in. breeze laid on engineering bricks which serve as skirtings. Windows

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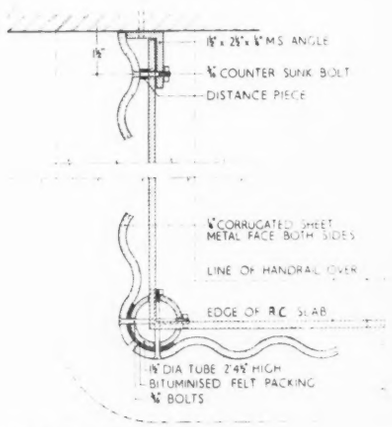
3

2, detail of balconies to one-room flats of block E.
3, open ground floor of block E giving covered access between south and north parts of the site.
4, block B and south-east façade of block E.



detail of typical balcony.

are standard wood frames; door linings are standard pressed steel. The laundry has brick piers with rendered 9in. panel walls; roof slabs are hollow tile. Pram stores have 4½in. brick walls externally, with 3in. brick-on-edge load-bearing partition walls; the roof is 3in. reinforced concrete slab.

finishes External walls are yellow stock. Private balconies are steel frame with asbestos sheet faced in steel both sides, painted Indian-red or bronze-green. Access galleries and staircase balustrades are steel tube painted blue, with bright yellow wire mesh panels. Staircase walls are distempered grey-green with a painted dado of Indian-red. Windows are painted ivory; beam faces are finished in grey cement paint; entrance doors to flats are grey framed with lower panels of oiled

4

oak. The panel walls round lift entrances are blue engineering bricks; lift doors are painted brick red. Internal walls are two-coat plaster, distempered ivory throughout, except for kitchens and bathrooms, which are ivory flat paint. All ceilings are distempered. Living room and bedroom floors are Columbian pine blocks, kitchen, hall and bathroom floors are mastic asphalt. Kitchens and bathrooms have white-tiled splash-backs; living room fires have slabbed tile surrounds. Floors in the laundry, lobby and cloakroom are terrazzo; in the calorifier room and sub-station they are granolithic. Walls in the cloakrooms, halls and calorifier room are flat painted and the laundry has a 7ft. 6in. dado of white tile. Kitchen units in all flats are finished in gloss paint, ivory for the bodies, grey for the doors; draining boards

5

5, block F seen across the playground.

6 7

6, ground floor balcony. 7, aerial view of courtyard and block E from the north.

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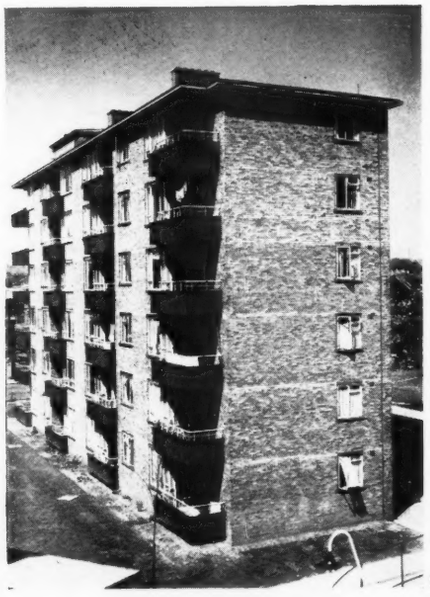
8. west façade of block D, facing the central courtyard. 9. block A from the south.



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block A south-west elevation scale 1/32 in. = 1 ft.

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are hardwood; dresser tops are covered in linoleum.

miscellaneous All blocks have gallery access to flats, and one lift and two staircases; refuse chutes are built in. Each flat has a fitted kitchen, built-in fuel bin, and cupboards for meters, linen and clothes; each living room leads on to a partially recessed private balcony. Flats with three rooms and over have separate w.c. and bathroom; the kitchen-bathroom unit is standardised throughout the scheme, and a large duct contains all services, including soil pipe and individual storage water-heaters; this duct is easily accessible for maintenance. One-room flats have built-in electric fires to save labour for elderly occupants. The communal laundry is fitted with 20 washing machines; hot water is from a 300-gallon thermal storage heater, and a water-softening plant is installed. The laundry, which includes a cloakroom, adjoins the electrical sub-station. Associate-in-charge: Whitfield Lewis. Senior assistant: C. A. Richards.

10, ground floor balcony of block F and covered way between blocks D and F. 11, blocks D and F, facing Rochester Square, from the east.

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John Arrow

THE BROADS AS A NATIONAL PARK

introduction

The more the English become an urban race the more necessary it is to ensure that a counterbalance to their urban environment is available in the shape of tracts of wild countryside where they can re-establish contact with nature, where they can breathe deeply (both literally and metaphorically) and where they can enjoy a life in which their own initiative has full scope in contrast to the synthetically organized life of the town. To prevent the remaining wild areas of this thickly crowded island from disappearing is one of the objects of town-planning, and to see that they are not only preserved but preserved in a form that will enable them to fulfil their restorative functions properly is the object of the National Parks legislation which Parliament is now considering. One of the proposed National Parks is the Norfolk Broads, which already have a great many of the qualities required. In a relatively small area they still achieve an atmosphere of solitariness. Their great asset, of course, is the safe amateur sailing which combines a twenty-four-hour-a-day open air life with all the opportunities for personal initiative and self-reliance you could ask for. It will be the task of the National Parks Commission to plan and improve the Broads so as to serve these purposes even better. This therefore is a case, as Lionel Brett pointed out in the June issue in his article 'Attitudes to Landscape,' where the genius existing in the locality must be cultivated to the maximum extent but where this can be done without departing from the principle of multiple use. It is for the Commission to decide on their objectives and allocate priorities accordingly. The danger, however, is that in trying to give the users of this National Park better amenities of all kinds—camps for more holiday-makers, better sailing facili-

ties, better sanitation and faster motor-launches—the Commissioners might find in the end that they had destroyed the very thing that gives the Broads their special value; their wild and solitary nature. It is the purpose of this article to describe the essential character of the Broads and discuss how improvements could be made so as not to destroy but to intensify it.

state of the Broads

the area

THE APPROPRIATE SHAPE for a National Park based on Broadland is not easy to define. Draw a line from Waxham on the East Norfolk Coast, through Wayford Bridge to Norwich; thence to Geldeston and Beccles returning to the coast at Lowestoft, in Suffolk; and an area will be enclosed within which lie all the broads and their interconnecting rivers and dykes on which visitors, and some local residents, enjoy during the Spring and Summer months facilities for boating in various forms with, as a minority interest, the study of Broadland's botanical and zoological peculiarities. But to regard such an area, or anything like it, as a satisfactory one for the purposes of National Park planning would be illusory on two counts.

Firstly, it includes large tracts of countryside which are only very remotely connected with any Broads activity. The rough lay-out of Broadland consists of three rivers—the Yare, the Waveney and the Bure—each with its attached broads, or shallow meres, and each finding its exit to the sea through Gt. Yarmouth harbour. Spreading fanwise from their confluence the rivers run through low-lying marshland; but between the three riverine systems, and broadening the further the coast is left behind, are spurs of higher ground; this pattern is repeated on a smaller scale in the upper Bure area where two tributaries, the Thurne and the Ant, flow into the main river. The way of life on this higher ground, exclusively agricultural, does not at any point make real contact with holiday-making on the rivers and broads. The farming community certainly uses the riverine marsh for grazing; and there is an economic link between farmer and visitor in the sense that the latter is an indirect customer for dairy produce, vegetables, etc. But that is all. The agricultural worker, except for a very occasional fisherman, shows no desire to get on to the water. In direct contrast, visitors to the Broads are essentially boat-minded; they seldom stray half a mile from the water; all that East Anglian farming means to them is that the distant view across the marsh is rural rather than industrial. But since the farming area is many times greater than that used by holiday-makers and naturalists, it would be irrelevant to include it within a National Park specifically designed around the Broads. The only case for doing so would rest on a threat of industrialization. This does not exist.

The second reason for rejecting in any form a National Park boundary enclosing the present area of Broads holiday activities is that it would preclude any future extension. This is feasible, and should not be ruled out at the start. Years ago, when the rivers of East Norfolk and Suffolk were important arteries of trade on which cargo wherries plied regularly and in great numbers, navigation was possible from Wayford Bridge to North Walsham; from Coltishall Lock to Aylsham; and from Geldeston Lock to Bungay and beyond. Today, both the locks are out of action and no boat penetrates above Wayford Bridge. But there is no reason why they should not be restored, and the now disused stretches of river made navigable.

Perhaps the best way to approach the question of the shape of a Broads National Park is to study the drainage system of this part of East Anglia. It is a two-level system, the lower level being made up of a network of dykes on the marshes, which are pumped out into the high level system consisting of the rivers, with their natural outlet to the sea. This system is maintained by the East Norfolk Rivers Catchment Board, and a map of this body's area of competence indicates the sort of shape which would be appropriate for a Broads National Park. Much of the Catchment Board area is irrelevant to the main purpose, for the complex of small streams above Norwich, together with the River Tas basin, are quite unsuitable for navigation and are not sufficiently tidal or saline to provide special interest for the naturalist. But what emerges clearly is that the parts of Norfolk and Suffolk where the presence and problems of water dominate the terrain, constitute the very opposite of a solid block; on the contrary, they suggest a system which may properly be called tentacular.

It is upon the control and development of these tentacles that a Broads National Park Authority must concentrate. It is a waste of energy to look beyond them, for in these winding stretches of river and marsh will be found all the problems which must be solved, all the dangers which might threaten the amenities of holiday-makers, and all the opportunities for extending them. These tentacles, then, provide the basic geography for a Broads National Park.

the tides

The physical features of the Broads may be classified as follows. There are about one hundred or more miles of major navigable waterways. Of this total thirty miles are dominated by fierce tides which hinder communications in general, and in particular hamper passage by sailing boat. Below Acle Bridge on the Bure, Reedham Ferry on the Yare and St. Olaves Bridge on the Waveney the state of the tide rigidly controls the movement of a sailing boat. If both wind and tide are contrary, little progress can be made; even with a fair wind it is difficult to make much headway against the tide; and at the entrances to Gt. Yarmouth yacht station the tidal stream may be so powerful that manœuvring under sail alone is dangerous except at slack water. It is easy to see how this affects communications. Progress downstream is restricted to seven hours in every twelve, while upstream it is restricted to five hours; for under normal conditions the ebb, with the weight of up-river drainage water behind it, is more powerful than the flow. In practice, the restriction is even more severe, for passage by hired boats, the great majority of those using the waterways, is forbidden at night. This tidal barrier at the junction of the three rivers has contributed, though not perhaps decisively, to a lopsided distribution of boatyard facilities in Broadland and to the fact that in recent years more motor cruisers than sailing boats have been built; for with a powerful engine you can 'buck' the tide.

grown-up areas

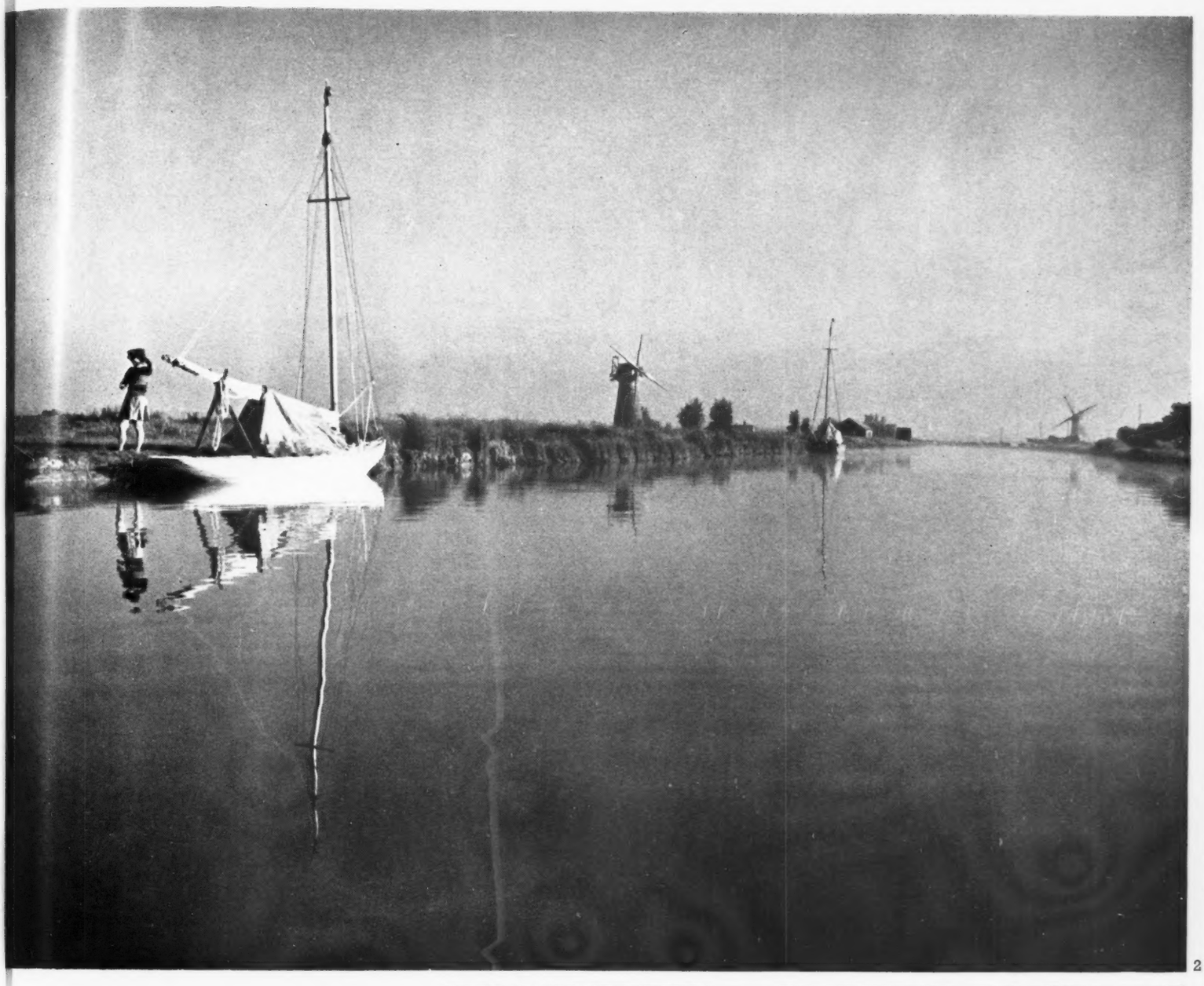
The remaining seventy odd miles of river are free from strong tides; but sixteen miles are fringed with mature trees which make sailing a doleful business of drifting through a green canyon—albeit sometimes a beautiful one—at the mercy of stray puffs of wind which come and go fitfully. This grown-up area, too, has contributed to the increase in motor cruisers.

Another twelve miles of remaining river are lined with a wretched, half-grown scrub. While sailing is quite possible in these reaches, its quality is low and the typical Norfolk Broads view across miles of open country under an enormous sky is entirely lost.

silting

All the rivers suffer from silting, but there are two distinct forms. On the lower reaches of the strongly tidal areas silt is brought in from the sea and deposited where the tidal scour is least. Very great quantities of silt have been deposited in Breydon Water, the natural spillway of the River Yare, just above its entrance to Gt. Yarmouth harbour. Years ago Breydon Water was truly estuarine in character with plenty of deep water on either side of the channel through it; today, it is reverting to

(*contd. on page* 91)



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BROADLAND LANDSCAPE *The scene from Ranworth Church tower, 3, shows scrub and small, useless trees invading the wide marsh, clustering along the rivers and dykes, inhibiting the wind and the view. Brown in winter, a dull green in high summer, this depressing growth is at present allowed to proliferate unchecked. It brings a hint of mean streets to water thoroughfares which were, only a generation ago, as wide open to the sky as the River Thurne, 2. This is the real Broadland—the horizon is distant, and the impact of the weather immediate. Sun, wind or rain have free play, and the holiday-maker must deal with them as best he can without shade or shelter except for a canvas awning over his boat.*

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NEGLECT *Many of the smaller dykes and cuts have been so grossly neglected that no boat will ever traverse them again. At first, an upthrust of weeds, rooted in deposits of silt, begins to creep out from the banks, 4. A dredger could deal with the menace in a few hours; but the totally inadequate equipment is required to maintain more important channels, so this little one goes by default. In a few years, nothing is left of this backwater but a narrow drain, 5. A few more years, and a weed-choked gap in the scrub is all that is left, and the passing yachtsman scarcely wonders where the now dead waterway could have led him, 6. Finally, the death warrant arrives and is conspicuously displayed, 7.*

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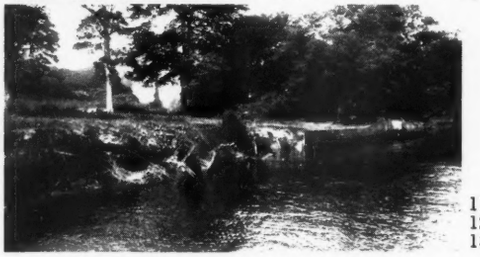

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DECAY *The public is debarred from entering some broads by the action of the owners of surrounding land, 8. Where trees stand thickly they spoil the sailing, and, understandably, the visitor contents himself with a motor cruiser, 9. The derelict, 10, is a navigational hazard, but has been lying sunk for years. Barton Broad is free for navigation, but old-fashioned and inefficient piling near the north entrance, 11, effectively prevents any landing or mooring. When trees fall athwart the river, constituting a danger to Broads craft, 12, the authorities charged with their removal often leave them for months. Public staithes, with which no authority is concerned, soon become dangerous eyesores, 13.*

(*contd. from page* 88)

the status of a river, with vast expanses of mud exposed at low tide which are covered by only a few inches of water at the top of the flood. Silting from the sea is thus a menace.

The second form of silting takes place when drainage water is pumped into the rivers from the low level system of dykes. Mud in suspension settles round weed or reed growths and channels have to be kept open by dredging.

As well as major waterways there are, or were, very many narrow dykes and drains perhaps too shallow and restricted to permit passage by a large boat, but charming places to explore in a small one. But through unchecked silting up, these are becoming a lost feature of the Broads area.

weed

If the condition of the Rivers Yare, Bure and Waveney and their tributaries leaves much to be desired in spite of maintenance dredging, the state of the broads themselves is far worse. Excluding Breydon Water there are somewhat under 1,500 acres of open water connected to the rivers by navigable channels; but most of this open water is too shallow for satisfactory use.

A closer classification shows that of nineteen recognizable broads only two are in anything like decent condition. These are Wroxham Broad and Oulton Broad, and even these do not permit of unrestricted navigation by the largest size of Broads boat. Both are materially smaller in area than they were a generation ago.

Under the heading of second class broads may be listed Barton Broad and Horsey Mere. The latter has not become materially smaller of recent years, but there is a very rich growth of weed on the bottom which makes the nominal depth of 6 ft. of water seem considerably less. Barton's 120 acres are rather rapidly deteriorating. At the beginning of the century the broad was estimated to cover 270 acres (and in Nelson's day, 600) but now it presents all the characteristics of decay; thick outgrowth of reed beds from the sides, reeds appearing above the water level in many places, and a progressive lessening of the depth of water everywhere.

In a third category come Malthouse Broad, South Walsham Outer and Inner Broads, and Salhouse 'Great' Broad. Here the problem is not so much weed as mud; they are charming places, but useless for vessels drawing more than 3 ft. of water.

More depressing still is the state of Hickling Broad and Heigham Sounds; and of other broads at Salhouse, Surlingham, Rockland and Womack where there is little but reed and mud. Hickling is still the most beautiful place in Broadland for those who love the typical flat Norfolk scene, where the horizon is broken only by a clump of trees or a windmill (now derelict), and where, from the centre of the broad, the land is attenuated to a thin, sere or faintly greenish strip between placid ripples and a vast, rolling landscape of a sky. Yet this lovely place is almost useless for sailing. Outside the channel leading to the public staithe, or landing place, the depth of water is scarcely more than a couple of feet above the top of thick, bushy weed. As an instance of the pace of deterioration of a noble broad, Hickling will serve. In 1903 it covered 464 acres, and up to 1914 it was possible to hold a regatta there with boats drawing four feet of water and more. In the '20s, Hickling Regatta was still a popular event, but for smaller boats, drawing a little less than three feet. Today, reduced to 300 acres, Hickling sees no regattas at all, except informal affairs in centreboard dinghies.

The condition of Heigham Sound is worse. Here the encroachment of reed beds has been more severe, and even the channel is getting hard to negotiate. As for the other broads listed in this fourth category, they are broads by courtesy only; little shallow puddles choked with reed, just able to float a light row-boat.

Lastly, there are the lost broads. Sutton Broad is still shown on the latest ordnance survey maps. In fact it does not exist. Its original boundaries may be charted by the tree line, beyond a wilderness of reed and sedge, through which today passes a shallow channel less than 40 feet wide.

closure

Now we come to yet another category of broad — those closed or restricted by owners of the surrounding land. There are six of them. Hoveton Great Broad, Martham Broad and Decoy Broad are closed entirely. Ranworth Broad and Cockshoot Broad are open for six months of the year to row-boats only. In the case of Blackhorse (or Hoveton Small) Broad an agreement with the owner allows free access during the summer months only. All these broads have suffered an even more rapid deterioration than those in general use; for it is well known that boat traffic tends to check silting and reed outgrowth.

It is difficult to write quite dispassionately about the decay and imminent ruin of the broads. Their decline has been rapid, for 50 years ago 3,000 acres were open; 100 years ago, 4,000. These are nostalgic figures for the broadsman; the threat, and a spur to action, lies in an estimate of their future boundaries.

responsibility

The responsibility for keeping navigation open on the rivers and broads of Norfolk and Suffolk is borne by the Gt. Yarmouth Port and Haven Commissioners. To that body go the tolls payable by every owner of a boat on the river. The Commissioners have been active in dredging the Yare, for it is the route taken by seagoing ships of up to 750 tons which carry coal to Norwich. On the Bure and Waveney, river channels are just maintained; minor channels are neglected. The Commissioners consider the broads themselves their responsibility only in so far as the channels through them are concerned. The results of their labours in this direction have not been impressive.

Finally, for the record, there are a small number of broads which are open to the public but not connected with the river system. Most notable are Ormesby, Filby and Rollesby Broads, once accessible from the Bure below Acle by a narrow dyke, Muck Fleet by name. These large and beautiful sheets of water are strictly outside a survey of contemporary Broadland

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14-18, *Broadland holiday*

as a holiday centre. They might have their place in a plan for a Broads National Park.

holiday facilities

Facilities and servicing for holiday-makers are most conveniently expressed in terms of the number of boats to let, their location, and the available ancillary services; for people spending the typical boating holiday constitute the vast majority of Broads users of all types, and round them and their needs centre the most highly organized complex of activity in the area. The special needs of minority groups will be discussed later, when such groups are analysed.

The table, right, is based on information available in the 1949 edition of Blake's 'Norfolk Broads,' the catalogue of the Norfolk and Suffolk Yacht Owners' Association, in which is grouped the great majority of boat hiring firms.

Location	Firms with 20 + boats	Firms with 20 – boats	No. Yachts	No. Motor Cruisers	No. House-boats	Total
Bure and tributaries ...	6	—	142	99	2	243
	—	18	75	69	10	154
Total Bure	—	—	217	168	12	397
Yare	—	4	nil	42	1	43
Waveney	1	—	15	12	nil	27
	—	6	5	40	1	46
Total Waveney	—	—	20	52	1	73
Overall totals	7	28	237	262	14	513

It is self-evident that the Bure and its tributaries support many more boats than do the other two rivers put together. Even allowing for the greater mileage on the North River, as it is called, and its tributaries, the approximate all-in average of boats per mile of navigable river is: Bure, 7 boats per mile; Yare, 1.5; Waveney, 2.9.

Shopping and other services are naturally grouped in the centres where the largest number of yachts and motor cruisers are stationed. As far as can be ascertained they are adequate; and the only point where overcrowding is noticeable is in the bars of the more popular and easily accessible riverside public-houses. This is not necessarily to be deplored; it may add something to gaiety and friendliness; there is no evidence that it is condemned on the Broads.

As well as boats, servicing, and shopping facilities, Broads holiday-makers must have somewhere to tie up at night. Here reasonable requirements are not met. The public staithes or landing places at which, years ago, trading wherries loaded or unloaded are almost all under the jurisdiction of the appropriate Parish Councils. Since the wherry trade virtually disappeared, these staithes have been grossly neglected. Most of them are now in a squalid, tumble-down and dangerous state; and in spite of first rate examples to the contrary, both publicly and privately owned, it has to be stated that landing places on the Broads are a disgrace. At terminal and nodal points good moorings are especially important, with well-planned facilities for restocking the boats, tanking up with fuel, enjoying hot baths and so on. The three most important places in this respect are Norwich, where the yacht station is adequate, but only just; at Gt. Yarmouth—a key-point at the junction of the three rivers—where the yacht station is easily the most depressing and inconvenient place in the whole of Broadland; and at Oulton Broad, where the yacht station is owned and operated by the Lowestoft Borough Council, and is the outstanding example in the area of sound planning and willing service.

The overall dilapidation of public staithes, taken together with the much

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BUNGALOWS 19 *shows typical ribbon development. These buildings may conform to the standards required by the local authority, but they ruin the view—and the sailing.* 20, 21, 22 *show unplanned, uncontrolled river-side development; broken quay-heading, shacks mouldering and neglected, ancient boats pulled up on the bank and left to rot. The unity of marsh and river is destroyed by this hideous man-made scrawl of bungalows, telegraph poles, electric cables and tin fences.*

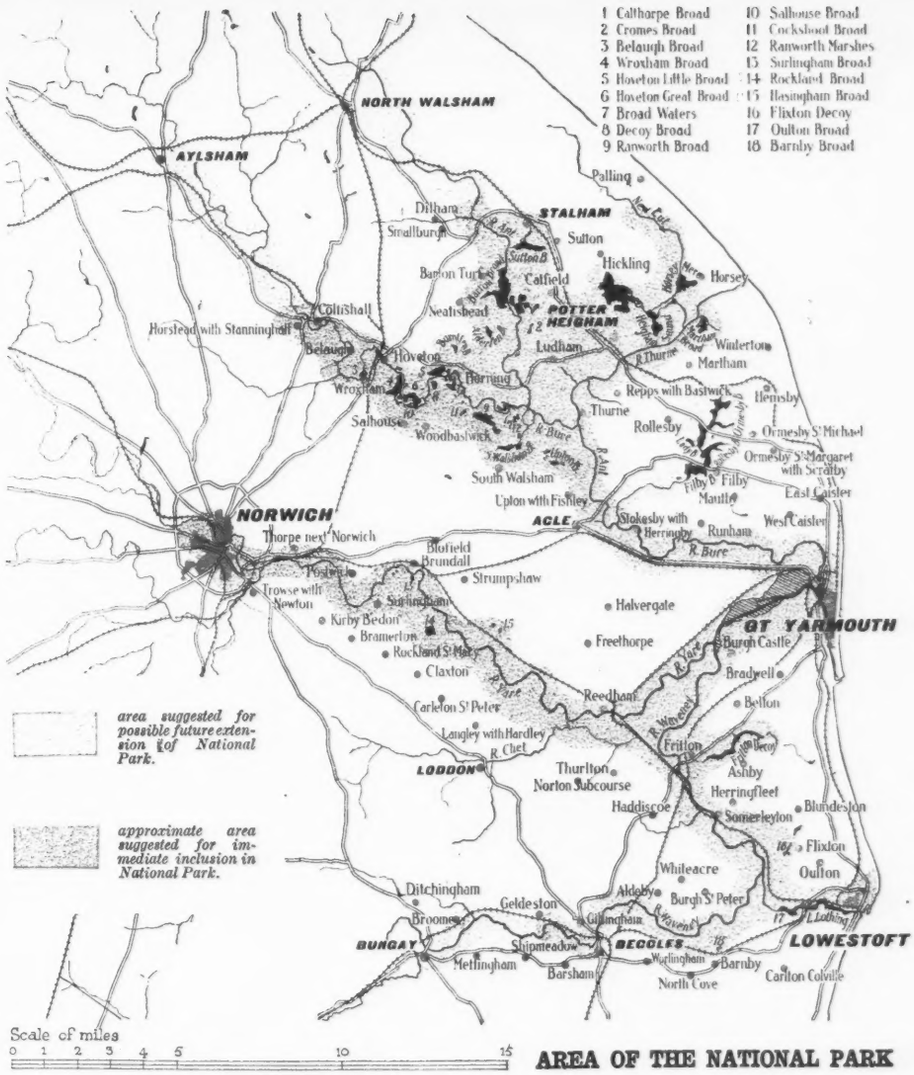
more crucial dilapidation of natural amenities, leads to an important conclusion which it is right to state at once, and which any Park Planning Authority must face as its first problem. It is that the Broads, unlike any other area likely to be chosen as a National Park, needs more than mere protection and control. It calls for a major job of reconstruction; decay of the whole area has gone far, and it will be correspondingly expensive to rescue and restore what is left.

the visitor and the resident

There is no accurate census of persons visiting the Broads each year, but an agreed estimate suggests that about 100,000 visitors per annum spend some portion of their holidays there. Of these, probably more than three-quarters hire boats with sleeping accommodation; and these people, who can afford a substantial holiday in Broadland, constitute by far the largest single group using the area. The group can be broken down into two main components—Enthusiasts and Tourists. The former hire sailing yachts; their main pleasure is in the sheer joy of sailing, for its own sake. Much of their time they spend passage making on the river; but to such people the broads themselves have a very great attraction, for to get on to open water gives a very different form of sailing, and is a welcome change. It is upon the Enthusiasts that the dilapidation of Broadland has borne most heavily. Tourists, in the main, prefer the motor cruiser. They are anxious to explore the rivers and broads, or to refresh their knowledge of places which pleased them on their last visit. Passage making and sightseeing are their main preoccupations, and a broad is not of first class interest except as an impact on the senses. Unless they moor there, people on motor cruisers seldom spend any longer time on a broad than it takes to pass through.

It is easy to see how differences in age, temperament and skill separate the sailors and the motorists. But it must not be supposed that because sailing requires the exercise of qualities that most people think desirable, consequently that motoring about the river is undesirable. This is a common heresy among the people who vaguely 'approve' of sailing but who do not really know the Norfolk Broads.

A smaller group of visitors whose aim it is to get on the river is made up of those who hire a small half-decked sailing boat, or motor launch, by the hour. Such people are catered for, but not systematically. Potter Heigham, on the Thurne, is the only considerable centre for half-deckers, and a good fleet of launches is available there. Otherwise only Oulton Broad caters much for this trade, principally with launches. In this class of Broads user the difference between sailors and motorists is much more marked. Sailing seems to generate enthusiasm for itself, whatever the size of boat employed. But it is unfortunately true that the prospect of an hour or two afloat in a motor launch seems to attract a proportion of noisy and thoughtless people who charge about at full throttle, damaging the river banks with the wash of their vessels, and proving a nuisance to more careful and considerate Broads users.



AREA OF THE NATIONAL PARK

Last of the groups of boat-minded visitors are those who are catered for, principally at Wroxham, by a fleet of water charabancs. A charabanc party afloat is much like one on shore—something to be enjoyed with as much gusto as possible. Why not ? The important thing here is that the professional watermen who skipper these river-buses are uniformly courteous and considerate in their dealings with the amateur skippers of the boats they pass and meet.

Local residents, as well as visitors, enjoy Broads sailing. About 1,200 of them belong to yacht clubs, and of these some 250 own boats, the emphasis being on small, open racing craft. They set a standard of skill, seamanship and good manners which is a useful example; but as is natural they tend to concentrate their interests on the sailing grounds of the club or clubs to which they belong.

A smaller group still, again mostly drawn from among local residents, enjoys some excellent coarse fishing. Yet another group owns or rents bungalows on the river verge.

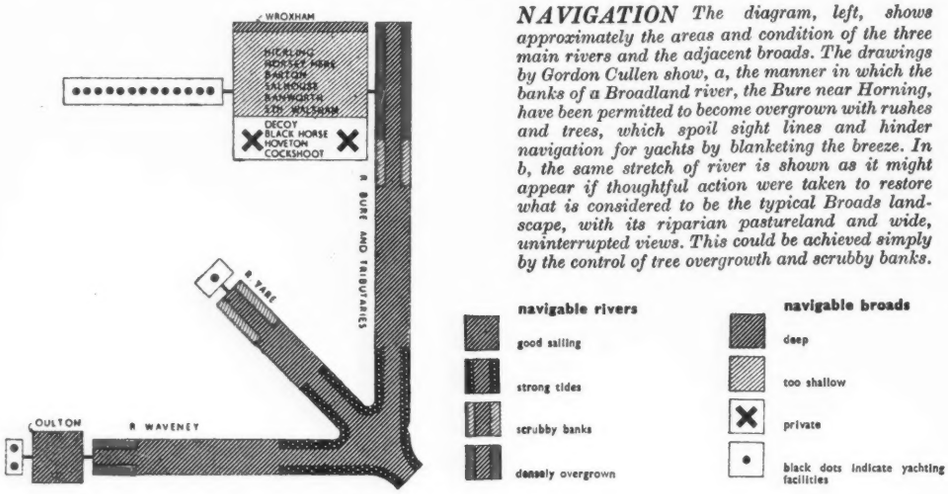
Finally there are the naturalists. In many ways the biology of Broadland is unique. Variations in salinity, and the rhythm of the tide which is felt far inland, combine to produce conditions of great interest where flourish forms of botanical and zoological life not easily reproduced elsewhere. Naturalists are well catered for. Three large broads and several small ones, not connected with the rivers, have been given or leased to the Norfolk Naturalists Trust; and in general naturalists have been organized into a compact and vocal body, with some very decided views on the future of what they consider, perhaps a little self-importantly, to be their preserves. The number engaged on serious study is not great.

the craftsman

The needs of seasonal boating, and the custom of local yachtsmen, have established a flourishing industry on the Broads. An adequate number of craftsmen and labourers are employed in building new craft, and in maintaining and servicing old ones at the numerous riverside yacht yards. These men enjoy a unique relationship with the visitors; they make it a point of honour to do their utmost to see that their customers have an enjoyable time; and repairs to damaged gear, or engines which develop the slightest fault, are prompt and efficient. For their part, visitors seem genuinely impressed with and grateful for the excellent service they receive. Private yachtsmen regard the senior men working on the yards they know as valued friends. The pleasure seeker and the provider of

a

b



NAVIGATION *The diagram, left, shows approximately the areas and condition of the three main rivers and the adjacent broads. The drawings by Gordon Cullen show, a, the manner in which the banks of a Broadland river, the Bure near Horning, have been permitted to become overgrown with rushes and trees, which spoil sight lines and hinder navigation for yachts by blanketing the breeze. In b, the same stretch of river is shown as it might appear if thoughtful action were taken to restore what is considered to be the typical Broads landscape, with its riparian pastureland and wide, uninterrupted views. This could be achieved simply by the control of tree overgrowth and scrubby banks.*

the wherewithal for pleasure are closely and happily integrated.

the value of the broads

The first thing to make clear is that the value of the Broads to the nation is that they offer in an urban society a way of life, if only for a fortnight, that is a foil to city life. Solitude is still one of the things to be enjoyed on the Broads; it is possible to avoid seeing a soul for as long as one wishes. Peace is another inherent quality of the place. The only man-made sound which disturbs some of the remoter reaches is that of the petrol engine; if in a boat, this is not unduly irksome, for it is appropriate. Indeed, those who complain much about the noise of engines on the water had better turn their attention to the sky, for aircraft cause more disturbance than do motor boats.

A Broads holiday encourages old fashioned qualities like self-reliance and individualism. Self-reliance, because apart from the business of adapting yourself to living in very confined spaces, everything which makes your holiday a success must come from your own initiative. You steer your own boat, find and cast off your own moorings, work out your own routes. If you have a sailing vessel, the exercise of self-reliance is the only thing which will enable you to move about at all; and if you wish to get the best out of your boat you will have to make considerable efforts and exert considerable skills, especially if there is too much wind for comfort, or too little.

Individualism is encouraged because there is no standard of behaviour, no standard of dress, no standard of performance on the Broads. Above all, there is no routine. Within the limits of good manners and your own sense of the possible you can go where you like, do what you like, when you like, how you like.

Nevertheless, a Broads holiday is not undisciplined. It is subject to the fairest and yet the strictest discipline of all; that of the elements. Wherever you go, the weather in its widest sense is paramount; whatever sort of boat you have, it conditions all your activities.

You can never escape from the weather. There are no mechanical amusements in Broadland whatever. No cinemas, no pintable saloons, no 'popular' restaurants, and only one dance hall, unsophisticated and not much patronized by the visitors. Apart from the company in the pub, you make your own amusements. There is nothing to occupy you but the sky, the water, the reeds and your boat; your companions if you have any; your thoughts if you are alone. Thus, if you find a Broads holiday interesting, then the interest is peculiarly your own; if you find it boring, it will be because you find yourself dull.

The traditional Broads holiday is a sailing holiday; sailing brings out the essence of the place a good deal more clearly — more poignantly, even — than marine motoring. Even today it is slightly more popular; and it has always been cheaper. In a sailing holiday the Broads are learned more intimately; the attraction of the place, a mingling of sweet charm and sudden excitement, of furious battles with the wind and quiet lying in the sun, of brilliant atmosphere and long distances and huge clouds comes quickest in a sailing boat.

A realization of this is fundamental to good planning for the Broads.

conclusion

There are two objects, closely linked, which should be served by a plan for a Broads National Park. Because it seems important to preserve the independent, personal type of holiday as an alternative to mooching or cycling about in droves, pullulating in holiday camps, or mooning in and out of cinemas and amusement arcades, the first of the objectives should be:

TO PRESERVE AND ENCOURAGE THE TYPE OF HOLIDAY BROADLAND OFFERS.

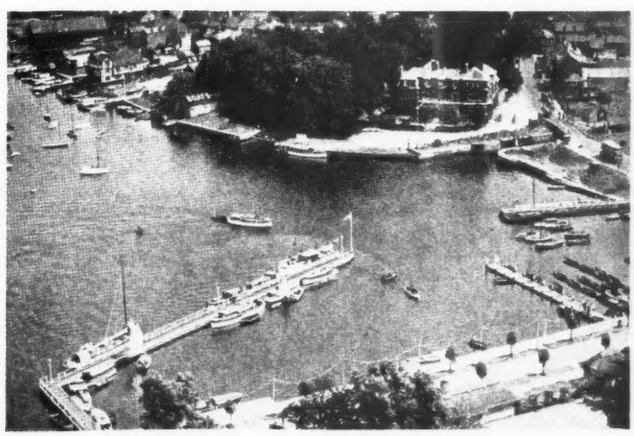
Because facilities in the Broads area are unevenly distributed, and much of it is sparsely used, the second objective should be:

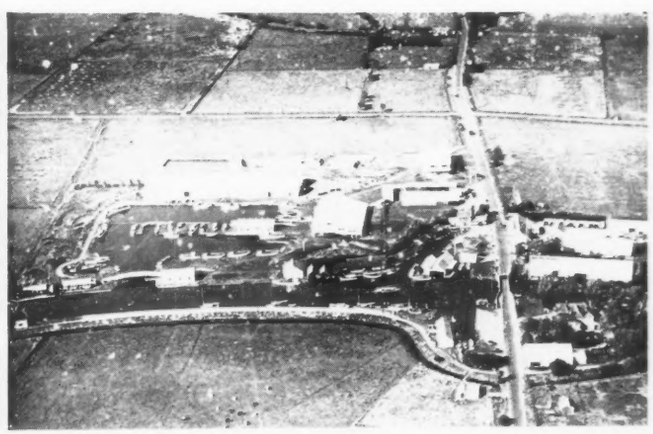
TO EXTEND THE OPPORTUNITY OF A BROADS HOLIDAY TO MORE PEOPLE.

This immediately raises the important question of the ultimate size of a Broads National Park in terms of its holiday capacity. At present, as has been shown, it absorbs rather more than 100,000 people per annum. In the 1946 report submitted by the Broads Conference to the Minister of Town and Country Planning, the potential capacity was placed at 250,000. This may be a little optimistic; and it should be accepted as a matter of principle that the number of boats and people manning them should be proportional to the scale of natural amenities. It is a matter of observation that saturation point on the Bure and its tributaries has almost been reached. If many more boats were accommodated it would mean overcrowding the now popular reaches, or the more frequent use of the remoter ones. The former alternative is obviously undesirable, while the latter would tend to destroy the possibility of solitude, itself an important amenity. The figure of 250,000, then, is certainly quite out of the question without the scaling up of development on the Yare and the Waveney to the level of that in the Bure Valley. The difficulties of doing this are considerable, and will be discussed later.

23

INDUSTRIAL LANDSCAPE *In the usual up-and-down well-treed landscape feckless dumping of the impedimenta of the twentieth century—radio masts, fir-poles for telephone or electricity, sheds, hoardings and suchlike—can get by; in a flat, under-treed landscape they cannot. Only a hair-line divides a wild and solitary marshland of enormous vistas and sublime simplicities from the kind of wasteland one associates with the industrial midlands. This is particularly true of the Broads, and though the gasometers of Yarmouth seen across the marshes may have for some people a certain sinister splendour, it is the rural scene the visitor is really after. Yet it only needs a few poles and wires, the roofs of a few bungalows, a derelict pumping station chimney, to shatter completely any rural illusion. In a flat landscape each single upright becomes a vertical punctuation with an enormous capacity for good or evil—for good, the yacht masts; for evil, the telegraph and electric grid poles. 23, typical wild prospect of great potential sublimity is turned into a derelict industrial landscape by a few deft strokes.*





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25

YACHT STATIONS *Oulton Broad yacht station, 24. The best piece of planning on the Broads. Visiting boats pay a modest mooring fee, and full shopping and other facilities are close by. Broadshaven, Potter Heigham, 25, shows clearly how moorings can be contrived round an artificial basin when river space is limited. Broadshaven suggests a way of siting bungalow colonies where these are needed.*

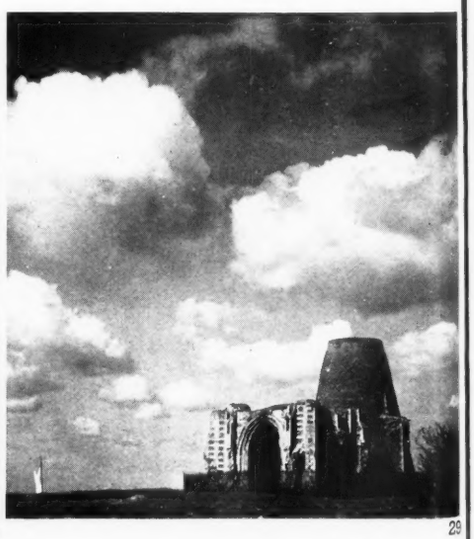
26

STAITHES *Hickling Staithe, 26, is a first-rate example of the kind of architectural work needed on the Broads. White railings and a deck in the functional tradition transform a corner of a particularly wild Broad into a haven where yachts can tie up and yachtsmen can relax without detracting from the scene. Hickling Staithe is functional, beautiful, ship-shape, simple and in every way a fit object for its job and position. It should set a standard for all other building work on the Broads. Equally well planned are the private moorings at the Norfolk Broads Yacht Club, at Wroxham, 27. On the right of the board walk are the pens for the racing craft; on the left is a small basin where visiting boats, dinghies, etc., may be temporarily moored.*

27

WINDMILLS *The tottering hulls of windmills, 28, are scattered over the Broadland scene. One was even built into the ruins of St. Benet's Abbey, 29. The pumping the mills did is now done by diesel or electric power, but these derelict structures are still beautiful and characteristic, and should be preserved where possible, with their sails or what remains of them.*

28



29

planning policy for the Broads

THE POLICY TO BE adopted by the planners of a Broads National Park may be dealt with under three heads—restriction, reclamation, and construction.

restriction

Restrictive measures which should apply to the Broads National Park do not present any great problems. Since the undesirable features in Broadland are few, restriction would mean, for the most part, nothing more controversial than the maintenance of the *status quo*. As soon as any National Park Authority is constituted it should lay down four

absolute prohibitions:

(1) Erection of *advertisement hoardings* in sight of the rivers or broads.

(2) Entry into the area of *cinemas or other mechanized amusements* (except small scale itinerant entertainments, such as fairs and village hall film-shows).

(3) Erection on the river banks or the verges of the broads of any *bungalows or houses that do not form part of the planned development of the National Park* **1**.

(4) *Industrial development*, except developments, direct or ancillary, of the boat-hiring business **2**.

While these four things must be absolutely prohibited there are others over which the Authority, as soon as it is constituted, must immediately establish

general control:

(1) The location and design of buildings *other than dwelling houses and factories*. All requests for licences to erect dance halls, shops, public-houses and clubs should be very critically examined. In the Bure Valley section of the area, already adequately served in these respects, the general principle must be the fewer the better. On the Waveney and Yare, on the other hand, supposing that they are developed as sailing centres, amenities of this kind should be not only permitted but encouraged. So far as boatyard buildings are concerned, the fact is that most of them are ugly, and a building code applying to them could well be worked out **3**. The siting and planning of boatyards should be strictly controlled by the Authority, with an eye to such factors as the utility of the sites to Broads users, actual or potential, and the minimum of interference with natural amenities.

(2) *The building of boats*. An indirect control over the building of boats, in the hands of the Broads National Park Authority, would serve several valuable purposes. First, it would provide an adequate safeguard against unchecked exploitation and consequent overcrowding, and would ensure the even distribution of boat-hiring facilities over the whole area of the National Park. Secondly, it could encourage the building of a higher proportion of sailing boats and check the construction of motor cruisers **4**. It is not suggested that a licence should be obtained from the Authority for each new boat. The control should be quantitative and broadly qualitative, the Authority indicating each year how many new craft the area could absorb, what sort of craft they should be, and where they could most usefully be stationed. It should be left to the boatbuilding trade as a group to implement in its own way as much of the quota as it thought commercially desirable. There should certainly be no attempt to interfere with the design of boats **5**.

the bungalow problem

So far we have been discussing restrictive controls which the Authority should impose immediately on receiving its charter. There is a further measure of this type which, though its principle must be established at an early stage, cannot

1 *In practice, the prohibition already exists, for the local town planning officers have for long refused to grant licences for building of this sort. There is no suggestion here of stopping the erection of necessary houses in or near riverside villages. The criteria are typically elemental: Will such buildings interfere with the wind, or spoil the view?*

2 *There is only one factory in Broadland now, the sugar beet processing plant at Cantley, on the Yare. There are excellent reasons why it should remain; but the Planning Authority might well insist on some alternative way of disposing of the waste pulp. At present it is pumped on to the surrounding marshes and allowed to rot, generating a most offensive smell.*

3 *But let the planner beware of any consideration save that of function; to insist on clapping a Norfolk reed thatch on to a large storage shed, because such a roof is traditional to the Broads, leads to absurdities that take their own visual revenge.*

4 *Lest this be thought a high-handed measure it is as well to state that competent authorities in the trade consider that if conditions for sailing boats were improved, public demand would swing from power to sail; thus the measure contemplated would ensure the satisfaction of a healthy consumer need. Such a control is even more desirable where the building of the smaller types of boat is under review. There is a shortage of day sailing boats at present, and almost no new ones are being built. On the other hand, a case could be made for restricting the number of small motor launches for hire; for they are the only type of craft of which a significant proportion is consistently mishandled.*

5 *The standards of comfort and convenience provided by Broads boats are very high, and local boat-builders are always trying to improve them in the light of experience. As long as the existing low bridges are retained as natural load-gauges, sheer size will never be a serious problem; and any move which led to the development of a uniform type of boat would be deplorable. In this connection it is sometimes suggested that the horse-power of engines driving cruisers and launches should be limited so as to prevent high speeds leading to excessive wash. But this is a layman's approach, and will not bear technical scrutiny. For the*

at once be put into practice. It concerns unsightly bungaloid growth which, in the best interests of Broadland, must be removed. Over a period of years bungalows have been built along the river banks at some places, notably at Potter Heigham, to produce a particularly squalid form of ribbon development. They are without merit or charm, and they and their attendant festoons of electric cables wreck the view for miles.

Some of them are on private land, some on ronds vested in the Catchment Board. Tenants of the latter body can legally be dispossessed at a year's notice, and their bungalows removed. But morally there are powerful restraints on the use of this power—restraints which would apply equally to any power which a Broads Authority might obtain to deal with the problem. For not all the bungalows are used, as formerly, as summer homes or letting propositions: many of them are used as permanent dwellings, and if their occupants were displaced they would have nowhere to go; at present the housing shortage in rural Norfolk would make it impossible to find them alternative accommodation equally accessible to their work.

In these circumstances, it would be the duty of the Broads Authority to state, immediately and categorically, that every bungalow that destroys or threatens a natural amenity will be removed as soon as possible. At the same time it would be made clear that bungalows are not in themselves necessarily undesirable, but that they must conform to certain standards of design and be built on approved sites. It would be right and reasonable that, when the time came for removing those bungalows which were deemed undesirable, the Authority should bear the cost of preparing new sites, on which it could charge rent, and that compensation should be paid to owners whose bungalows are removed **6**.

reclamation

Under this head there are certain measures that must be undertaken at once by a Broads National Park Authority if it is to fulfil its immediate objective—'To preserve and encourage the type of holiday Broadland offers.'

by land:

(1) *Bushing.* All scrub should be cut down and kept down. This need not be an expensive job if done in time, but the scrub grows thicker every year.

(2) *Tree felling.* Mature growth must be felled where necessary. The object of such felling would, in most cases, be to free the wind, but considerations of landscaping in the broadest sense must be taken into account, since at some points the tree-lined river is very beautiful **7**.

by water:

(1) *Dredging the rivers.* As long as routine maintenance is continued on the present scale, this should not constitute a high priority. The upper reaches of the rivers, though not perfect, are tolerable; the totally neglected channels are not of major importance; and it would be a waste of working potential to improve greatly the tide-bound stretches, which are not fully used.

(2) *Cleaning out the Broads.* This must rate as a very high priority indeed, and every piece of the new equipment that will have to be obtained if the Broads are to be rescued at all must, to begin with, be concentrated on it. But it must be grasped at once that it would not be possible to reclaim the total original area under a prohibitive cost. It is estimated that the cost of restoring for navigation those parts of a broad which have degenerated into marsh is £1,000 per acre; and several thousand acres of once open broad have so degenerated, through the coagulation of mud round the roots of reed beds spreading from the verges **8**. A sense of proportion must be employed when planning the restoration of broads. Some are so far gone that the best that can be hoped for is the cutting of a wider and deeper channel through them than there is today: Sutton Broad is a case in point. Work on some broads

shape of a hull, and not the engine driving it, is the chief factor in wave-making. If the present policy, dictated by self interest, of Broads builders to engine their boats with the minimum horse-power consistent with safe manœuvring is maintained, all will be well.

***6** In this connection, there would seem to be little objection to bungalow colonies at nodal points grouped on dykes built at right angles to the river, or round an artificial basin constructed on the marshes. At such points, group sanitation and a proper water supply would be feasible. 'Broadshaven' at Potter Heigham offers a stimulating example. Again, however, the criteria are elemental: don't spoil the wind; don't spoil the view.*

***7** The best way would be to leave mature growth where it forms part of a naturally wooded section of country, and remove it where it acts merely as a screen between water and open country. No rule can be laid down with any certainty; it is a case for the exercise of* ad hoc *taste and judgment. Any rule of thumb method involving the removal of such trees on one bank as project above an imaginary line drawn at an angle of, say, 30 degrees from the horizontal from water level on the opposite bank should be resisted.*

***8** There are no figures available to show exactly how much broads reclamation would cost. But the Chief Engineer of the Catchment Board has stated in public that the restoration of the whole area of the Broads to the condition it was in 25 years ago could be done for £983,000. A private estimate to restore to full navigation all the water now visible is in the region of £400,000. In both cases, maintenance would not be unduly expensive. Anyone who thinks the sums excessive may be reminded that the average rate of growth of the bed of a broad towards the surface of the water is reckoned to be half an inch every year.*

***9** Lying as it does within the confines of a large town it would normally be outside the competence of a National Park Authority. But its importance at the junction of the three rivers is such that unless its present owner, the Yarmouth Borough Council, can be stimulated to do something constructive about it there might be a good case for the Authority itself to take it over and rebuild it, not necessarily on the same site.*

***10** It has been stated that if the lock were constructed a high tide would flood Great Yarmouth owing to its not being able to escape up the rivers. This is not so. At full moon, with a north-west wind, a great deal of water does*

must be started at once if navigation is to remain open: for instance, Heigham Sounds. In all cases judgment rather than rule of thumb must be employed, but as a guide to priorities it is suggested that Heigham Sounds, Barton Broad, Oulton Broad, Hickling Broad, Horsey Mere and Wroxham Broad be tackled in that order.

(3) *The provision of staithes.* Concurrently with giving the public better broads, the Authority would have to turn its attention to the improvement of landing facilities. In particular, Yarmouth Yacht Station must be greatly improved **9**.

construction

All, or nearly all, the significant extensions and improvements that would result from the measures under the head of reclamation would be in the Bure Valley. Nothing would have been done to improve communications with the Yare and the Waveney, or to make those rivers more suitable for sailing. The tidal problem would still remain, and while it remained the full development of the South Rivers, and of the holiday potential of Broadland, would not be achieved. Thus the full development of the South Rivers implies a modification of the tidal structure of the Broads. This could only be brought about by the construction of

a master lock at Great Yarmouth

This lock, by no means a new project, and a perfectly feasible one in the engineering sense, would be constructed below the haven bridge, itself below the confluence of the three rivers **10**. Thus placed, it would solve for good the most important drainage problems afflicting the East Norfolk Rivers Catchment Board. It would act as a barrier to prevent spring tides, which are liable to cause extensive flooding, from getting inland, while the sluices would be able to deal with excess drainage water, which piles up very slowly and could be let out in periods of low or normal tides **11**. It would also solve the problem of the silting up of the lower reaches of the three rivers and of Breydon Water, which latter could be cleaned out and made into one of the best racing courses for small boats in Britain east of a line from the Solent to the Clyde. Moreover, the silt which has come in from the sea, spread on the marshes, would make an alluvial tilth comparable to the black soil of the fen country **12**.

It is not too much to say that the effect of such a lock on the holiday amenities of the Broads would be revolutionary. It would release for first class sailing thirty miles of river (more than a quarter of the total mileage) from the bondage of the tide. It would make communications from the South Rivers to the North River easy. Above all it would open up the Yare and the Waveney for sailing boats **13**.

It is almost certain that the well organized and ably briefed naturalists who regard Broadland as their special province would object to the project of a master lock. Should salt water be excluded from the broads and the rhythm of the tides interfered with, their argument runs, the whole area would lose its peculiar character and many interesting species, botanical and zoological, would cease to exist. This is the extreme view. But other naturalists, less pessimistic, say that although the worst might happen it is not a foregone conclusion that it would. In this connection it is worth recalling what happened when the Zuider Zee—now Ysselmeer—was walled off from the open sea and a lock constructed for shipping. It was then thought that because of the virtual exclusion of salt water the fishing industry on Ysselmeer was doomed, and arrangements were made to resettle the fishermen in some other industry. Those fishermen are still plying their trade on Ysselmeer, although the nature of their principal catch has, admittedly, altered **14**.

the second-best alternative

Some years ago an alternative to the master lock at Great Yarmouth was proposed, in the form of a canal, eight miles long, between Acle on the Bure and

come up Great Yarmouth harbour to spill into the three rivers; but it only does so because the general level of the North Sea is then higher than the water on the lower reaches of the Broads. All that would be required to make Great Yarmouth perfectly safe from flooding (which it is not now) would be to increase the height of the harbour wall at its south end by some 12 *or* 18 *inches.*

11 *There is no danger that an impasse would be reached, with high tides to seaward of the lock, and high water on the landward side; abnormally high tides seldom last more than a week.*

12 *On the other hand it must be admitted that silting would tend to get worse further up river, for the soil in suspension which is pumped out from the low level drainage system into the rivers would tend to settle round reed growths instead of finding its way out to sea as some, if by no means all, of it does today with unchecked tides. So that the overall amount of purely maintenance dredging in Broadland rivers would not necessarily decrease. Also, the absence of salt in the water would probably encourage the growth of fresh water weeds, but it would seem that if the antique devices now in use were replaced by efficient machinery, the problem of weed could be solved.*

13 *Such expansion could most conveniently take the form of a new type of sailing holiday less expensive than hiring a cabin boat, based on groups of bungalows equipped with open day-sailing boats, a suggestion put forward in the original White Paper on National Parks. This type of holiday would be very suitable for families with small children, or elderly people, for neither extreme of age takes kindly to the rather limited accommodation of a small cabin.*

Siting such communities along the already crowded Bure would be unwise. But there are great stretches of the Yare and Waveney which would offer magnificent sites were the tidal problem solved. Consider Reedham, as a pilot example. The village is set on the north bank of the Yare, with excellent rail and river communications with Great Yarmouth, Norwich and Oulton Broad; yet as a yachting centre it is negligible. On the south bank is a great expanse of marsh. A bungalow community, with all facilities, could be placed round a basin cut into this marsh, and would hardly be noticed. With Breydon Water dredged, boats would be near—but not too near—what is easily the safest and best sheet of inland water in Britain; but in any case there would be available many miles of the broadest river, passing through unspoilt country.

14 *Moreover, significance may be found in the fact that the salinity of the most seaward broads, Hickling*

Cantley on the Yare. Such a canal, designed to by-pass the difficulties of negotiating the rivers near Great Yarmouth, is also a possibility in the engineering sense, although some sort of lock in it would be necessary to allow for the difference in water level of the two rivers. Suitable bridges for two railways and at least five roads would also have to be provided, and the cost would be very great. In any case, the project begs the main question: it does not solve the physical difficulties of sailing in tidal waters, and its effect might be to cut out from use altogether the thirty miles of tidal rivers which the master lock would make fully usable ***15***.

finance and administration

It is generally recognized by those who have studied the question that the task of restoring the Broads and of expanding and maintaining their amenities must involve heavy expenditure. The Minister of Town and Country Planning has made this clear in the House of Commons, and the draft Bill for the establishment of National Parks specifically states that the whole of the cost of improving waterways will be borne by the Exchequer. In considering the question of finance, one factor that must surely be taken into account is the increased expenditure in the area by holiday-makers resultant on the Broads becoming a National Park. If the estimated million pounds at present spent annually in the area is doubled, the additional million might well represent a substantial saving in foreign currency for holidays abroad. At the same time, it would be reasonable to increase somewhat the tolls now collected in respect of all boats on the river by the Great Yarmouth Port and Haven Commissioners, such tolls to form part of the general income for the National Park Authority for the Broads.

In the sphere of administration, the chief difficulty springs from the fact that while 75 per cent of the controlling Authority of the National Park will be drawn from local administration, in the case of the Broads there are so many authorities engaged in administering the area piecemeal that it is hard to see how any collective view, apart from nominal compromise for the record, could emerge from their deliberations. It is perfectly true that all these public bodies, and also the private ones such as the Association of Yacht Owners and the naturalists' organizations, have great contributions to make to the future of the Broads ***16***. But policy is not formed by calling everyone who is interested to a committee, stating views, and reconciling interests. There must somewhere be a nucleus of detached opinion round which technical views and commercial interests can focus. And it is the job of the Minister in charge to ensure, through his own choice of personnel for the Authority, that such a nucleus exists.

Finally, it must be remembered that undesirable exploitation of the Broads, although it must be guarded against, is not yet a threat. The National Park Authority for Broadland must avoid itself constituting such a threat.

and Horsey Mere, is by no means accountable by their being connected by river to the sea. It has been established that salt water seeps through the spongy ground between these broads and the sea; and it has been proved that their salinity is much greater than the salinity of the reaches above Acle, only a dozen miles from the river's mouth. The regular tidal rise and fall on Hickling Broad and Horsey Mere is minimal; but according to the height of the water in the North Sea the level of these broads varies, this time not through seepage, but as a result of the water spilling into the Bure and raising its general level.

15 *Canal or no canal, lock or no lock, there is one problem which any plan for Broadland will have to cope with. It is the question of sewage disposal. It is obviously desirable that all bungalow aggregates should have some form of group sewage disposal even though, in some cases, it could not be connected with main drainage. The best way to deal with the problem of sewage from boats would be to provide at convenient points properly designed and equipped public lavatories on the bank. There is no need for such buildings to be at all prominent; constructed of local materials and discreetly sited they would be quite inoffensive, and, in open country where any new building would be undesirable, disused windmills could be adapted without altering their general appearance. But neither boats nor bungalows, be it said, present the problem on the scale of Norwich or Great Yarmouth where, treated or untreated, sewage is piped wholesale into the river.*

16 *The body with the best overall view of Broads requirements is probably the Norfolk and Suffolk Yacht Owners Association. They have done very important work in publicizing the state of the Broads and they should be represented on the Park Authority. But it must be realized that they represent a vested interest, though a legitimate one.*

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the day after tomorrow Creative planning should never envisage a completed whole but look beyond the immediate problem to possible future developments, remote though they may be. In the case of the Broads there are certain improvements which could be made without reference to the construction of a master lock at Great Yarmouth, but which are of secondary importance and should not be tackled until the main problem has been solved or established as insoluble.

(1) The river mileage could be increased by restoring for navigation the three extensions to the present system, i.e. the waterways above Wayford Bridge, Coltishall Lock, and Geldeston Lock.

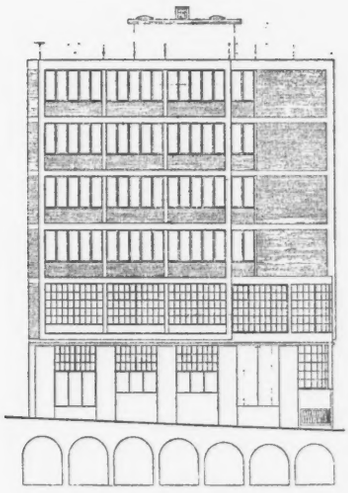
(2) The ancient Hundred Dyke linking the Thurne and the Ant could be dredged out, to provide an alternative route between Hickling and Barton Broads.

(3) A cut could be made from the head of Catfield dyke to Sutton Staithe. Such a cut, though little more than a mile long, would be rather expensive because one railway and two roads would have to be carried across it. But it would make possible a circular tour of some of the finest broads in the whole area while a bungalow-boat group might be sited near Catfield.

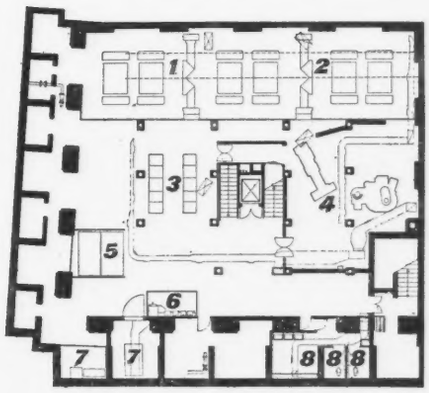
(4) The now choked Muck Fleet could be opened, to bring Ormesby, Filby and Rollesby broads into the system. Another bungalow-boat community might be established in this area (with adequate precautions against pollution, since these waters act as reserve supply for Great Yarmouth).

NEWSPAPER BUILDING IN LONDON

ERNO GOLDFINGER: ARCHITECT

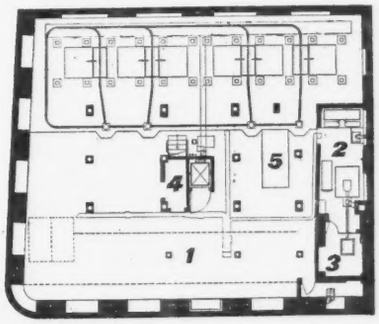


south elevation



basement

key 1, rotary press no. 1. 2, rotary press no. 2. 3, control boards. 4, main foundry. 5, newsprint delivery hatches. 6, main switchgear. 7, electricity sub-station. 8, toilets.



sub-basement

key 1, newsprint storage. 2, boiler room. 3, fuel. 4, lift motor room. 5, loading ramp.

scale 1/32 in. = 1 ft.

site It was essential that the *Daily Worker* should be sited in the 'London newspaper' area, near main railway stations. A bomb-damaged Victorian warehouse in Farringdon Street was acquired, and appeared to be structurally sound. Work was begun on the replacement of existing timber floors by reinforced concrete floors, strengthening these where necessary with pillars to carry heavy presses and other machinery. It was found that some external walls were considerably out of true; new plans had to be prepared; a new structure had to be built from the first floor up.

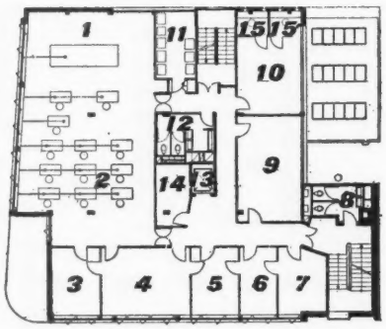
plan The building was required to be in two distinct parts of roughly equal volume; one part, for printing works, to occupy the sub-basement, basement, ground and first floors; the offices to be on the second, third, fourth and fifth floors. The intake of newsprint and the rapid dispatch of newspapers at night were important considerations, and the problems of newspaper production conditioned the shape of the plan. The essential vertical circulation is by a centrally-placed lift serving all eight floors. Two staircases serve all floors above the ground, and one of these includes the basement. There is another staircase connecting the ground floor with the basement and sub-basement floors. A number of hoists, cranes, chutes and slow delivery machines give vertical integration to all parts of the building, and weld it into a machine-like whole. This system is very complete. On arrival in road transport, newsprint is lowered 25ft. by hoist; mechanical conveyors stack it; loading from store rooms to presses is by small trolleys; once on the press all operations of unrolling, printing, folding and counting are automatic; production finishes at ground level again in the despatch room.

construction The main structure is reinforced concrete with London stock brick infilling on external walls. Up to the ground floor there are four rows of supporting columns which carry the heavy machinery floors; the central lift shaft is self-supporting, and itself carries part of the floor. Upper storey ceilings are flush, and the 2ft. beams are in the thickness of the hollow tile floors. Partition walls are hollow tile; fireproof walls are 9in. brick or 5in. reinforced concrete. Fire-resisting walls, where required, are of 3in. breeze blocks. Internal divisions are easily changeable, and window mullions are set at 2ft. 3in. intervals to take partitions. All windows are standard steel section.

finishes Office flooring is asphalt tile; in the factory and press rooms floors are granolithic. Windows, grilles, and balustrades are painted battleship grey. Sandlime plaster is used throughout, and walls are distempered. Electric conduits are on the surface at the client's

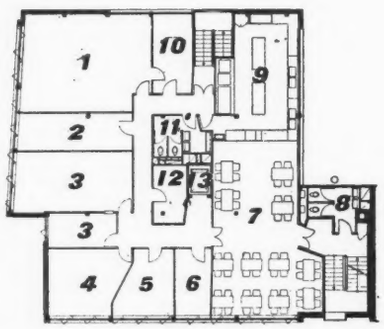
request, and these and all woodwork and metalwork are painted in various colours.

miscellaneous A top floor canteen serves 200 at one sitting. The factory rooms have a complete artificial ventilating system ; internal lavatories and main editorial rooms are also artificially ventilated. The heating circulation is from an automatically stoked solid fuel boiler ; the fuel store is two storeys high with direct access from the street ; hot water is supplied by the heating system or from a gas boiler in summer. All services are in easily accessible ducts, and the main duct in the centre of the building also carries the rainwater pipe. Assistants : Martin Cobbett, Olive Nowell.



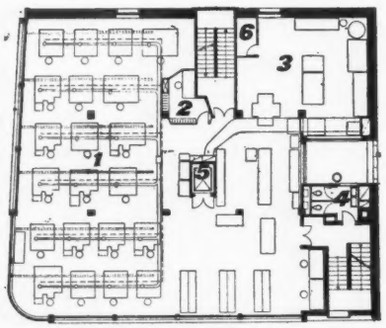
second floor

key 1, sub-editors. 2, reporters. 3, editor's secretary. 4, edit r. 5, assistant editor. 6, foreign editor. 7, legal. 8, toilets, women. 9, sport. 10, stenographers. 11, teleprinter. 12, toilets, men. 13, lift. 14, interview room. 15, stenographers' telephone booths.



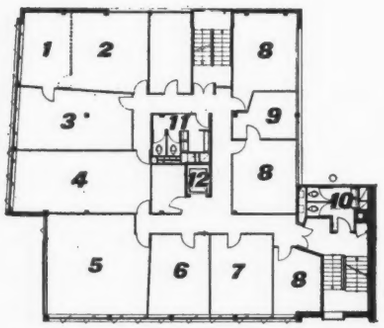
fifth floor

key 1, accounts. 2, stationery. 3, funds. 4, typists. 5, cashier. 6, post room. 7, canteen. 8, toilets, women. 9, kitchen. 10, accountant. 11, toilets, men. 12, kitchen stores. 13, lift.



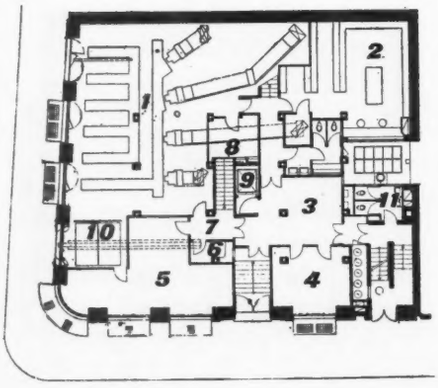
first floor

key 1, composing department. 2, printer's office. 3, top foundry. 4, toilets. 5, lift. 6, foundry office.



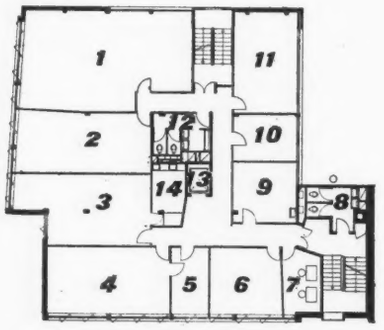
fourth floor

key 1, secretary. 2, committee room. 3, industry. 4, organization. 5, propaganda. 6, general. 7, finance. 8, advertising. 9, secretary. 10, toilets, women. 11, toilets, men. 12, lift.



ground floor

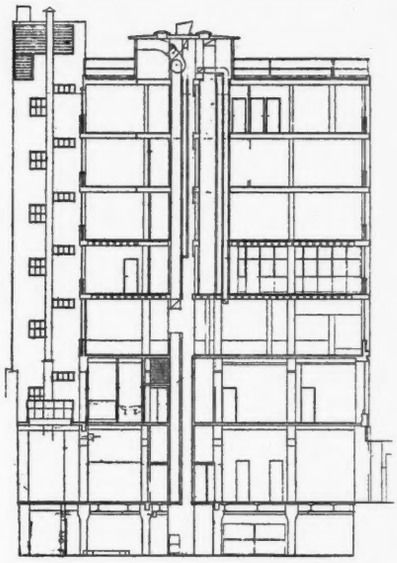
key 1, warehouse. 2, day publishing room. 3, entrance hall. 4, production manager. 5, circulation manager. 6, porter. 7, lobby. 8, night publishing room. 9, lift. 10, newsprint delivery hatches. 11, toilets.



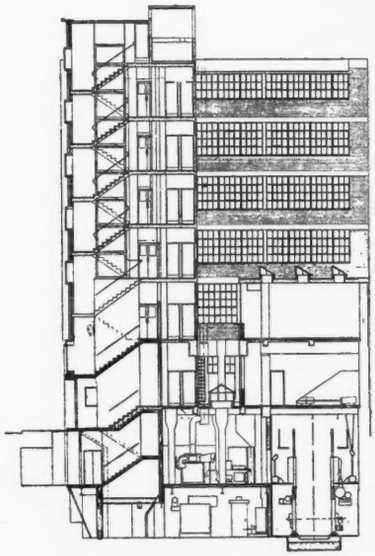
third floor

key 1, library. 2, features. 3, art. 4, board room. 5, secretary. 6, legal. 7, telephone exchange. 8, toilets, women. 9, welfare. 10, publicity. 11, special writers. 12, toilets, men. 13, lift. 14, dark room.

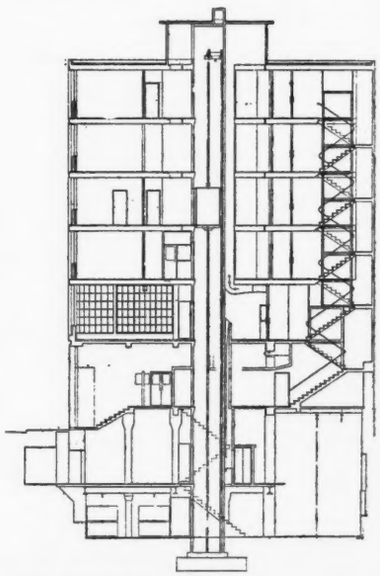
scale 1/32 in.=1 ft.



cross section through main duct



elevation to party wall



cross section through lift

NEWS

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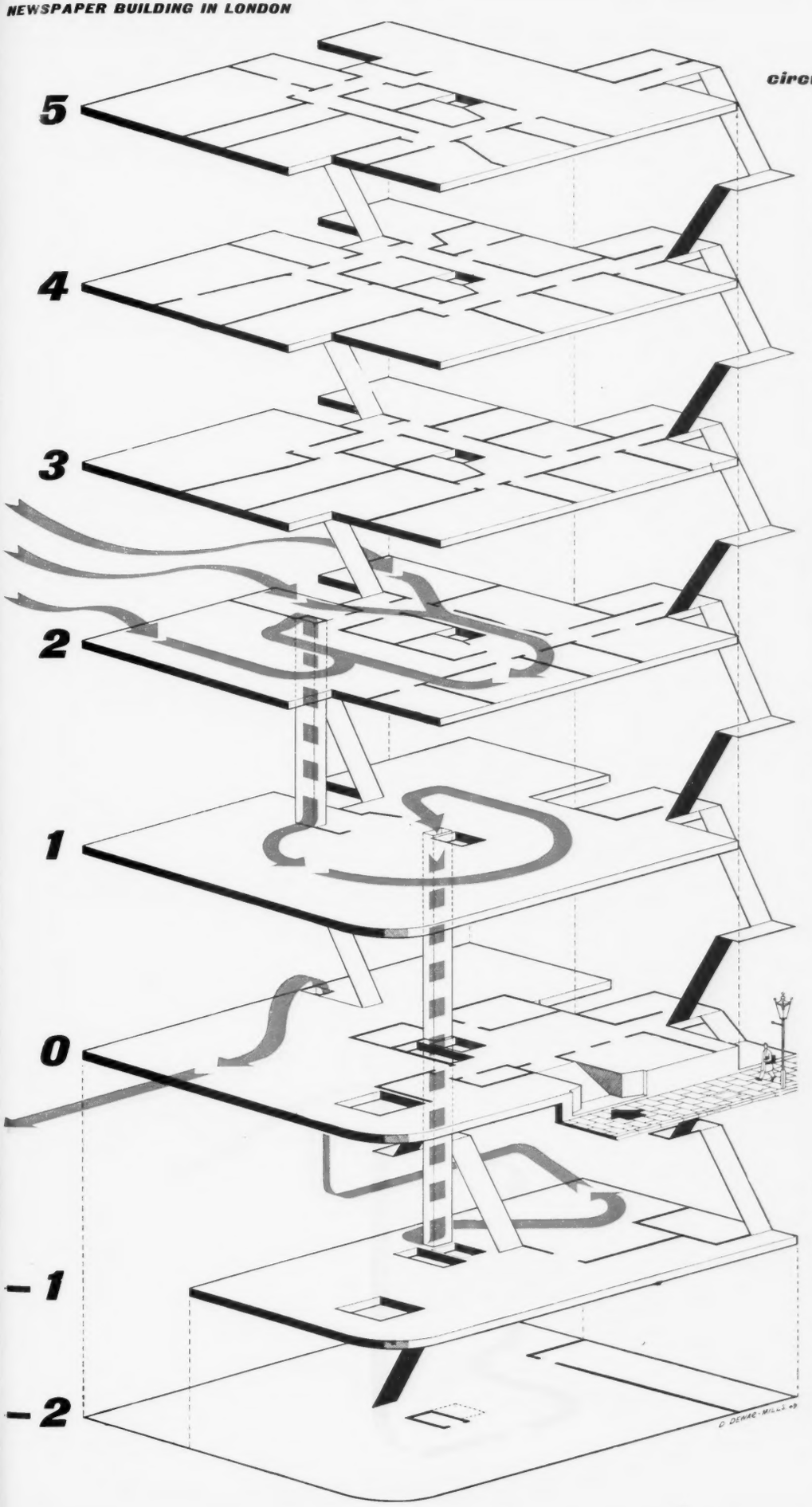
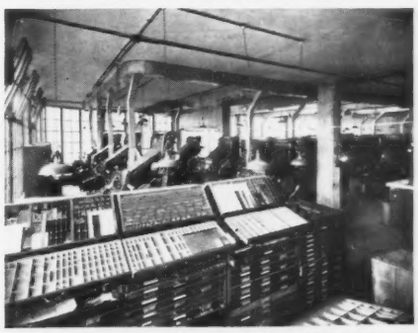


circulation diagram showing the progress of news and newsprint through various floors until the completed newspaper emerges. News is received by teleprinter, reporter and stenographers, and, after editing, leaves the second floor by downward conveyor to the first floor composing room. Here it is set up as type and matrices are made; these travel down to the basement foundry, from which castings go to the basement machine room. Meanwhile, reels of newsprint are taken from the sub-basement store, and are fed to the presses. The printed and folded newspaper rises by conveyor to the ground floor despatch department.

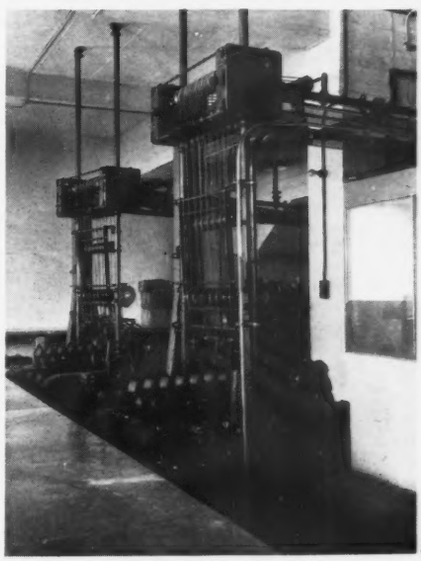
shows the progress of news

shows the progress of paper

1 reporters' and sub-editors' room on the second floor where news is first received.

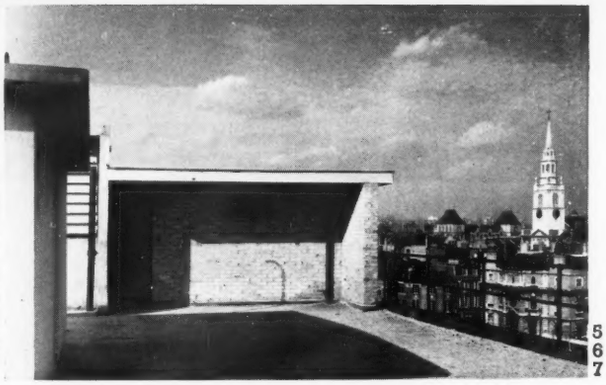


2 composing and linotype machine room on the first floor where news matter is set up in type.



3 ground floor end of newspaper conveyor, delivering folded completed copies for despatch.

4



5
6
7

4, main elevation seen from Farringdon Road. 5, entrance to lift. 6, front stairway. 7, tank and machinery house on roof.

Philip Johnson

The Frontiersman

In my opinion, Frank Lloyd Wright is the greatest living architect, and for many reasons. He is the founder of modern architecture as we know it in the West, the originator of so many styles that his emulators are invariably a decade or so behind. All younger moderns—except perhaps Le Corbusier—acknowledge Wright's influence, though some may forget the debt in their later years. There can be no disagreement, however, that he is the most influential architect of our century. In the 1900's he originated the Prairie House, with its open plan, which through the Wasmuth publication of 1911 became the prototype of so much modern design. In the 20's he outdid the massiveness of the Mayan with a new kind of ferro-concrete structure. In the 30's and 40's he has been and still is inventing new shapes: using circles, hexagons, and triangles to articulate space in new ways.

But he is more than an inventor. No one understands the third dimension as well as he, the capacity of architecture to be an experience in depth, rather than a mere facade. His buildings can rarely be appreciated correctly except at first hand. A photograph can never relay the experience of being surrounded by one of them. Nor can a camera record the cumulative impact of moving through his organized spaces, the effect of passing through low space into high, from narrow to wide, from dark to light. (Taliesin, Taliesin West, Johnson Wax Co.)

Wright is also unique in his ability to adjust buildings to natural surroundings. Whether they rise from a hill (Pauson House, Loeb House, Hartford Tower) or hug the slopes (Taliesin, Taliesin West and Jacobs House) his structures always look rooted to the soil, in his words 'organic.'

It is of great importance, therefore, to listen to Mr. Wright's opinions—especially when expressed so violently—on the work of the architects whom he calls here 'internationalists,' 'stencillists,' 'functionalists.' Since he refers twice to the exhibition which I organized at the Museum of Modern Art in 1932 as the agent responsible for the introduction of these foreign 'isms' perhaps a few notes on the intervening years would be appropriate.

Mr. Wright would undoubtedly include in his list of 'stencillists' most of the architects in our 1932 catalogue. Besides himself, there were men like Le Corbusier, Mies van de Rohe, Gropius, Oud, Mendelssohn, Aalto, Neutra, Lescaze and Stonorov. According to Wright these are fascist-inspired, cliché artists, many of whom design two-dimensional flat facade buildings because they are more interested in painting than architecture. Furthermore, they do not understand Nature; in fact, they are anti-Nature.

There is a lot of meat in Mr. Wright's castigations, but he is wrong in attributing functionalist leanings to us at the Museum who have fought it for 20 years. There is also much doubt how many of these artists really believed in functionalism even though they sometimes gave it lip-service. Mr. Wright, for example, might better have remembered not only Le Corbusier's unfortunate propagandist *machine à habiter* but his beautiful definition *'L'architecture, c'est, avec des materiaux bruts, établir des rapports emouvants,'* to which most architects including Mr. Wright would subscribe.

When he writes that international architecture is 'stencillist,' and able to be repeated, taught and learned so easily that our universities have adopted it rather than Wright's own 'organic' architecture, he is correct. Le Corbusier,

and perhaps latterly Mies van de Rohe, have indeed been too superficially adapted for teaching; Wright's principles, on the other hand, are impossible to teach in the conventional, institutional way.

Again when he cites Le Corbusier for being two dimensional in his approach he has a point. Le Corbusier facades are often flat, those of his followers flatter. And certainly the group as a whole has been distinguished by its extraordinary interest in painting. Le Corbusier, himself, is an active and accomplished practitioner of the art, but it does not necessarily follow, as Mr. Wright implies, that because he is capable of creating in two dimensions that he cannot create in three. A cube is undeniably three dimensional. To raise it on stilts only serves to emphasize that fact. Such a purist concept is, of course, a far cry from the spatial complexity of a building by Wright, but the one does not necessarily negate the value of the other.

Mr. Wright has often attacked the slick boxlike 'negativities' of international work, the painted stucco, the boredom of repeated columns. But these objections have long since been met by the internationalists themselves. They no longer use stucco, nor rely on paint. The smooth flatness is gone. Mies projects his windbraces and columns to get shadow; Le Corbusier complicates his facades with Mondrian-shaped mullion patterns and *brises soleils;* Gropius, Breuer and Neutra now use native wood, pitched roofs and deep porch-like overhangs; Aalto curves entire buildings. The movement away from the 'boxes' that Mr. Wright attacks brings the internationalists nearer to Wright's position and further from their own position of 20 years ago. How much of this enrichment is caused by a reappreciation of Wright and how much to a natural reaction against bad material and lonely cubes would be hard to say.

When Mr. Wright claims that the international movement is fascist-inspired he uses the word in two senses. He argues first that the 'provincial art elite,' the trustees and visitors of the Museum of Modern Art, being rich are fascist-inclined because rich, and second that because Mussolini favoured the *stile razionale,* therefore modern architects admired Mussolini.

The New York rich, however, are demonstrably Republican and as a class are the best clients for Georgian and Elizabethan mansions in the world. But more important, a large percentage of Mr. Wright's 'foreigners' are refugees from Nazism and Fascism. It is hard to understand his argument. As a matter of fact modern architecture has never flourished in any totalitarian country whether Communist or Fascist. It is a true child of social democracy.

It is on the question of Nature and its relation to architecture that Mr. Wright is clearest. 'We must learn to use the word Nature in its proper *romantic* (i.e. integral) sense' he writes (italics mine) and he is indeed romantic about Nature. He has proposed elsewhere that 'the Tree should be the inspiration for American architecture of the Machine Age.' He speaks of his new Johnson Laboratory Tower as having a tap-root and branches. His greatest objection to the 'internationalists' is their anti-Nature stand.

In his eyes Japanese and Mayan work are 'organic' while Greek and Renaissance architecture are inorganic, opposed to Nature. The internationalists, he correctly points out, admire the Greeks and consequently conceive their work as a contrast to Nature rather than a part of it. Like the Parthenon their buildings are placed against Nature.

Mr. Wright's preference for regarding his buildings as identified with Nature has inspired him to produce the most remarkable architectural creations of our time, but does this in itself invalidate the other point of view? Rather, is not the contrast between Le Corbusier's *prisme pur* and Wright's luxuriant forms but another manifestation of the Classic-Romantic dichotomy? Does not Le Corbusier's work symbolize Mediterranean culture today: the bright tight shapes of a static civilization, against a blue sky. And does not Wright's work typify the exuberant individualism of an ever-expanding frontier?

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3

TALIESIN WEST

Frank Lloyd Wright's winter camp in the Arizona desert was begun in 1938. The only permanent structural elements are the heavy walls and plinth, made of concrete in which have been set large many-coloured rocks taken from the desert. Shelter, with a variable and controlled quality of light, is provided by the superstructure of rough lumber and canvas, and by louvres. Here, during the winter months, apprentices make drawings and models of the work which Frank Lloyd Wright has in commission. They also continue, with no outside assistance, to build on to the camp, to enlarge and improve it, as part of their training in 'organic' architecture. A theatre is now being built, near the camp workshop (see plan on page 108). 1 is the new tower, which houses the air-cooling apparatus for Frank Lloyd Wright's own living quarters; the entrance to the playing area is on the left; connecting the main buildings and the roof of the playing area is a bridge, which leads to a roof garden and spectator gallery for the playcourt beyond. 2, 3, exterior and interior of Frank Lloyd Wright's own study, the interior shows a corner of his drawing-board. The colour photographs are by David Pleydell-Bouverie.

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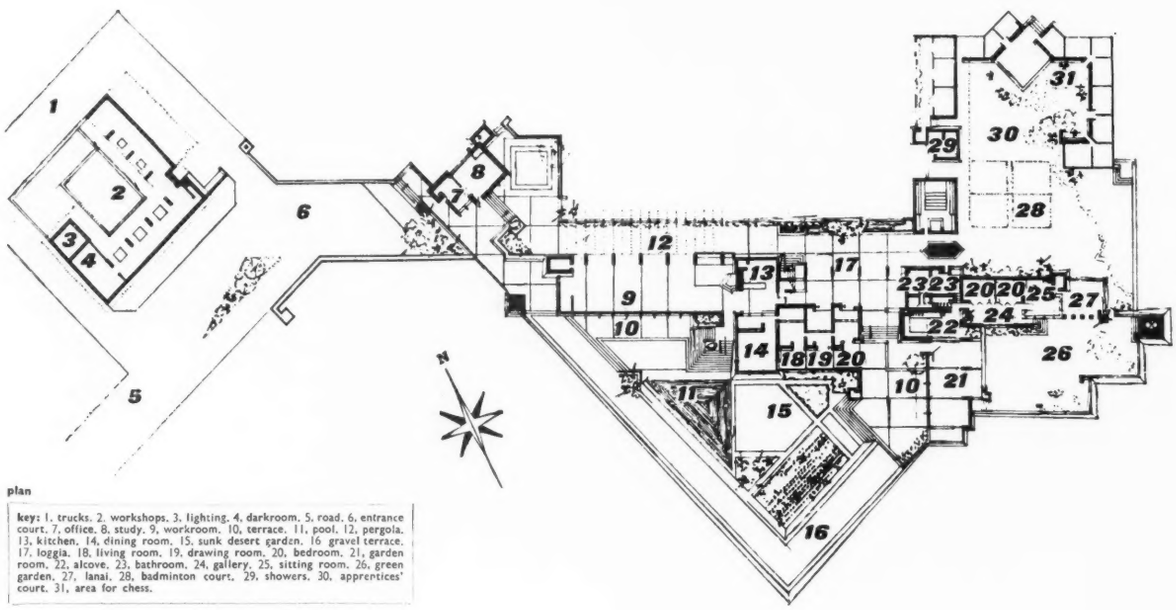
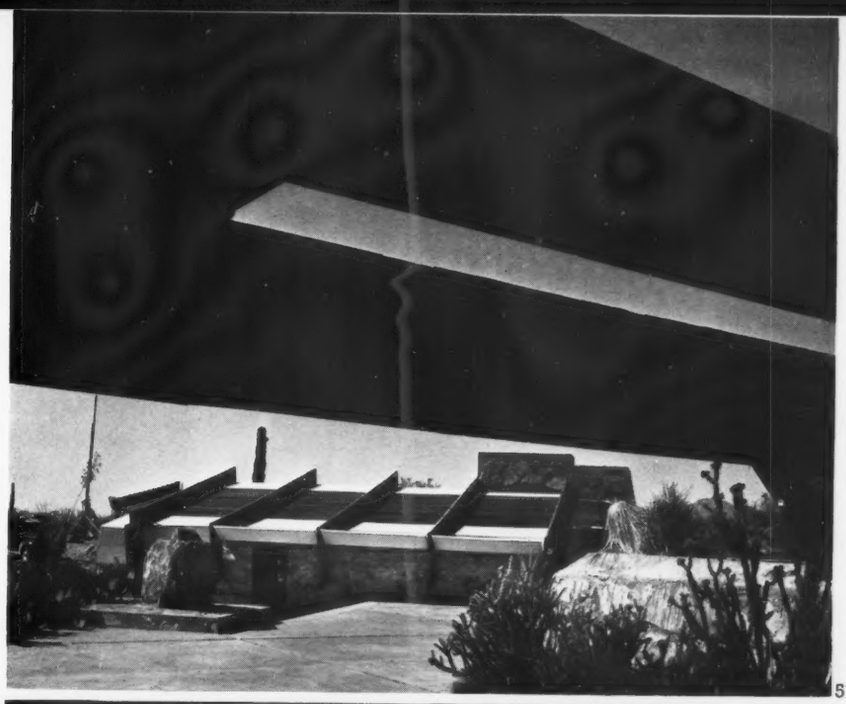
the workroom, from the paved entrance court; in the middle foreground is the fireproof plan file.



plan

key: 1, trucks. 2, workshops. 3, lighting. 4, darkroom. 5, road. 6, entrance court. 7, office. 8, study. 9, workroom. 10, terrace. 11, pool. 12, pergola. 13, kitchen. 14, dining room. 15, sunk desert garden. 16 gravel terrace. 17, loggia. 18, living room. 19, drawing room. 20, bedroom. 21, garden room. 22, alcove. 23, bathroom. 24, gallery. 25, sitting room. 26, green garden. 27, lanai. 28, badminton court. 29, showers. 30, apprentices' court. 31, area for chess.



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5, 6, characteristic views of the camp at Taliesin West, showing the relationship of the solid base of stone and concrete to the wood and canvas superstructure. 7, the loggia with the guest terrace above it; in the background is the bell tower, by which the fifty or sixty members of the Taliesin Fellowship are summoned to an assembly or to the various tasks into which a day may be divided.

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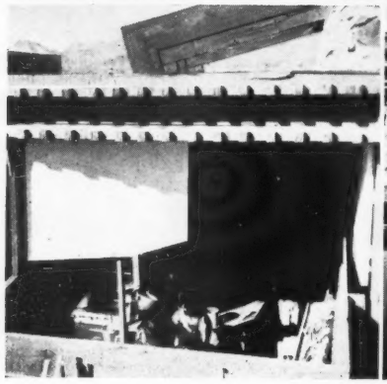

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TALIESIN WEST

8, *Frank Lloyd Wright and Philip C. Johnson.* 9, *looking down into the partly open kitchen, where every apprentice of the Fellowship takes his turn at preparing and cooking food. Square blocks of rough wood are nailed to the fascia, creating the 'pin-point' shadows which are characteristic of the Arizona desert; these shadows may be seen in* 8 *on the hill in the background.* 10, *the pool, with its reflection of masonry wall and the cantilevered awning over the dining-room.* 11, *the Pauson House, near Taliesin West, on completion, and* 12, *as it appeared in* 1949 *after it was burned down.*

11
12

Helen Rosenau

ARCHITECTURE AND THE FRENCH REVOLUTION: JEAN JACQUE LEQUEU

Ever since E. Kaufmann of Vienna rediscovered Ledoux and recognized his importance in connection with certain principles of modern architecture, his innovations have been called the style of the French Revolution. Dr. Rosenau, in the following article, proves two things: that Ledoux was only one of several to evolve this style, and that the connection with the Revolution is far less characteristic of him who was not a believer in it, than of Lequeu, whose work is here for the first time assembled and analysed.

LITTLE IS KNOWN about Jean Jacque Lequeu the Younger, one of the most profound and original architects of the period of the French Revolution[1]. The Hôtel Montholon in Paris built by Soufflot and decorated by Lequeu has disappeared and was, as far as one can judge, of an indifferent character[2]. The only biographical facts which can be mentioned are that, according to an undated manuscript volume entitled *Voyage in Italy* he must have visited Italy and that—according to F. Benoît—he was 'inspecteur des travaux de Soufflot, attaché au comité des travaux publics, au Conseil des Bâtiments civils[3].' A self-portrait exists, above, showing features which the psychiatrist to-day might be inclined to call pycnic. The contrast between his sensuous mouth and his straight nose, perspicacious eyes and broad forehead covered by a fringe, is significant. Judging from this drawing, which is dated 1792, Lequeu must have been born between 1740 and 1750. He thus belongs to Jacques-Louis David's and Marat's generation. The background of the self-portrait is made up of some of the elements of Lequeu's style which we shall find characteristic: a combination of Gothic and classical forms and a prominent display of books and drawings pointing to a desire to achieve literary fame. That such a desire lived in Lequeu is proved by the number of manuscripts surviving, some evidently intended for publication. He deposited all of them in the Bibliothèque Nationale. Here are their titles:

Four volumes on architecture, consisting mainly of sketches (our illustrations are all taken from these).

Lettre sur le savonnage. Mécanique. Voyage en Italie. Plan et décoration de l'Hôtel Montholon. Précis méthodique pour apprendre à graver. Nouvelle méthode appliquée aux principes élémentaires du dessin tendant à perfectionner graphiquement le tracé de la tête.

To go back to the self-portrait, Lequeu's wish to build in the capital is implied in the words 'de la ville de Paris' on the sheet of drawing paper, whilst 'Détails de Bâtimens' et 'Les Cartes de Géographie' indicate that he was conscious and proud of his versatility. The caption to the portrait informs us that Lequeu was a member of the Académie Royale of Rouen. A perusal of the available transactions of this academy has failed to produce his name, but many of its records were destroyed in 1793. That Lequeu was a resident of Rouen, he tells us in the caption to a design for a Ducal Chapel in two storeys (Fig. 1) which shows Renaissance motives on the columns and the barrel vault, and a display of statuary indicative of a keen interest in sculpture. The most interesting feature of the drawing, however, is two lines dotted across, the lower showing, as Lequeu explains, 'la hauteur de la voûte moderne à l'antique qui lui donne plus au moins chaque Architecte à la grecque,' while the higher is preferred by Lequeu, as possessing to a larger extent 'de la délicatesse,' 'du majestueux' and also the 'teinte religieuse et respectable que donne une suite de siècles.'

This concern with the feelings of the Middle Ages is to be met again in another design probably connected with the chapel, for the chapel seems to refer to the Château de Gaillon[4], which at that time belonged to the Duc Dominique de la

[1] I wish to thank Mr. J. Adhémar and the staff of the Bibliothèque Nationale for assisting me in my work, the director of the Rouen Library for information, Mr. Enthoven, F.R.I.B.A., Dr. N. Pevsner, Mr. A. W. Wheen and Miss Frances Yates for valuable suggestions.

[2] It is mentioned and reproduced by J. C. Krafft and N. Ransonette: *Plans, coupes et élévations des plus belles maisons. . . .* Paris 1803, No. 17. It is also dealt with in a MS. volume of drawings by Lequeu in the Bibliothèque Nationale.

[3] F. Benoît: *L'Art Français sous la Révolution*, Paris 1897, p. 267. An obstacle in investigating Lequeu is, incidentally, that another architect Lequeu existed at almost the same time. He is called François Romain, was born at Alençon and domiciled in Normandy.

[4] On Gaillon cf. J. A. Deville: La construction du Château de Gaillon, Paris 1850. The two-storied chapel is mentioned and illustrated in this work. The château was sold in August 1792 and largely destroyed in 1793. One gateway is now erected in the courtyard of the École des Beaux-Arts ancient site of the Musée des Petits-Augustins.

Rochefoucauld, Archbishop of Rouen. Now for him Lequeu designed a 'Gothic Gallery' (Fig. 3) to be erected, as the caption says, at Gaillon. With its slender pillars and large oblong windows it foreshadows later constructions in cast-iron. Similar in style is the drawing of a façade to be added to a mysterious 'Temple to Isis as built by the Gauls and preserved by King Francis I' (Fig. 2). A comprehensive knowledge of architectural idioms is seen in the combination of Gothic tracery, Gothic pinnacles, Ionic volutes, Baroque volutes and an open belfry surmounted by a cross[5]. It should be remembered that such syncretistic ideas were current among the freemasons in Lequeu's period, and that there existed no fewer than four lodges in Rouen. Lequeu, if not himself a member, may well have possessed some knowledge of their ideas. (Cf. Précis historique de la Franc-Maçonnerie, Paris, 1829.)

It is interesting to compare early Gothic designs by Lequeu—for work for La Rochefoucauld must of course be earlier than the Revolution—with English eighteenth century examples of the Gothic Revival, for instance Batty and Thomas Langley's *Gothic Architecture* of 1747 (Fig. 4) or, to mention an actual building, Sheffield Place in Sussex of 1779 (with the same stepped gables as Lequeu's Gallery), or Soane's *Designs in Architecture* of 1790[6]. The interest of Lequeu in English art is undeniable and only one of several examples of English influence on late eighteenth century France (Marie Antoinette's *Hameau*, the *Jardins Anglo-Chinois*, and so on). But Lequeu's insistence on Gothic forms is something rare indeed amongst French eighteenth century architects. It can perhaps be explained by the proximity of Normandy to England.

Another remarkable comparison can be drawn between Soane's 'Elevation of a Dairy House in the Moorish Style' (Fig. 5) designed in 1780 and published in 1793, and Lequeu's chicken coop on a farm (Fig. 6). The style is instructively similar, though Lequeu's clarity of outline is entirely in the French tradition, a French characteristic right down to the present day. Incidentally, it is worth noting that the roof was intended to be made of white iron, which would at 'certain hours shine brilliantly in the sun.'

After these excursions into the Middle Ages the next illustration shows a much more serious one into Antiquity, a reconstruction or 'autographie,' dated 1791, of the tomb of the Etruscan King Porsenna, based on the descriptions of Livy, as well as—a surprising touch of archæological scholarship—on an Augustan coin showing the Labyrinth of Minos (Fig. 7)[7]. This is introduced as a parallel to the labyrinth traditionally connected with Porsenna's monument. Lequeu's building is a globe supported by five pyramids on a platform. To appreciate how intelligently Lequeu tackled the interpretation of his sources, his design should be compared with that by Quatremère de Quincy, first published in 1825 (Fig. 8)[8]. Quatremère reconstructs much less conscientiously and takes any amount of liberty with his texts in order to suit his subjectively conceived æsthetic categories and practical considerations. Instead of placing the sphere on the top of the pyramids, for instance, as Livy says, he arranges them at their back.

After Gothic and Etruscan examples one may follow now Lequeu's interest in Jewish worship. We find among his drawings two views of a small Synagogue 'below the rock,' one of them showing the Sanctuary with the Holy Curtain and the Tablets of the Law. The Hebrew initials for 'Kether Thorah' stand for 'Crown of the Law,' and are customary for that type of decoration (Fig. 9). A second similar drawing shows the open shrine.

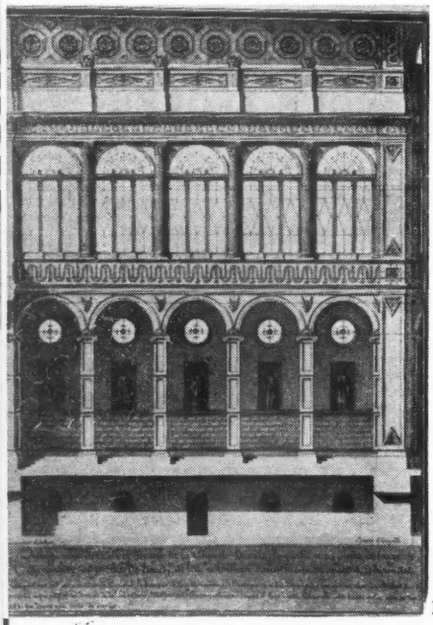
The reason for the position 'below the rock' may be found in a Jewish tradition, misunderstood by Lequeu, which requires

[5] Some useful references to alleged Isis finds in E. Espérandieu. Recueil général des bas-reliefs, Paris 1907, etc. Lequeu's opinions in archæological matters deserve careful consideration, see for example his Tomb of Porsenna (and note 15). A drawing for an Isis temple is among Lequeu's designs.

[6] Cf. F. Clark: The English Landscape Garden, London 1948.

[7] W. Wroth: Catalogue of Greek Coins in the British Museum, London 1886, p. 26, No. 74 shows a similar coin.

[8] Quatremère de Quincy: Restitution du Tombeau de Porsenna, in *Monuments et Ouvrages d'Art Antiques Restitués*, I, Paris 1829. Published as a pamphlet in 1826. In this work Quatremère refers to Caylus, as having drawn attention to this tomb. 'Que ces pyramides soient supportées si ridiculement et d'une façon si peu practicable, ce n'est pas mon affaire' says Caylus in *Mémoires de littérature*, XXIII, p. 298f. (not vol. XIII, as cited by Quatremère). This notion the later writer set out to remedy.



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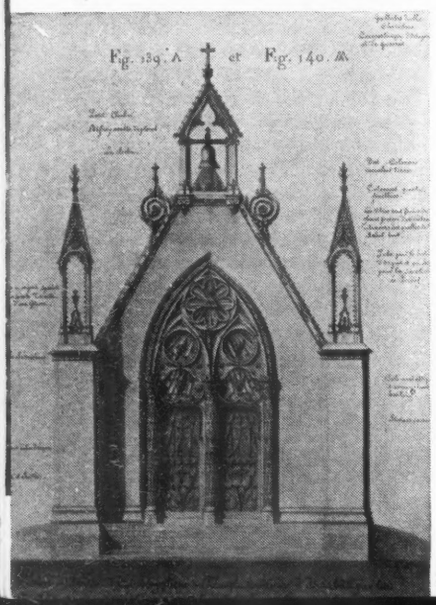

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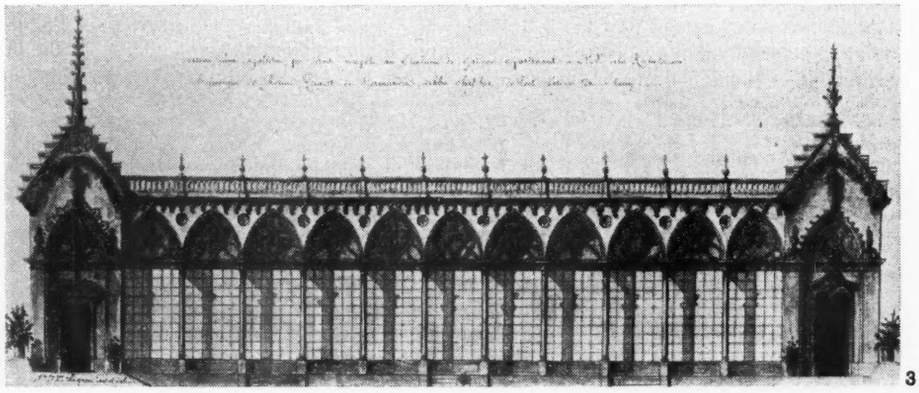

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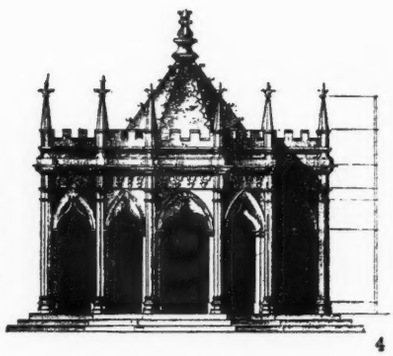

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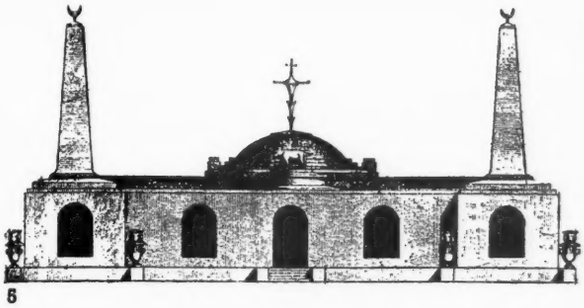
1, Lequeu's design for a ducal chapel in two stories, a building intended to be part of the Archbishop of Rouen's Chateau de Gaillon, for whom Lequeu also designed the 'Gothic Gallery'; 3, his frequent employment of Gothic forms is rare among French eighteenth century architects, and may have been due to the proximity of Normandy to England; 4, a piece of contemporary English 'gothick' by Batty and Thomas Langley. 2, the strange mixture of motifs in the façade to be added to the 'Temple of Isis as built by the Gauls and preserved by King Francis I', was typical of the syncretistic ideas current among the freemasons in Lequeu's time.



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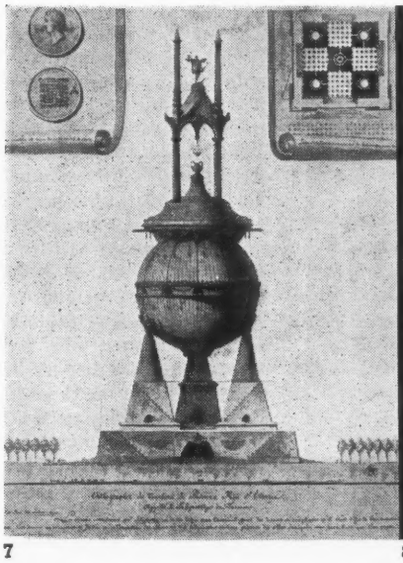
5, Soane's 'Elevation of a Dairy House in the Moorish Style' bears an interesting similarity to Lequeu's design for a chicken coop, 6, the roof of the latter was intended to be of white iron to reflect the sunlight; 7, an example showing Lequeu's antiquarian interests, the reconstruction of the tomb of the Etruscan king Porsenna; this design comes much closer to Livy's description of the tomb than the 1825 reconstruction, 8, by Quatremère de Quincy. 9, a building by Lequeu for Jewish worship, a synagogue 'below the rock.'



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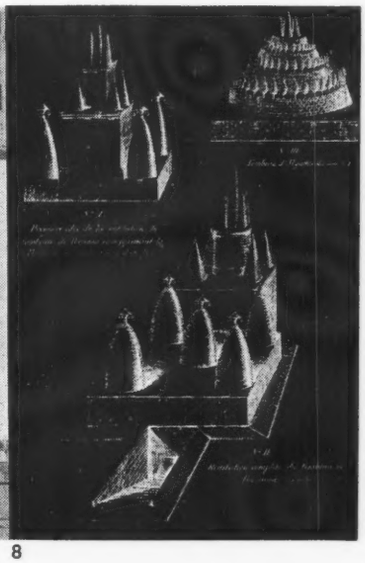

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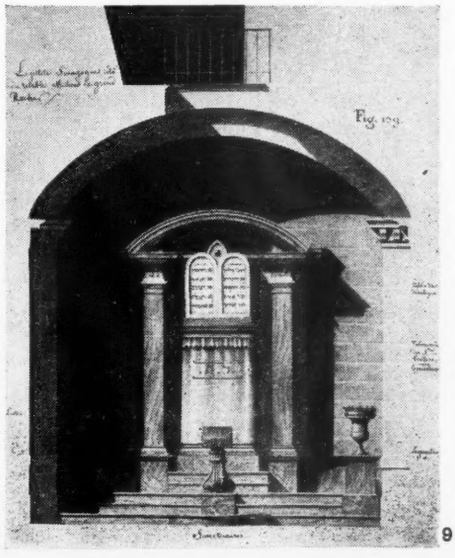

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the floor of a synagogue to have a level lower than the street, in order to be symbolical of the verse 'Out of the depths have I cried.' (Psalm 130.) However, Lequeu may also have been thinking of the persecutions of the Jews, which led them to hidden places of worship.

The synagogue and some of the other small buildings such as a Gothic House and a Rock Pavilion drawn by Lequeu may have been intended for a 'Jardin Anglo-Chinois' at Gaillon, in the same manner in which the enlightened Duke Frederick Franz of Anhalt included a circular synagogue in his park of Woerlitz near Dessau in Germany[9]. Another connection with English landscape gardening appears in Lequeu's drawing of a *Cabane des Sauvages*, but the scientific spirit with which he renders the details of the timbers is entirely Lequeu's. The colours of the trunks and branches are elaborately described in the captions and the interior arrangement of planks, fixed at four feet above ground in order to provide beds, is noted (Fig. 10).

Similarly meticulous and searching is Lequeu's curious façade of the *Ménagerie du lieu le plus désert, ou des Transformations*, an illustration to Ovid (Fig. 11). It shows the caves of the savage beasts as well as such transformations as that of Echo into a rock, Cyane into a fountain, Hyrie into a lake[10].

The focal moment in Lequeu's life must have been the outbreak of the French Revolution. There exists for instance a drawing of 1789, representing a new Order in addition to the existing Five Orders of columns. It is called 'a Symbolic Order for the *Salle des États* of a National Palace' and shows Nobility in chains, carrying the weight of the building. The correctness of the treatment of the entablature and of the Corinthian capital affords a striking contrast to the introduction of a topical political theme. It shows clearly Lequeu's double approach to his art, one archæological, the other political (Fig. 12).

Connected with this drawing is a design for a monument to *Force et Travail* destined for the Place de l'Arsénal, and a plan for an Assembly House for the French People, dated 1793 (Fig. 14). This is in a severely antique spirit semicircular, and it is worth remembering that the Hall of the Conseil des Cinq-Cents in the Palais Bourbon, which was established in 1797, had the same shape and that its architects Gisors and Lecomte may well have collaborated with Lequeu who, it will be remembered, was at the time 'attaché au comité des travaux publics' (Fig. 13)[11].

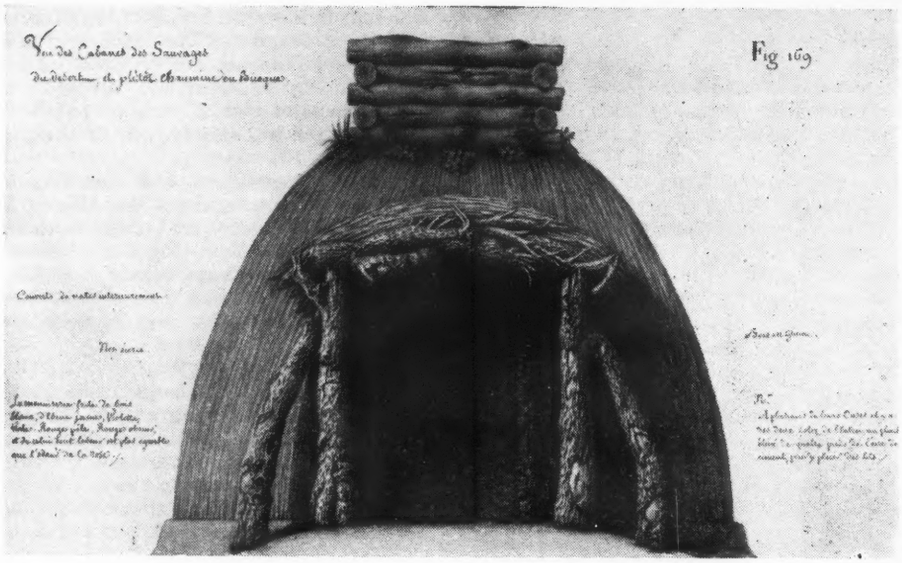
In Lequeu's drawing there is indicated on the platform a group representing 'Liberté' and 'Egalité' clasping hands in the well-known gesture of the *dextrarum junctio*. Roman fasces are used as an ornament.

These also appear in one of Lequeu's most surprising designs, a Palace of Justice, dated 1794 (Fig. 15). This building is completely spherical and surrounded in its lower half by a Greek Doric colonnade. The door on the other hand is of a primitive 'Gothick' kind. The motif of the sphere is not disguised inside either. On the contrary, it is repeated in the globe, forming the base of a statue of Justitia with the scales. The outer parapet is adorned by fasces surmounted by flags, symbolizing that unity represents strength. The dedication of this building to the *Egalité Sainte* expresses Lequeu's political convictions. Similar in style is another public building dedicated to the *Sagesse Suprême* (Fig. 16), a centre for theistic worship in which the interior decoration of the ceiling consists

[9] H. Rosenau: A Short History of Jewish Art, London 1948, passim.

[10] Cf. J. Seznec: La Survivance des dieux antiques, London 1940, passim. Lequeu has used the Metamorphoses. It is worth remembering that a Latin edition with French translation of the Metamorphoses appeared in 1784 in Paris.

[11] Cf. J. G. Legrand and C. P. Landon: Description de Paris, Paris 1808, p. 69ff. Cf. also note 3 of this article.



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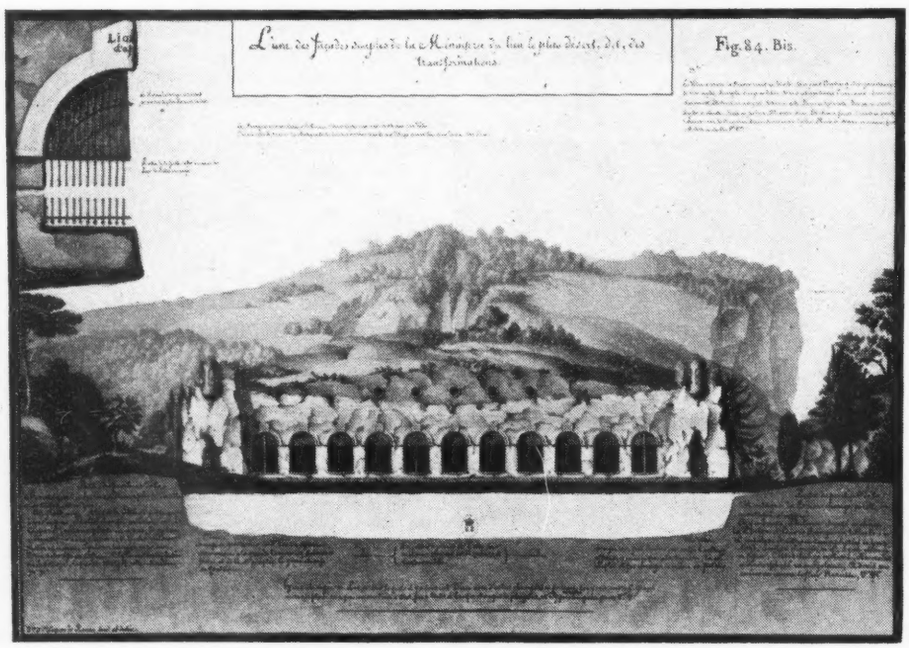

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of a representation of the star-lit sky. This suggested use of the sphere regardless of technical or functional considerations may seem baffling to us. At Lequeu's time it was not unique. It appears also in the designs of Boullée and Ledoux, Lequeu's contemporaries, of whom the later Ledoux, in the course of the last years, has become so much better known.

A connection with Ledoux seems also likely in Lequeu's *Column to the Glory of the Fallen of the Revolution*, a monument to be erected in the Place des Victoires designed in 1794 (Fig. 17). It is in type comparable to Ledoux's *guérites*, the sentry boxes of the Gates of Paris (1785-89) but shows a more elaborate treatment of detail and a change from ornamental simplicity to an emphasis on symbolism. The monument was to be adorned with statues, inscriptions and emblems. 'Mères! calmez vos douleurs, ils ont sauvé la patrie.' Here evidently Lequeu felt at one with the poet.

The epitome of his interest in science, in politics and in relationship between a cosmic and a symbolic interpretation of the universe is the intended frontispiece to the volumes on Architecture (Fig. 18). It gives a scientific exposition of the radiation of light. The globe in the centre is seen reflecting the light of the sun, of the moon, and of a torch or other fire. Along the periphery are geometrical shapes lit on one side and casting shadows on the other. They are meant to emphasize the importance of optics, that is of the effects of light and shade in the design of buildings. There is nothing comparable to this in Ledoux. But another contemporary of Lequeu, Jean-Jacques Boullée, shows a similar concern with shadows in his architectural manuscripts and large drawings which also belong to the Bibliothèque Nationale. Boullée probably prepared these not only with a view to publication as a treatise but for display in an architectural museum which he intended to create.

When considering the place of Lequeu in the development of French late eighteenth century architecture, comparisons between him, Boullée and Ledoux are

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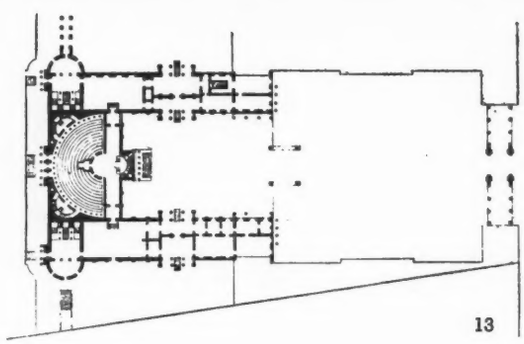

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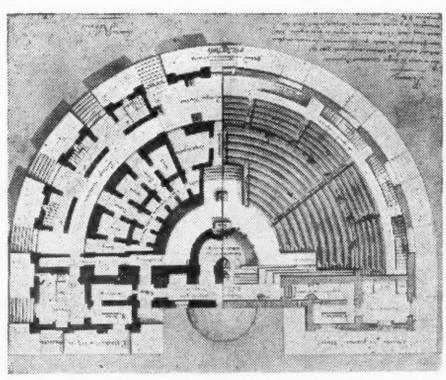

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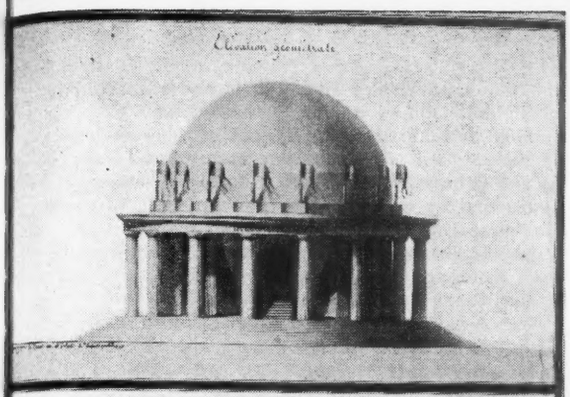
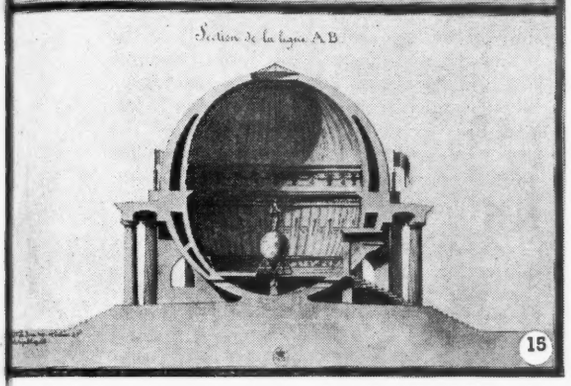
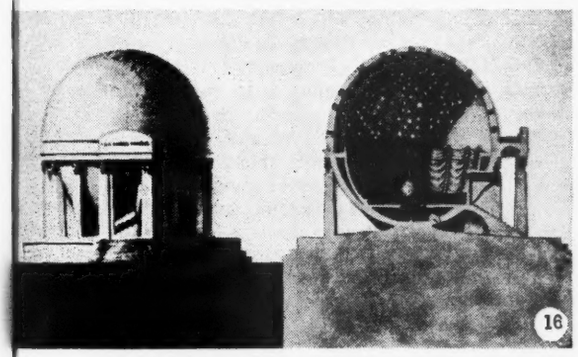
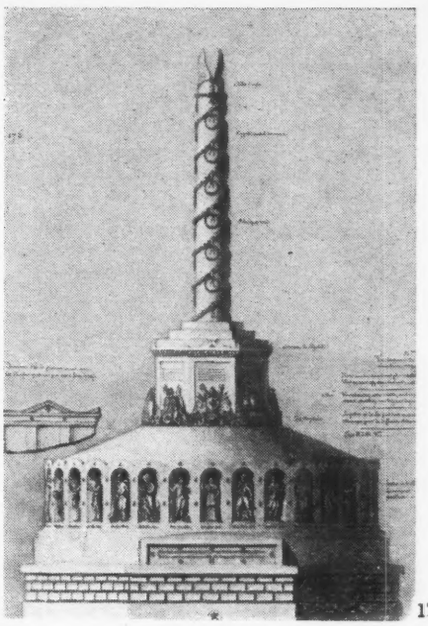
10, ***a meticulous drawing by Lequeu of a*** **Cabane des Sauvages,** ***presumably intended for a landscaped park in the 'style Anglais';*** **11,** ***an illustration to Ovid; façade of the*** **Ménagerie du lieu le plus désert, ou des transformations.** ***The importance in Lequeu's life of the French revolution is symbolized by his own suggested addition to the Five Orders,*** **12,** ***made in*** **1789;** ***it shows Nobility in chains, carrying the weight of the building;*** **13,** ***the plan of an Assembly House for the French people,*** **1793.** ***The semi-circular hall is the same as that of the Conseil des Cinq-Cents in the Palais Bourbon,*** **1797,** ***by Gisors and Lecomte,*** **14,** ***with whom Lequeu may well have collaborated.***





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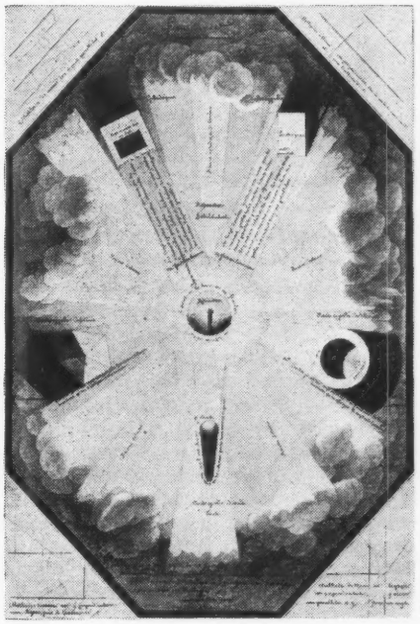
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15, *design for a Palace of Justice, in the form of a sphere, the lower half surrounded by a Greek Doric colonnade,* **1794**; **16**, *another public building, similar in style to the Palace of Justice, but dedicated this time to the* Sagesse Suprême, *and intended as a centre for theistic worship;* **17**, *column to the Glory of the Fallen of the Revolution.* **18**, *the frontispiece to Lequeu's* Architecture.

indispensable. Boullée was born in 1728 and died in 1799. Ledoux was born in 1736 and died as late as 1825[12].

Ledoux affirms in his *Architecture*, published in 1804, that his drawings for it were conceived between 1769 and 1789. But there is little evidence to support this claim, since all Ledoux's dated and executed work is far more conventional than his plans for 'la ville idéale.' On the other hand, Boullée's drawings were deposited in the Bibliothèque Nationale by himself, that is before 1799. They were thus publicly accessible, and may therefore have influenced Ledoux as well as Lequeu. Certainly the text of Boullée's architectural treatise seems to foreshadow Ledoux's approach, especially in the matter of functional town-planning.

Boullée's cenotaph to Newton is yet another example of a spherical building (Fig. 19), logically more understandable as a monument to a scientist than as a Palace of Justice as drawn by Lequeu or the house of a *Garde Agricole* by Ledoux. Moreover, Boullée's design can with some probability be dated about 1787, the year in which Marat's translation of the *Opticks* came out[13]. This was, of course, not the first rendering of Newton's work in French, but gained popularity in progressive circles, due to the political significance of its writer. If beyond the general shape Boullée's Memorial, and indeed his other designs are compared with Lequeu's, it will be seen that the archæological interest, so characteristic of Lequeu, is absent in Boullée, whose concern is far more for theatrical effects. While one can consider Boullée mainly as a decorator, Lequeu can only be appreciated, if his interest in archæology and novel structural techniques are taken into consideration. As to Ledoux, he was, with rare exceptions, of a more practical disposition, as witnessed by his greatest achievement, the toll houses of Paris.

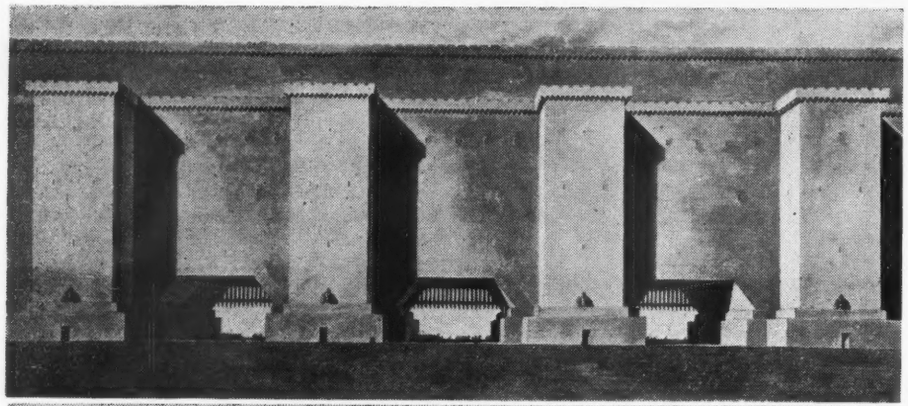
Politically neither Ledoux nor Boullée were acceptable to the Revolutionaries. Ledoux's Gates were swept away by the Revolution. 'Le mur murant Paris, rend Paris murmurant,' is how a contemporary Alexandrine puts it. And Ledoux himself was temporarily imprisoned. As to Boullée, a poster against him was pasted up, according to Benoît[14], on the walls of the Maison du Comité d'Instruction Publique, which said: 'Artistes qui demandés qu'il vous soit fait justice, reveillés vous. Un parti c'est formé . . . Un espèce de faux en architecture, Boullée le septuagénaire en est le noyau; cet homme a tout disposé pour lui: démarches pressantes, propos séduisants. . . .' The text further alludes to the patelin (flatterer) Ledoux, and is signed on the 19th Germinal of the year II by Le Juste. This signature should not be considered as the writer's name but as an indication of his intentions.

It is in fact known of Boullée and Ledoux that, although distinctly in advance of their time artistically, they belonged politically to the reformist and royalist factions. Theirs is a fight against 'superstition' in religion, against unintelligent patrons and 'enlightened' and responsible government. They belong to Condorcet rather than to Robespierre. Lequeu on the contrary reveals in his architectural designs his conviction of the greatness of a violent Revolution. An outsider who came to Paris from the provinces, he was not tied so much to the world of the French court, in which Boullée and Ledoux had found their chief employers. In communication with the court they had become used to planning on a large scale. One has only to remember the city of Versailles, conceived as an adjunct to the Palace, to realize what official planning meant in France. As to principles of planning, Boullée and Ledoux did indeed differ. Boullée emphasizes in his drawings for an ideal city the impermeable walls, and encloses in a similar manner the cenotaphs of his necropolis (Fig. 19). Ledoux's plan for Chaux (Fig. 21) on the other hand foreshadows the garden-city ideas of about 1900. But both Boullée and Ledoux think in terms of extensive groups of buildings, while Lequeu stresses the individual structure rather than the relationship between landscape and buildings. As an individualist and as a searcher into the diversity of cultures his originality lies in the discovery of new means of expression and in the adaptation of traditional forms to novel objects. That this approach was not without its dangers goes without saying. It makes Lequeu one of the forerunners of an eclectic historicism, although he remained himself immune because of his functional approach and his genuine interest in the meaning of the forms he employs. The purpose underlying

[12] J. G. Legrand: Essai, part of J.-N.-L. Durand's: Recueil, Paris, l'an viii (1801). The literature on Boullée and Ledoux is considerable. It is sufficient to mention here E. Kaufmann: *Von Ledoux bis Le Corbusier*, Vienna 1933, and the same author in *Art Bulletin* XXI, 1939, p. 212ff. Also M. Raval and J-Ch. Moreux: *C.-N. Ledoux*, Paris 1945, and G. Levallet-Haug: *C.-N. Ledoux*, Paris-Strasbourg 1934.

[13] Marat as a writer deserves more intensive study. His personality, unusual and versatile, combines an acute feeling and sympathy with human suffering with a keen interest in the pursuit of knowledge, be it of a scientific or political nature.

[14] Benoît, l.c. p. 252.



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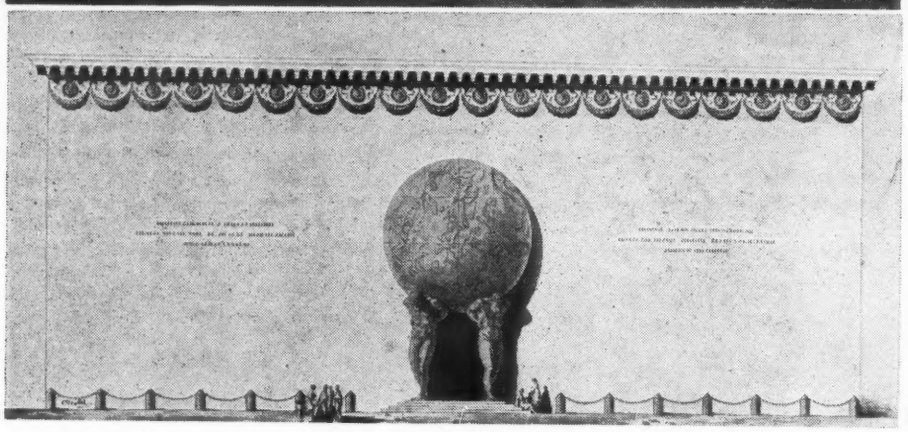

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19, one of Boullée's drawings for an ideal city, testifying in no mean terms to Sobry's belief that the 'ville sans mur n'est pas une ville.' The divergence of his ideas from those of Ledoux is shown in design by the latter for Chaux, 21, *which foreshadows the garden-city ideas of* 1900; 20 *is another design by Boullée, this one for a library with twin figures of Atlas carrying a globe, which is incised with astral constellations related to Autumn.*

his work may be expressed in the words of Quatremère de Quincy pronounced when challenging the thoughtless approach to art, which had been characteristic of the last phases of the Ancien Régime: 'Ou je me trompe fort, ou elle (a musical composition in this case) ressemblera beaucoup à des tableaux faits on ne sait pourquoi, pour être placés on ne sait où[15].'

One feature common to all the leading architects of the period studied here is a concern with simple geometrical forms as the basic elements of spatial composition. This was partly caused no doubt by a longing to give permanence and solidity to their visions. Yet, the period of the Revolution being short-lived and unstable, these visions were destined to remain untranslated into reality[16]. However, in spite of all the striking unity of style of Lequeu, Boullée and Ledoux (and some others), there still remains their own personal interpretation of contemporary trends.

If we look for instance at Ledoux's *Élévation* of the cemetery of Chaux —a strange elevation but probably meant to decorate one of the façades of the building—and then at Boullée's front of a library, we see that Boullée's twin figures of Atlas carry a globe which is incised with astral constellations related to autumn (1788) (Fig. 20). These belong to an old astrological tradition. Ledoux's earth, seen among the six planets, excluding Uranus discovered in 1781 by Herschel, and with only the rays of the sun appearing, is by contrast an astronomical and no more an astrological vision, in spite of its probable earlier date. What it means to say is: It is night for Europe and Chaux. Lequeu's 'Frontispiece' and his star-lit sky as the decoration of the temple to *La Sagesse Suprême* testify to the same scientific interests. Many of the engravings published at the time (especially in the *Mémoires* contained in the Transactions of the Académie des Sciences) reveal not only a similar style, but the recurrence of the same elements, the Zodiac, the planets and other astral combinations. It is in conjunction with these that the interest of the architects in Newton must be understood[17]. Boullée's proposed Newton Memorial is revolutionary but by no means unique. In 1800 a Grand Prix and a Prix d'Émulation were given by the Academy to Gay and Labadie for designs of Newton Memorials. In Gay's conception a pyramid—another simple stereometric form—is subdivided by a globe. It is quite possible of course that Gay knew Boullée's drawings at the Bibliothèque Nationale[18].

Moreover, the trees as a kind of subdivision of the sphere in Boullée's Cenotaph for Newton recur in Lequeu's tomb of Porsenna. It is unlikely that the motif would have been conceived twice independently. But if it can be assumed that one of the two architects depended on the other, then priority seems more probable for Boullée, not only because he must have been some fifteen or twenty years older, but also because the whole idea of the spherical building is one which seems far more appropriate for the Newton Monument than for Lequeu's uses. Boullée says indeed in his manuscript on architecture: 'Le corps sphérique est l'image de la perfection' and 'Dans le Cénotaphe de Newton, j'ai cherché à réaliser la plus grande de toutes les images, celle de l'immensité.'

Thus closer study may well reveal that Boullée was one of the originators of the remarkable style which is now usually called that of the French Revolution, and that, what has been accepted lately as Ledoux's personal genius, is no more than variations on themes popular at the time. But whatever the final verdict, Lequeu's significance is not based solely on architectural merit. What impresses one far more in him is his vision of a style which defied construction in stone and seems to demand concrete, and the agreement between architectural form and revolutionary political content—between the architect and the man.

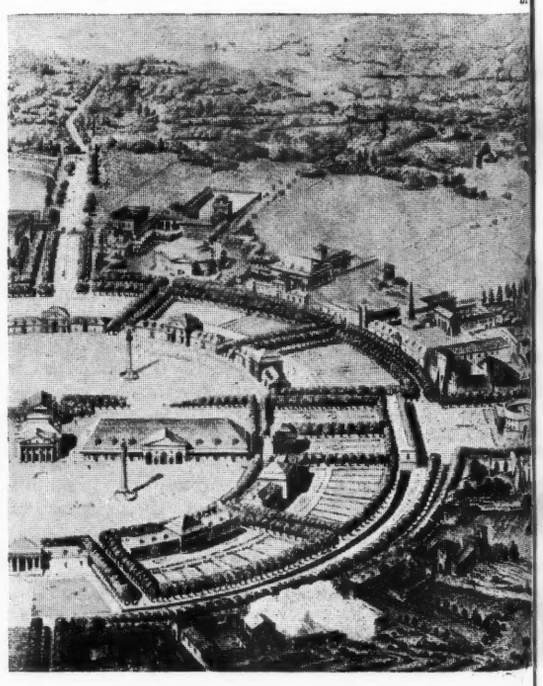
[15] Quatremère de Quincy: *Considérations morales sur la destination des œuvres d'art*, Paris 1815, p. 31.

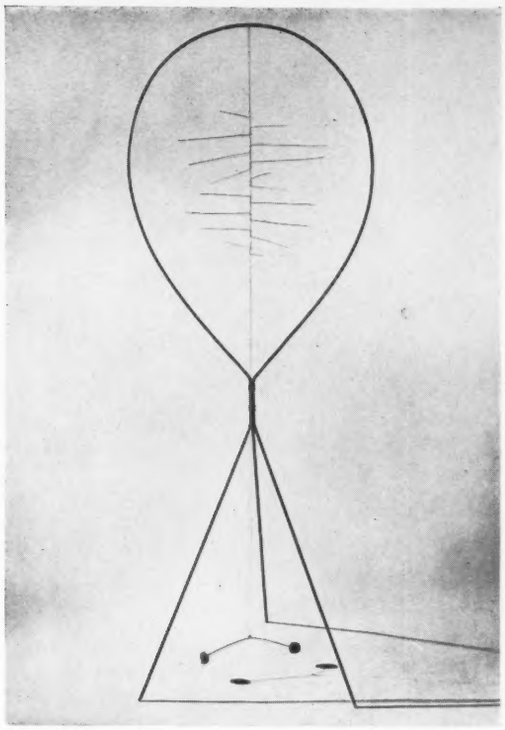
[16] The psychological importance of simple geometrical forms is stressed in Revue Française de psychoanalyse, I, 1929, p. 120.

[17] Miss Hope Nicolson's: *Newton Demands the Muse*, Princeton University Press 1946, unfortunately deals mainly with early eighteenth century material. But she emphasizes rightly Blake's, Lequeu's contemporary's, concern with Newton's teaching. The interest in astronomy, so characteristic of the period, is further exemplified in the *Observation d'une aurore boréale singulière of 26th II*, 1777 found in the Mémoires of the Académie des Sciences for that year (p. 462, pl. VII) which also reveals the influence of such drawings on representations of the sphere in architecture, as found especially in Boullée and Ledoux. Ledoux's Elevation of the cemetery of Chaux showing the earth and other planets is directly indebted to astronomical drawings. On astrological themes of this kind during the Renaissance cf. A. Warburg: Gesammelte Schriften, I, Hamburg, 1932, p. 169ff. Some astrological facts were kindly pointed out to me by the late Professor F. Saxl and by Dr. Gertrud Bing.

[18] The same reason may also explain the relationship between the ground plan of Boullée's Museum and a layout for an 'Elysium,' a city for the dead, by Gasse.

21





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STABILES

Alexander Calder's work on the 'stabile' is not as well known in England as is his work on the now well-established 'mobile.' In fact Calder has always done 'still' sculpture, and the term stabile, given to it by Hans Arp, appears to be some months older than the name mobile, which was invented by Marcel Duchamp. 1 *is* Hour Glass, *a self-supporting mobile of steel rod and wire, 5 ft. high, designed in* 1941. *Lately Calder has given much more attention to the stabile, which has developed, in his hands, from the earlier sheet steel spring designs to works such as* Morning Star, 2. *Designed in* 1943, *and made from sheet steel, wire and wood, it stands 6 ft. 7 in. high, and combines the forms and techniques of both types of Calder's sculpture.*

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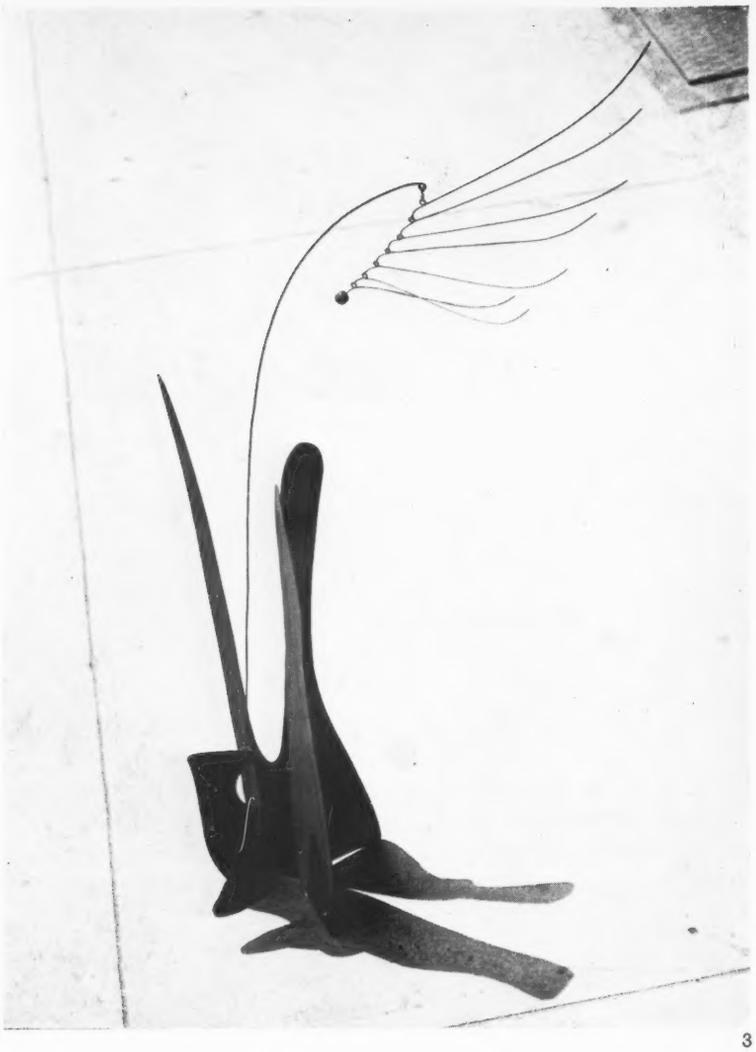

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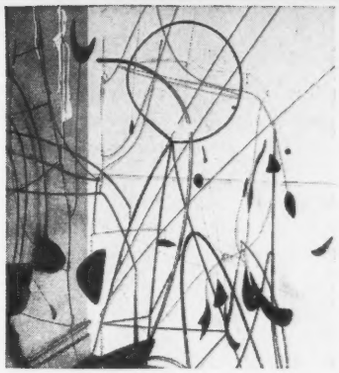
3, Cockatoo, 1941, *sheet steel and wire*, 36 *in. high.* 4, *two stabiles in wood and wire.* 5, *stabile of sheet steel seen in relation to coffee table and a chair, by Eliel Saarinen. This is characteristic of Calder's more abstract sculpture, and is relatively free of the zoological references which help to invest* 2 *and* 3 *with humour.* 6, *facing page*, Red Petals, 1942, *sheet steel, wire and sheet aluminium*, 9 *ft.* 2 *in. high.*

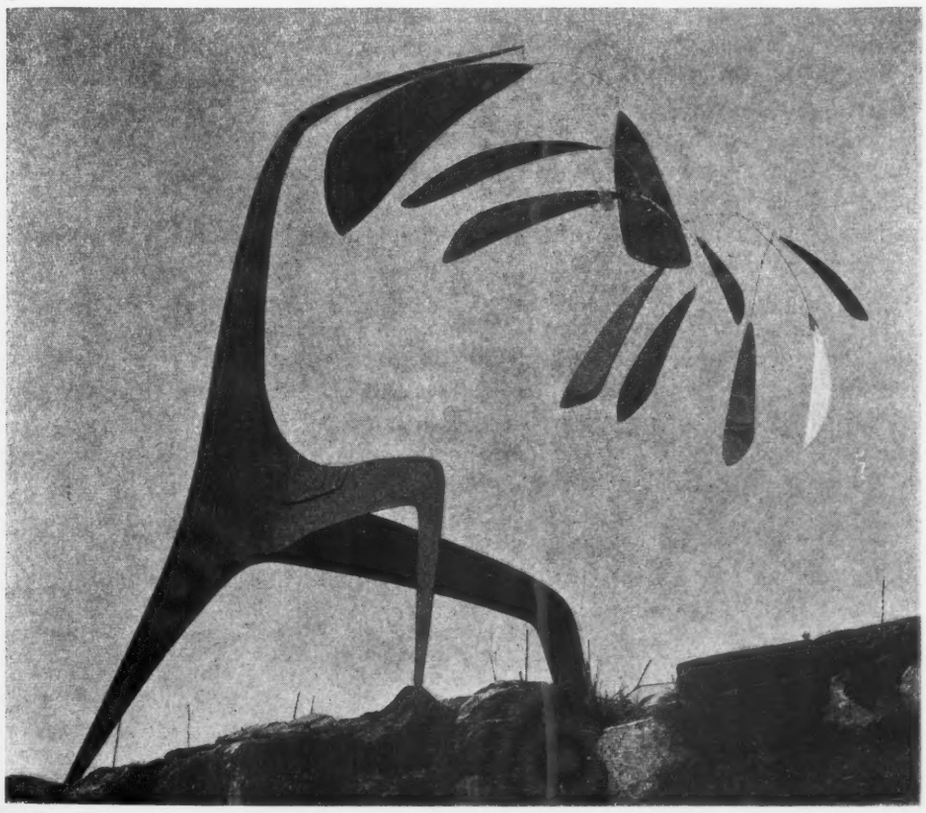


STABILES

Right, a corner of Calder's studio in New York, photographed by Herbert Matter.

Science is more a part of the culture of the age in America than it is anywhere else in the world. For the visual arts in America this has not been altogether fortunate: on the debit side it has produced the glorification of the pseudo-scientific, the reign of the streamlined kettle—in short, borax. But on the credit side it has given the world, among other things, the art of Alexander Calder. For a mobile or stabile by Calder, looked at from one point of view, represents the apotheosis of the gadget—not the utilitarian gadget of applied science, but the pure scientist's piece of home-made apparatus; it has the same air of having been improvised, coupled with the same kind of self-contained purposefulness which comes from the requirement that it shall 'work.' Through attention to factors such as these 'Calder has maintained an independence of the doctrinaire school of abstract art as well as of orthodox surrealism.'* It is more than eleven years now since Calder's London exhibition, and the photographs on these pages have been chosen to give some indication of what he has been doing in the meantime.

*James Johnson Sweeney, *Alexander Calder* (Museum of Modern Art, New York, 1943).



REASSESSMENT **Following a number of interesting letters on the subject of reassessment, the editors have felt it worth while to restate the reasons for the series. The representative letter below was prompted by the reassessment of Canterbury Cathedral in the April issue, and it is followed by an editorial reply. Mr. Oswald Brakspear writes:**

['*While welcoming the idea of re-assessment, may I make some suggestions as to the form it should take—particularly in so far as it concerns the Middle Ages.*

'1. *Would it not be wise to avoid the most famous buildings? If we have indeed reached the stage where Lincoln Cathedral offends because it reminds us of the Albert Hall, it would be well to choose a less familiar building of a less imitated period. The field to be explored is so rich and so neglected that there need be no fear of the less familiar leading to the "exploitation of the obscure."*

'2. *The re-assessment must be architectural. Mr. Townsend's article on Canterbury Cathedral is a painter's appreciation concerned primarily with purely visual impressions. To try and assess a Gothic building in this way without making a proper study of its function and structure is as hopeless a task as to try and review a book of poetry without knowing the language in which it is written.*

'*Our greater churches are almost all the result of repeated alteration and addition, and every detail of plan and structure has at least a functional origin. To ignore all or most of this, and to discuss the result as if it were a monstrous piece of abstract sculpture, is to confuse the underlying principles of English Gothic with those of the Baroque.*

'*If we are to have re-assessments of our mediaeval buildings, as I hope we are, the writers must use the material the experts have accumulated for them, and I hope the Review will allow sufficient space for proper drawings and photographs.*

'*The subject must be a unity. A vast complex like Canterbury Cathedral contains material for fifty re-assessments. It would have been better to deal with one limb of it, the central tower, a chantry, perhaps only a tomb: and may it be dealt with, whatever it is, not as abstract form, but as a work of architecture.*'

The writer makes some valuable points and gives the Editors the opportunity of defining once more the purpose they had in mind in planning the reassessment series, the fourth article of which, on the subject of Oxford colleges, appears on the following pages. It would appear, to borrow the

terminology of the military conference, that the preliminary 'briefing' was insufficiently thorough and that the 'object of the exercise' has not been perfectly understood by at least one of our readers.

1. The whole purpose of the series rests on the assumption that the buildings dealt with shall all be as famous as possible; masterpieces whose very familiarity has raised a distorting haze through which their silhouettes loom, accepted but fundamentally unperceived.

2. Since it is precisely the visual impression which it is our intention to analyse and reassess, the painter with a knowledge and appreciation of architecture is the ideal author for an article of this kind. Architecture can only be appreciated through the eye, and an understanding of function or history or structure, while it may often, but not invariably, assist our visual appreciation, is always, and must remain, subsidiary.

3. The very fact that Canterbury Cathedral is a complex of vast dimensions rendered it peculiarly suited to the REVIEW's purpose. The tendency to split up historic buildings for critical purposes and write treatises on the north porch of a church or the garden-front of the eighteenth century wing of a country mansion, inevitably produces the danger of the critic losing sight of the whole. No amount of theses on the individual trees, however well written or perceptive, can provide an adequate substitute for a clear view of the complete wood.

In the fourth of the REVIEW's reassessment articles the author is concerned with an even broader field than Canterbury Cathedral. The colleges of Oxford have all been exhaustively described individually from the historical, functional and purely picturesque points of view; what is here attempted is a general view of the lay-out of the university as contrasted with other schemes in other lands and times for dealing with a complex of separate but related buildings. As such it can rightly be rated as a *re*-assessment; an attempt, that is, not just to present a familiar view with a few personal reactions added, but to project a completely new landscape made up of the same old elements, the novelty of which will result from a readjustment of emphasis.

Oxford, just because of its celebrity, tends either to be taken for granted or admired as a collection of splendid specimens of various architectural periods. Here Mr. Pevsner looks at a whole complex of buildings together, and reveals some of the qualities that the twentieth century, with its deeper understanding of the English landscape tradition, is beginning to appreciate as the result of something more than happy accidents.

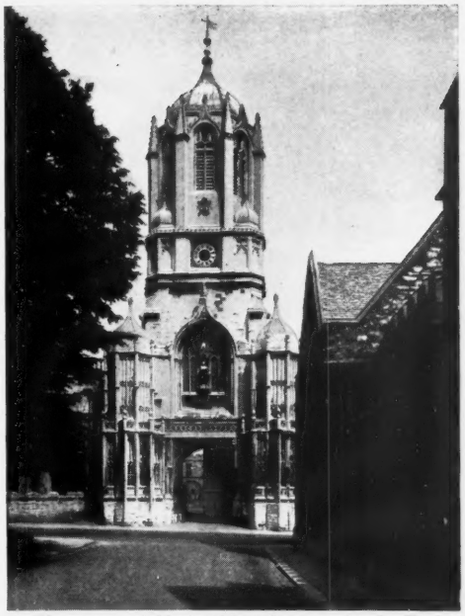
THE EDITORS]

REASSESSMENT 4: THREE OXFORD COLLEGES BY NIKOLAUS PEVSNER

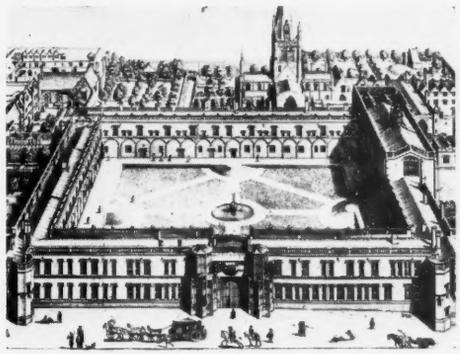
TOWN-PLANNING HISTORY as it can be read in the standard books does not do justice to the contribution of Britain. Take the historical chapters in Sir Raymond Unwin's, Hegemann and Peets's or Thomas Adams's books, or take Hughes and Lambourn's *Town Planning, Ancient and Modern*, or Brinckmann's *Städtebaukunst*, or better still Pierre Lavedan's *Histoire de l'Urbanisme* (vol. 1, 1926, vol. 2, 1941), the most detailed and up-to-date work on the subject, and you will invariably find a story which starts with classic Greek fifth and fourth century chess-board patterns, covers what geometrical planning the Hellenistic states and the Roman Empire evolved, then gives some account of the accidents of town development in the Middle Ages and the principles of growth underlying them, with a somewhat disproportionate emphasis on the relatively few planned communities such as the *bastides* in France and the New Towns of Edward I, of the Prussian Order and so on, and then arrives with some relief at the Italian Renaissance, with its ideal of the radial town. From these perfectly symmetrical patterns, perhaps originally conceived by the great Alberti himself and drawn for the first time about 1460 by Filarete, the way is clear towards Versailles and the Place de l'Etoile, and towards the crowning achievements of radial design and chess-board design: Karlsruhe in 1715 and Mannheim in 1699 and their combination in the Washington plan of 1790.

The measure of success in the books appears always—whether it is said in so many words or only implied—the degree to which plans of towns or districts approximate the perfection of all-round symmetrical ornament. As far as Britain is concerned, Wren's plan for London is therefore overstressed, and the Circus and Royal Crescent at Bath used as if they were pieces of planning meant to be seen in complete isolation. What is most English in English town-planning, and in fact amounts in my opinion to England's essential contribution to town-planning development, is in such a treatment disregarded. What matters is not the Circus or the Crescent as such, but the picturesque way in which such set pieces are placed as accents in an informal composition. The plan of the New Town of Edinburgh could have taught the same lesson, so could Nash's work along Regent Street and around the Regent's Park, and so could the earliest and in some ways most impressive example which Britain has to offer: the colleges of Oxford and Cambridge.

But although these are, most of them, incomparably better preserved than Edinburgh or Regent Street or even Bath, they are nowhere, it seems, looked at in the way in which their visual worth would come out. It is as an attempt at doing this that the following pictures photographed specially for the purpose by H. Gernsheim, and the comments which accompany them, should be considered.



1 *The tower of Christ Church starts in the Tudor Grand Manner with a gatehouse as the middle accent of the long St. Aldate's front. It was meant by Wolsey to have a tall centre but not as tall as it is now, and two turrets left and right, reaching somewhat higher than the centre—that is the motif which also dominates the fronts at Hampton Court, at Trinity College, Cambridge, and many Tudor mansions. Wren paid tribute to the* genius loci *by finishing the tower in the Gothick manner, though with a reversal of accents. The engraving, below, shows the gateway before Wren finished the tower. The old lime tree by St. Aldate's Church, and the dark rough wall of Pembroke against the much more polished wall surfaces of Christ Church, are a setting after our picturesque tastes, but were no doubt not seeable or appreciable in Wolsey's time.*



2 *The monumental gate leads dead into the centre of the most monumental of Oxford quads—*260 *by* 260 *feet. The fact that the chapel is not placed in any relation to the gatehouse may be taken to have been, from Wolsey's point of view, an unavoidable snag, considering that he had to use the existing church of St. Frideswide: but the raised hall on the right—in no axially stressed place—is a deliberate breach of etiquette, the same which appears at Hampton Court. The nineteenth century could appreciate its planning value, and Thomas Garner's tower over Hall Staircase (of about* 1880*), which appears between cathedral and hall, is a bold and wholly successful addition. The gully separating it from the raised hall adds intricacy where one would least expect it but cannot help welcoming it.* **2a** *shows this*

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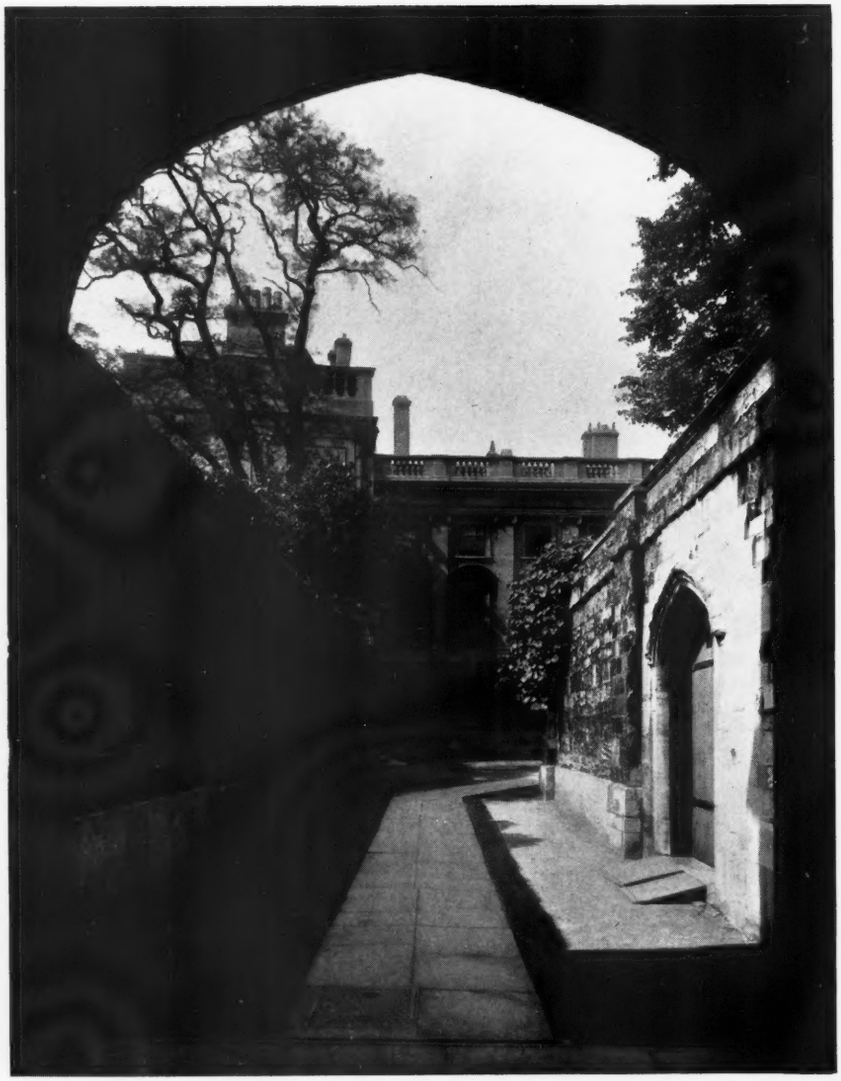

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corner of the quad before Garner's tower was built.

3 *Fell Tower in the other corner is an equally asymmetrical if less prominent ascent. Garner might have repeated its height and turreted pattern on his side, but he did not. Through Fell Tower is the only way out of Tom Quad. You have entered this vast square by a grand gateway. You leave it by a narrow vaulted passage. Sunny breadth and smooth lawn are exchanged for a moment by a cool and confined space.*

4 *And then, again only for a moment, we seem in a wholly different scene. Rough walls on the left and the right, trees rising behind them, and the trailing-down wild Vitis Coignetiae as a link to emphasize and get over the seeming incongruity between the rustic walls and the smooth, trim Palladian wing of Peckwater, appearing in front of us to prepare us for the sober dignity to come.*

5 *But there is yet another surprise in store before we reach Peckwater. Directly we pass the wild wall-creeper we leave the zone of vegetation and return to pure stone-scape. And there, while we expect the gentility of Palladianism, there towers on our right the dramatic mass of the Library, twice as moving with its flaking stonework than it would be were it smoothed as the rest of Peck-*

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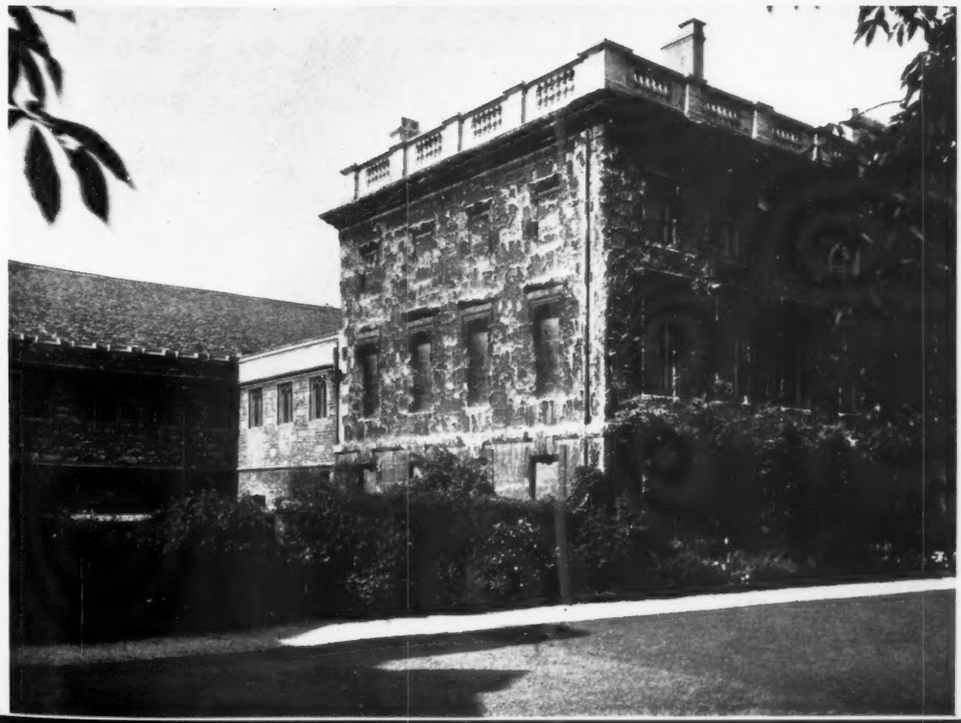

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water. No more poignant contrast than this in the whole of Oxford. It is heightened in its effect also by the more deliberate contrast of giant orders with and without a ground-floor pedestal to stand on. English Baroque and Burlingtonian (Pre-Burlingtonian) classicism side by side. Through the cleft, and we enter Peckwater.

6 *A quad considerably smaller than Tom but raised to equal dignity by its even classical façades:* Atrii Peckwateriensis quod spectas latus extruxit Antonius Radcliffe S.T.P., *says the main north façade. Smooth columns, fine masonry, large main pediments, and evenly alternating small pediments for the windows of the* piano nobile, *but to our right as we now stand, still the glowering front of the Library—even here an unsolved antagonism. And the tour of Christ Church is not completed yet. In the gap between smooth and rough and moderate and immoderate appears a further building, Wyatt's delicate gateway of Canterbury Quad. The quad is a classical backwater of only two stories, humble compared with the cliff of the library.*

7 *Through Wyatt's arch and a few steps down Merton Street, and we are at the entrance to Corpus Christi College. The front quad, completed in* 1520, *is comfortably smallish and business-like. It is entered not in the centre of the north side, but the Pelican set up in* 1581 *restores symmetry. Only let nobody expect that that axiality would be carried on into a major formal composition. To reach the second quad we have to slink out at the left corner, and then the tour begins to be exciting.*

8 *A narrow corridor ends under the arcades at the narrow end of a cloister, if cloister it can be called. At first it seems only a rather meanly-sized courtyard in front of Fellows' Building, but a variety of striking effects are compressed into the narrow space. Founders' Building is a formal composition with two symmetrical slightly projecting wings; but its symmetry can from nowhere be seen effectively. Also the narrow sides of the quad do not continue the symmetry: on one side the cloister in which we stand, on the other a break in height which is not concealed in any way.*

9 *And the arcades of the long side of the cloister opposite the formality of Founders' Building are turned into a picturesque delight by dangling Virginia Creeper and Gothic wall and window above. Again leafage intervenes between two characteristically opposed textures: peeling ashlar and coarse rubble. No Piranesi could have introduced impropriety with more zest than the designer of this cloister. As we look at this north wall of the courtyard we stand in a long corridor of no more than five and a half feet width—the most incongruous centre feature of so representational a composition as Founders' Building.*

10 *Turn round and enjoy the surprise of one of the lushest of Oxford gardens at the end of the dark passage—an excellent piece of unpretentious landscaping with fine sensitively chosen trees. The tulip tree in front stands out against the background of Christ Church Meadow.*

11 *Then walk along towards the President's nicely proportioned lodgings—Neo-Stuart of* 1905*—turn round and receive the parting shot: two-storied, embattled rubble wall and three-*

12

storied balustraded classical wall; cosy Tudor windows and forbidding blank classical niches; and a foreground of lawn and a low wall hidden by flowering bushes. The tour has taken us from the comfortable square size of the front quad by way of the exceedingly compressed and intricate second quad to this scene of landscaped architectural variety.

***12** Is it necessary to continue? It should not be. The same experience can be had in most of the other colleges, unless they are as exceptionally unlucky as Balliol. But remember standing on the spacious lawn in King's at Cambridge, between Henry VIII Chapel, Gibbs's Fellows' Building and Wilkins's Screen and Hall, or in the narrow, intimate, domestic quad of St. Edmund Hall at Oxford, the epitome of collegiate picturesqueness. The dominant feature here is a tall, broad acacia tree placed out of all axes and growing at an angle of sixty degrees. Buildings are of two, three and four stories with cornices at ever varying heights, the somewhat more formal building of 1680 tucked into one corner. Its warmer cream colour is in contrast to the greyer rubble on the left, and the branches and umbellate blooms of wistaria stand delicately against the rubble behind.*

Fortified by memories of such visual treasures, should one not see Bath and Edinburgh and Regent Street and Regent's Park in a new light? The spatial experience, an experience undergone in time, as one walks along and looks this way and that is exactly the same as at Oxford and Cambridge, and the only difference is, that Edinburgh, Bath and so on are planned throughout and at one moment, whereas Oxford and Cambridge have grown. But this difference has in the past, I think, been unduly emphasized. It cannot possibly be enough to attribute to accident such effects as I have here tried to analyse. Accident may have been responsible for much in the Middle Ages, and on the other hand, Sir Uvedale Price may have been quite right in admitting accident amongst the chief picturesque attractions; yet the development of Christ Church or King's is not, and never can have been, a matter of accident. Why did the great adjusting schemes of Hawksmoor, of Robert Adam, not succeed? Was it lack of money only, or was it not a secret satisfaction with the way in which time and the sensibilities of so many past designers had worked? After all, Hawksmoor, Wren, Vanbrugh, and even Adam, made use of different styles themselves, now enjoying Baroque, now Classical, and now Gothic, moods—an attitude inconceivable amongst the Hardouin-Mansarts and the Gabriels of France.

So it can be safely assumed that those who added new to old building and new to old quad were fully aware, as a rule, of what they were doing, and delighted in the same surprises, contrasts and incongruities as we do, or would do, once we saw them under these specifically English terms of man-made landscape.

CANON towards a consistent theory of modern architecture

In the third article in this series, which is designed to collect, from the periodical literature of all countries, the materials out of which a new philosophy of architecture may be constructed, Eric de Maré discusses recent contributions to architectural thought from America, Germany, Russia, and Great Britain.

TO TRY TO UNRAVEL the tangle of contemporary architectural philosophy is the object of this series of articles—not an easy job because so much is involved beyond purely architectural considerations. Where exactly is one to start, and where to end, since all things to each other linkéd are? In the cause of sanity let us then draw a fairly firm provisional boundary line and say:

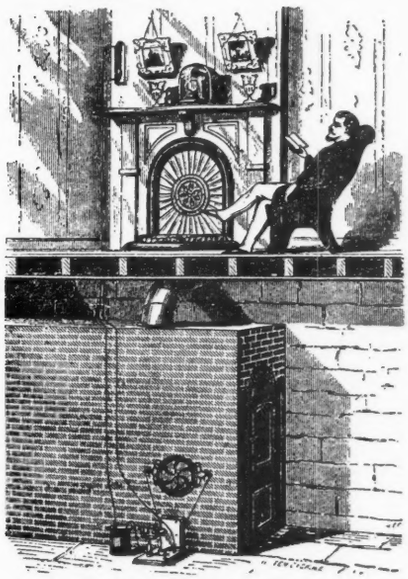
> 'We do not like the present futilitarian *Weltanschauung*, because everywhere in the world it is working against creative building and, indeed, too much against life itself. However, for the time being, whatever we may do as individuals, as specialists we must accept it and try to alter it by acquiring a pragmatic philosophy and by expressing symbolically through our work, as best we may, a better way of life than we know today, especially through the full and liberating use of modern technics.'

Any improvement of architecture within an unhealthy society must to some extent help to create a healthier body politic by acting as propaganda, not necessarily deliberate, for a better way of life than the existing one.

Enter at this point the special issue of *The Architectural Forum* for November 1948 called *Measure*.

On Space:

> 'Today the architect is no longer using space, he is creating it. . . . Walter Behrendt was not merely indulging a dramatic flair when he stated—"Space has become more mobile, its limits are melting away, its walls blasted asunder. . . . Rooms penetrate and interlace and mingle in several planes." . . . The penetration, interlacing and mingling of which Behrendt speaks are possible only when space can be considered as a single thermal environment. . . . One of modern architecture's great victories has been to prove, in its own field at least, that freedom and security are not incompatible.'



An early type of controlled heating. From the special issue of The Architectural Forum *called* Measure.

On Esthetics: This section is of special interest in its movement away from, or rather its reassessment of, the functional theory now universally evident:

> 'Can science aid us,' asks the anonymous writer, 'in dealing with the least measurable aspect of building—its effect on the emotions of the people who see it and use it? Merely to raise this question is to alienate some who, like Plotinus, believe that the sublime is blighted by every developing form—that analysis murders art. It will also immediately recall the reverse of this point of view: the age-old search for a mathematical guide to the forms of art, an effort most recently represented by Le Corbusier's "Modulor" scale. Before we dismiss this kind of mathematical venture entirely with Frank Lloyd Wright's "Proportion in itself is nothing," it is only fair to concede that pleasing proportion is a great deal better than awkward proportion. But to imply that the esthetic effect can be reduced to a matter of proportion is to reduce the great roaring fire of art to its mere kindling wood. It would be equally a mistake to suggest that Le Corbusier himself believes that the esthetic end of contemporary architecture can be defined within the limits of proportion. . . . Since there is still enough confusion on the "form follows function" doctrine . . . it may be well to say baldly that the most important job of the architect is to create an emotional effect. The real estate broker, the banker, and our own enfeebled sensibilities will make sure that he doesn't create any more of this than is good for us.'

There is bitter but legitimate irony in that last remark and it is the point at which most architectural theorizers prefer to draw a line—as this one does. He goes on:

> 'In so far as the architect is an artist, his job is to organize man's immediate physical environment by creating the spatial relationships which will permit maximum human freedom. Thus it is no accident that the social objectives of our time seem to be more truly expressed in architectural philosophy than in any other art. . . . In nature, we have a pure resolution of all forces whatever they may be. The tree's form is a beautiful equation in which static load, wind resistance, maximum sun and water absorption are all factors. Now the machine and the new synthetic materials seem to be providing us with the first semblance of a similarly fluid and economic fabricated form. Viewed in this light, there does not seem to be the fundamental conflict between the forms of technology and the forms of nature that categorical thinking would lead us to believe. On the contrary, we can say that, while the artist has always intuitively apprehended purity of form, now exact knowledge is simply catching up with his insight. Without science we are unable to analyse nature, now we can both understand and emulate her miracles.'

The writer concludes:

> 'Whatever the role of man's intellect in shaping his actions, we now know that it is our emotions which move us to act. Thus the emotional experience of art is a liberating experience, and we can consider art as a means of liberating human energies. When we recall that the mass neurosis of industrial society seems to be a matter of blocked or distorted individual energies, we can appreciate the overwhelming importance that a new sense of creative art might have for us all. To the degree that we can act, creatively and spontaneously, we are alive. This is the great integrative function of art in human life.'

Turn now to a talk on *Force and Form: The Aesthetics of Stress Distribution* given by F. J. Samuely at the R.I.B.A. on February 15 (*R.I.B.A. Journal*, March 1949). In our present context the talk is significant in the attitude expressed towards functionalism by a rare and admirable type—the engineer with a developed æsthetic sensibility. Again we see the tendency to regard functionalism with reservations. The speaker says:

> 'No one believes that carrying stresses is in every case the main function of a building; in a block of flats, for instance, it may distract your attention very much if you see the whole structure in every room. In this type of building, there are other things it is more important to show than the structure. . . . I believe that there are many functions of everything, of which structure is only one. . . . When, however, one function is overriding you get a functionalist building, like an aeroplane or a large bridge, because you have nothing to compete with that one function.'

Some other discoveries of interest this month: First, a work called *Ein Architekt Geht Über Feld* by Walter Schmidt (Otto Maier, Ravensburg, 1948). Schmidt discusses the major and minor principles which lie behind all good architectural design. His definition of monumentality is perhaps of particular interest:

> 'Monumentality is something immutable. It removes a thing from the context of a changing world. It isolates, makes a thing individually significant and imbues it with a loneliness, whether of haughtiness, awe, tranquillity, arrogance or reserve. It keeps you at a distance. It is not a matter of size. The head of Charles on the penny, though measuring only half-inch in diameter, is yet monumental. The greatness lies not in dimensions but in simplicity, clarity, finality of form. As a geometrical conception, the pyramids are the essence of monumentality. One cannot intentionally aim at monumentality. That is death. Innocence, naïveté, generosity—these are qualities one may possess but which one cannot strive to possess. How can one aim at innocence?'

Secondly, in *Plan* (No. 3, 1948) the Architectural Students' Association Journal, the Editor asks architects to work hard and to show their deepest love for the People. That mythical monster, the Common Man, rears its shadowy head again, and we are asked to kiss it. The suggestion is obscene. M. le Procureur deals in ghosts.

Also in *Plan*, there is a short article on *Scale in Contemporary Design*, written and illustrated by Mr. Ashley Barker. He writes:

> 'It is unfortunate that the consideration of scale today has a rather reactionary ring. One feels subconsciously that it should have gone out with the orders and the centre-line to make room for the more exciting visual studies of the Sharawaggist. But the principles of scale remain just as they have always been, and so it seems rather serious that a large proportion of modern design goes astray in these respects.'

In his own way, by attacking the present tendency towards meanness of scale, Mr. Barker is, I suppose, also calling for a New Monumentality.

Finally, the canons to the left of us have been thundering away, including a surprise burst in *Pravda*. This confounds the confusion by revealing an unsuspected civil war within Russia itself. Alexander Vlasov, municipal architect of Kiev, accuses the Soviet Academy of Architecture and some architects of 'formalism, backwardness and being subservient to the decadent, bourgeois West.'

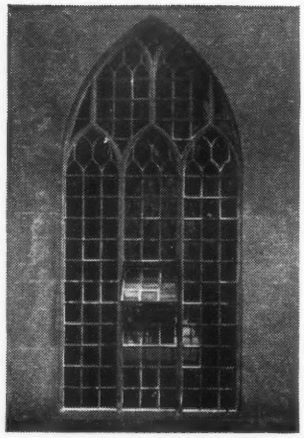
In a Moscow report, Mr. Ralph Parker writes:

> 'The gist of Vlasov's complaints is that the architectural theorists in the Soviet Architectural Academy do not, in their town-planning, take sufficiently into consideration the special factors of building in a period of Socialism, being too apt to treat the new socialist city as being but a "natural" development of a tradition founded long ago in the past. Considering the work of pupils of the now discredited Zholtovsky, architect of the State Embassy, he attributes to their influence the "pseudo-Parthenons" that appear in the plans for Stalingrad, the proposal to rebuild the city's House of the Soviets in the style of a medieval fortress. . . . This, Vlasov maintains, is sheer idealism, an attempt to consider beauty as detached from social conditions. . . . This tendency was manifested in several architects' treatment of the classical tradition, such as the ancient Roman forum planned for the centre of the old Russian town of Kaluga. . . . Vlasov inveighs against the familiar practice of embellishing contemporary Soviet buildings with columns and pilasters of no constructive significance. . . . Little attention was being paid to city-planning, Vlasov maintained, pointing out that many towns in Siberia, the Urals, the Ukraine and Byelorussia had no qualified architects, and that even in such cities as Stalingrad and Magnitogorsk the architectural personnel available was inadequate. . . .'

A mixed picking this month to be summarized briefly thus:—*U.S.A.:* Modern technique has given us a new conception of, and control over, space. The forms of technology approach nature's forms as our knowledge grows. Creative use of technical knowledge, however, depends on the emotions; these are now blocked by the mass neurosis of industrial society. *England:* Good architecture need not depend on the visible expression of structure. The architect should work hard and love the People. We must re-establish the old principles of scale. *Germany:* Why cannot we achieve, in spite of our technical resources, that quality in building which came so easily in the past? Monumentality does not depend upon size; it is something immutable and cannot be deliberately achieved. *U.S.S.R.:* The thesis of æsthetic idealism is opposed by the anthesis of building for social needs. We await the synthesis.

No space is left to cover the stimulating discussion on Architectural Criticism at the Architectural Association on May 25 (reported in the *Architects' Journal* for June 2) except to quote Mr. Hugh Casson: 'Beauty may be capable of definition but primarily it should be *felt*.' Some of us still consider that beauty is an important 'social need.' How idealistic we are. Mr. Casson's remark leads to a final general summary of a world-wide tendency discernible in all thinking:—Thinking is not enough; the intellect, like building technique, is no more than a useful tool; the emotional impulses are the source of all life and creative power; if we deny them, we and our works are doomed to an age of monochrome meanness, boredom and dull poverty.

Eric de Maré



EARLY IRON

1 Window Tracery Among the early uses of cast iron in building, one which needs fuller investigation than it has yet received is its use for window tracery. Writers on cast iron are apt to imply, even if they do not state it in so many words, that cast-iron window tracery was first used in the Commissioners' churches, built under the 'Million' Act of 1818. But as I have noted elsewhere, iron window frames of Gothic design were employed more than twenty years earlier, in 1795, in John Carline's church of St. Alkmund, Shrewsbury. The east window of this church is shown in the photograph opposite; even if it were thought that to classify its simple frame as 'tracery' is stretching a point, Francis Eginton's figure of Faith (after Guido Reni) in enamelled glass should be enough to justify the reproduction of this photograph here.

The *Shrewsbury Chronicle* said of St. Alkmund's, that 'all the Iron Work was cast by the Coalbrook-Dale Company.' To the same

BOOKS

PILGRIM TO ATHOS

THE STATION. By Robert Byron. John Lehmann. 12s. 6d.

THE Station, Robert Byron's second travel book, written when he was only 22, is in the main a description of a visit to the Holy Mountain of Athos in 1927, into which are woven reminiscences of an earlier visit in 1926, and of a subsequent journey to Mistra, that almost deserted medieval city beside Sparta, on the way over the Langadha Pass to Kalamata and Crete.

For all the gaiety and mockery which were integral parts of his dynamic disposition, Robert Byron visited Athos with something of the spirit of a pilgrim. Athos to him was the place where the years had stood still, and where the mystic spirit underlying the Byzantine achievement was yet to be found. His constant thesis in conversation was to trace a direct line from the archaic art of ancient Greece (from which to him the art of Praxiteles was a temporary and unfortunate divagation—a 'glucose formula') to the art of the Eastern Empire which was in due course to engender the Renaissance (a creature he considered inferior to its parent), and more directly through the Cretan school to blossom into El Greco, and through him to shed a vital influence of colour relation and interpretational form among the impressionists and their successors.

The principal object of the journey in 1927 was to obtain photographic and other material for working out much of this thesis in *The Birth of Western Painting*, written in collaboration with David Talbot Rice and published by Routledge in 1930.

Robert Byron was killed in 1941 on his way to Egypt and the world lost a figure of unusual genius in whom, beneath an indefatigable sense of humour, a tireless power of controversy, and a rare originality, there lay, as Mr. Christopher Sykes puts it in his introduction, a 'fine and impassioned spirit.'

The Station is crammed full of the colour and light of the Athonite Promontory and its singing, timeless buildings; it is crammed full too of entertainment arising from the impact of two dissimilar cultures, when Oxford undergraduates of the twentieth century found themselves confronted with the crudities and glories of a different epoch. The curious monastic world, deprived of women or cows, where even an egg-laying hen is looked on askance, with its crude diet in which the octopus and the stewed gherkin predominate, with its lack of drainage, and its plethora of bed bugs, its intrigue, and its ignorance, is presented in all its squalor, and so is the accompanying beauty of landscape of architecture, of painting, and of the contemplative way of life.

Mr. Christopher Sykes has written not only an admirable introduction to this new edition of *The Station*, but also an excellent appreciation of Robert Byron and his work in *Four Studies in Loyalty*. With both of these, however, I have to disagree in one respect. In the latter he says that Robert, when he visited the Holy Mountain 'was at the time not only an atheist but an active, vigorous enemy of the churches, to

firm, that founded by Abraham Darby in 1709, or a little before, the iron window frames of the church at Adderley, in north Shropshire, must be due. One of the windows of this church forms the headpiece to this note, and it will be seen that the main tracery is identical in pattern with that of the Shrewsbury window, while a greater richness is given to the design by the secondary framework (also of iron) which holds the small panes of glass.

But Eaton Hall, Cheshire, in which William Porden set out 'to adapt the rich variety of ancient ecclesiastical architecture to modern domestic convenience,' and Eccleston church nearby, would appear to be the first buildings in which cast iron was used for window tracery with a full appreciation of its ability to mass-produce complicated forms. For the appearance of Eaton, which was done away with by Waterhouse, we have to rely on prints, and in particular on the Bucklers' fine folio published in 1826. These show windows of several patterns which make a passable attempt at fourteenth-century forms and do not really look much too 'skinny.' The *Monthly Magazine* for September 1814, quoted by Neale in his *Views of Seats*, gives the information that they were 'moulded on both sides, and grooved to receive the glass.' This reference helps to date the cast-iron work, since Eaton, though begun as early as 1803, was a long time building. Eccleston church was designed in 1809. Again we have to refer to prints for the design of its cast-iron tracery; Buckler's view will be found reproduced in my *Stuart and Georgian Churches*.

Marcus Whiffen

whom the conventional practices of religion were stultifying misdirections of energy (later in his life he became not only more tolerant, but near to being a conventional Christian).' In his introduction to *The Station*, Mr. Sykes describes him as 'that pitiless disbeliever who confesses that to approach the good monks of Athos he was compelled to lay aside a deep repugnance to the Christian religion'; and accuses him of having at that time worshipped modernity.

I can find no such confession in *The Station* and, as one who accompanied Robert on his first visit to Athos in 1926, and who joined him after his second visit for his journeys to Mistra and Crete, I can only say, remembering endless arguments on mule-back and balcony, that his attitude at the time was resolutely Christian. My own attitude being tinged with agnosticism, I was the constant butt of his militant Christianity; he accepted, however, only the protestant and orthodox churches—'at schism with one another but at heresy with Rome,' was, I think, the phrase he used. He was at that time at least somewhat strongly opposed to the Catholic Church of Rome: and among his early prejudices, no doubt later overcome when he visited Persia, was also a powerful sense of resentment against Moslem culture and religion, so that he would hardly be persuaded in Constantinople to visit a mosque that had not been built as a church.

It was mainly, I think, because of the rationalism which led Gibbon to decry the Christian and praise the Moslem religion, that Robert was so much opposed to his interpretation of Byzantine history. Robert's own mockeries of monkish superstition on the Mountain amounted to no more than a natural amusement at some of the more exaggerated of the Athonite legends and an expression of his distaste for the doctrine of Transubstantiation.

Robert's philosophy of life may not have been entirely logical, or particularly self-consistent, but it was very definite; he allowed no doubt about it. The theory of his early atheism bears no relation to my own recollection of his utterances even at the time of his first visit to the Holy Mountain in 1926. This is not to detract from Mr. Sykes's fine and indeed inspiring introduction. It is only to say that I do not agree that the atheism he suspects was ever there.

Bryan Guinness

TOUR DE FORCE

NEWER SARUM: A PLAN FOR SALISBURY. By Thomas Sharp. The Architectural Press. 10s.

NEWER SARUM is as different from Max Lock's *Survey of the Hartlepools* as two surveys of English towns made in the same decade well could be. The one is the work of a team of scientists. The other is the work of an individual with a flair, and, as the title suggests, the main emphasis here is on proposals put forward for improving the appearance and increasing the conveniences of the old Cathedral town of Salisbury. The last few years have seen a number of master plans published. Their real functions, as I see it, have been to rouse the interest of the public in a dry and uninteresting subject—i.e. Town Planning. As a publicist of planning Thomas Sharp is unusually successful. He has produced a series of most readable and delightfully illustrated books with the same kind of universal appeal as the Shell Guides to the various counties of England. *Newer Sarum*, like the rest, is a book which anyone would be pleased to have on his shelves. At the same time one cannot help wondering whether the newer technique, employed by Max Lock, of rousing the interest of the local population by enlisting their co-operation in a statistical survey, does not result in a more intelligent and critical interest in the subject, and give results which, if less glamorous, are likely to be of more lasting usefulness to administrative planners than a personal *tour de force*. Some of Mr. Sharp's suggestions, for instance, do seem open to question. The Canons' gardens, which lie between the Cathedral Close and the river, are among the beautiful gardens of England. Is it wise to cut them off from the river bank in order to make a public walk? Won't this result in the erection of barriers across gardens designed as a single sweep? Why can't the water-meadows of the opposite bank be used as public pleasure ground with a view across the water to the trees and lawns of the prebendaries' gardens? Does the cathedral really need a long low technical college as a foil? Mr. Sharp says it does. But Mr. Sharp implies that a new bypass would brighten up the place. And has the proposed new link between Fisher Street and Crane Street architectural or other value?

These critical remarks are not intended as an attack on the author but on the attitude of mind which results in Planning Consultants being asked to complete in a couple of months what should be the slow work of almost a century. As a sketch design *Newer Sarum* is adequate. But unless the administrator entrusted with the carrying out of the proposals

is a man of Mr. Sharp's calibre, it may prove to be a seed that falls on stony ground—or, worse —a source of embarrassment.

Aileen Tatton-Brown

YEAR BOOK

DECORATIVE ART 1943-48: THE STUDIO YEAR BOOK. 25s.

THE Studio Year Book of Decorative Art has made its appearance again after six years. Its title this time is *Decorative Art*, 1943-48. As in previous numbers it deals in a popular way with developments in domestic architecture, furniture, glass, textiles and other household equipment, and includes examples selected from the work of many countries.

It must be said at once that there is a real need for this kind of book. In the first place, it provides for the layman a picture gallery, which is not limited to work in this country—even the technical reader is rarely able to secure a subscription to foreign periodicals like *Domus* or *The Forum*, so that the publication of selected examples must be of special interest and can be a tremendous stimulus. The Studio Publications are to be congratulated on their effort in again producing the Year Book.

There are, however, one or two criticisms which are intended in a constructive sense. In the first case it seems a pity (in a book which in any case goes back to 1943) that some examples are included which must date from before the war. There seems to be an obvious omission of a great deal of interesting work produced in America, particularly, and other countries during 1943-48 period. Examples that come to mind are the many excellent small houses including those of Marcel Breuer. There is the furniture that has been displayed from time to time in the Museum of Modern Art. The Studio Publications have not, for instance, reached the standard of selection that has often been apparent in a magazine like *Domus*. But this can be remedied in future, and, if further additions can be made, why not a few actual samples of the excellent wallpapers that are now available? Or, for instance, some British handloom weaving which is hardly surpassed outside this country? Also it would be interesting to know in each case the country from which the design originates.

Sadie Speight

BYZANTINE REASSESSMENT

BYZANTINE MOSAIC DECORATION. ASPECTS OF MONUMENTAL ART IN BYZANTIUM. By Otto Demus. London (Kegan Paul), 1948. pp. 97 and 64 illustrations. £2 2s.

IN this book Otto Demus, now back in Vienna as President of the Austrian Monuments and Fine Arts Service, has given his friends in this country a very welcome memorial of the years he spent here. A dissertation on Byzantine mosaics in general, it follows a book on the principal examples in Greece, in which he collaborated with E. Diez, and a monograph on those in St. Mark's in Venice (in German). Although it will be as handy to the student as it is stimulating to the specialist, it is less a handbook than a thesis, a thesis which, let it be said at the outset, is written with authority and nearly always carries conviction.

Repeated observation of the mosaicist's work *in situ* and a reassessment of the liturgical and other factors controlling it have led him to draw some new conclusions regarding Byzantine æsthetics. In the light of these he reviews the crystallization of the classical mosaic system of the eleventh century, its penetration by alien elements and finally its imprint on later art.

'Decoration' on the title-page is something of a misnomer, for while sixth century mosaics such as those in San Vitale at Ravenna were conceived, as Demus points out, as a decorative adornment of the architecture they cover, post-iconoclastic mosaics acquired an intrinsic importance, through their function as icons, to which the structural scheme was co-ordinated, if not actually subservient. This function Demus explains in a concise exposition of the theory of the icon as it emerged, purged and strengthened, from the struggle with the iconoclasts: 'A painted representation of Christ is as truly a symbolic reproduction of the Incarnation as the Holy Liturgy is a reproduction of the Passion.' The almost priestly role of the artist precluded his taking any serious liberties with types and compositions hallowed by tradition. The special achievement of the later Byzantine mosaicists lay rather in the relationship of icon to icon and to the beholder and in the building up of a coherent scheme for a whole church. Yet, Demus points out, even in this sphere the doctrinal function of the images ultimately imposed a general uniformity, so that each should have its proper place in the hierarchy, which ranged from Christ in Majesty in the summit of the dome, down through the prophets who ringed the drum, to the Virgin in the apse and the 'Chorus of Saints' in the lowest register. The standardization of the iconographic scheme carried with it the need for uniformity in the architectural framework. Hence the monotonous repetition of certain standard types of church, as that with the dome over the intersection of two barrel vaults carried on four free-standing piers, of which Basil I's New Church was the prototype. It is unfortunate that none of the many surviving churches of this type contains mosaics, and Demus's argument, which rests to some extent on mosaics in the squinches and niches of churches of a less common type, is somewhat tenuous.

Demus stresses the frontality of the individual figures, which their veneration by the Byzantine church-goer demanded, coupled with a statuesque character inherited from pre-iconoclastic sculpture. There is no suggestion of picture-space; the figures stand against the infinity of the unbroken gold ground and recognize no space but the real space in front of them, which they share with the beholder. These conventions also controlled the narrative subjects, which, though excluded at first, became increasingly numerous. Thus in the Annunciation at Daphni the Angel is shown in three-quarter view, the maximum permissible departure from frontality, facing the frontal Virgin on the other side of the niche. The only space conceived in the composition is the actual physical space enclosed by the niche. 'The church itself is the "picture-space" of the Icons,' where the worshipper 'feels that he is himself witnessing the holy events and conversing with the holy persons.'

The number of niche receptacles which the architect could place at the disposal of the mosaicist was limited and the narrative subjects ultimately relapsed from the spatial conception into flat forms, recalling the portable festival icons and miniatures, from which they had originally been borrowed. In place of a homogeneous assemblage of images, the churches decorated under the Palæologues confronted the worshipper with a multitude of independent pictures, each with its own picture-space enclosed in a niche-like grouping of conventionalized architecture, or receding up a terraced landscape. Demus regards these changes as the outcome of the transference of the pictures from actual spatial niches to flat walls, where the painters evolved the new conventions in order to retain their spatial character. He finds the beginnings of this development in the latest (twelfth century) mosaics of Monreale.

In the light of these and other principles he reassesses the principal mosaic monuments. The fine Ascension cupola in St. Sophia at Salonica is put back—very reasonably—from the eleventh to the ninth century; for the dedicatory figures in St. Demetrius in the same city 'tenth' century (p. 58) is surely a slip for 'seventh.' The brief discussion of the Sicilian mosaics whets the appetite for his promised monograph on the subject. The analysis of those in St. Mark's in Venice, which cover the whole of the twelfth and thirteenth centuries, traces the course of the classical Byzantine system in dissolution, the injection of the Romanesque spirit, the new Byzantine impulse attested in some of the narthex cupolas (a consequence surely of the sack of Constantinople in 1204) and finally, in the Moses cycle, the emergence of the new style of picturelike units with elaborate landscape and architectural settings. The pyramidal form of the latter compositions is ingeniously attributed to prototypes in the triangular panels of a cross-vaulted church, but it is questionable to cite in this connection the Kahrieh Djami in Istanbul, where the vaults are domical, except as regards the style of its somewhat later mosaics.

The 64 illustrations are well chosen and reproduced. Those who helped with the revision of the text, which was written in English, must bear the blame for an occasionally unfamiliar turn of phrase, for the use of such words as 'organicism' and for such spellings as 'Ancyra' (for Ankara); but the sense is nowhere in doubt and the thesis, however venturesome it may seem in some respects, is likely to remain a standard work on the subject.

A. H. S. Megaw

SHORTER NOTICES

DUIZEND JAAR BOUWEN IN NEDERLAND. C. V. Allart de L'ange, Amsterdam, 1948. Vol. I by S. J. Frekema Andrea and E. H. Ter Kuile.

It is not much more than ten years since the one volume *Kernstgeschiedenis der Nederlanden* came out, 568 pages by the country's foremost experts, and sold at a very reasonable price indeed. It has had a second edition recently, and is now followed by an equally competent and even more detailed history of Dutch architecture, written by three of the best of Holland's excellent scholars. It is going to be in two volumes. The first, devoted to the Middle Ages, came out a few months ago. There are 130 pages on town planning and 230 on architecture proper with about 200 photographs and 60 drawings—a mine of the most up-to-date information, not at all popular in its presentation, yet (according to its sales) beyond doubt of interest to the educated layman in Holland. Would such enterprises, if they are possible amongst the Dutch, be equally possible amongst us? The question is often asked and has not yet found a satisfactory answer.

N.P.

NASCITA E VITA DELLA ARCHITETTURA MODERNA. By Piero Bargellini. Arnaud, Florence, 1947.

Before the war Italian art historians were known for never looking across the frontiers of their country. That has changed completely. Several books which are remarkably well informed about things in this country and America have recently come out of Italy. Among the best have been those by Tedeschi and Bruno Zevi. Signor Bargellini's book is also well informed, but in other respects it does not come up to their standard. The first part of it deals with the genesis of the modern style (data and illustrations rather shamelessly lifted from Giedion and Pevsner without as much as mentioning them) and the second with the modern style itself (in chapters on Gropius, Le Corbusier, Wright, Neutra, Aalto and Italy). The style of writing is somewhat florid, and the book as a whole is by no means free of mistakes.

N.P.

ANTHOLOGY

Locked in Westminster Abbey . . .

It happened once that, wishing to see the interior of the basilica at dusk, I lost myself in admiration of its architecture, so full of caprice and of passion. I wandered slowly about it, overwhelmed by the sensation of the *sombre vastness of Christian churches* (Montaigne). Suddenly night overtook me : the doors had been closed. I searched for an exit, I called out 'usher,' I beat on the 'gates.' All the noise I made disappeared, lost in the silence. I found myself resigned to sleeping among the dead.

I hesitated in my choice of a resting-place but finally stopped near the tomb of Lord Chatham at the foot of the rood-screen and the double storey of the Chapel of the Knights and of Henry VII. At the entrance to the stairs, to the wings closed by grills, a sarcophagus set in the wall, opposite a marble Death armed with his scythe, offered me shelter. The folds of a shroud, also of marble, served as a nook; I was, like Charles V, hardening myself to my own burial.

. . . . . .

Nestling in my bedsheet of marble, I turned from noble thoughts in search of naive impressions of space and time. I felt that anxiety, mixed with pleasure, which I suffered in my tower of Combourg (the family château near Saint Malo) in wintertime when I listened to the winter wind, for gusts and shadows are of a like stuff.

Little by little accustomed to the obscurity I made out the statues on the tombs. I looked at the corbellings of Saint Denis of England where one might say that past events and years gone-by descend in the form of Gothic candelabra; the entire building was like a monolithic temple to Time petrified.

I counted ten, eleven strokes by the clock; the hammer which rose and fell on the bronze was the only living being there besides myself. Outside—the noise of a moving cart, the cry of the night watchman and that was all. All those distant earthly sounds came to me from another world. The fog of the Thames and the coal smoke filtered into the basilica and spread a further gloom.

At last a half-light shone in a corner of the darkest shadows. I stared at it fixedly as it grew brighter. Did it spring from the two sons of Edward IV, butchered by their uncle? 'Those happy children,' wrote the great playwright, 'were asleep together. They held themselves wrapped in the arms of one another, innocent and white as alabaster. Their lips were like four red roses on a single stem which, in all wonder of their beauty, kissed one another.' God was not sending me the sad and charming spirits; rather the faint shadow of a young woman, just past adolescence, appeared with a light screened by a piece of shell-shaped paper. It was the little ringer of the bells. I heard the sound of a kiss, and the clock tolled daybreak.

The bellringer was terrified when I walked out with her at the Cloister Gate. I told her of my adventure. She told me that she had come to take the place of her sick father.

We did not speak of the kiss.

CHATEAUBRIAND (*Mémoirs d'Outre-Tombe, Vol. II.*) Librairie Garnier frères, Paris, 1947. (*Translated by Henry Hope Reed.*)

MARGINALIA

Churches in Danger

A gloomy picture of the present condition of the fabrics of many English parish churches is painted in the one hundred and thirtieth annual report of the Incorporated Church Building Society. During 1948 the Society endeavoured to ascertain the approximate extent of church repairing needed throughout England. 'In one diocese,' the report says, 'it is stated that "most churches need repairs"; another refers to 50 per cent as definitely essential; a third reports that "a flood of applications is constantly coming to us"; in another small diocese ninety-six grants have been made in one year.' Among particular instances, that of Peterchurch, Herefordshire, is noted. Here the 113 ft. spire, which forms one of the chief landmarks of the Golden Valley, is to be dismantled immediately on account of its dangerous condition; its re-erection will depend on the raising of funds.

Intelligence

At a meeting held on June 21, Michael Waterhouse, M.C., was re-elected President of the R.I.B.A.

The Council of the Royal Society of Arts announces that the following are appointed to the distinction of Royal Designer for Industry:—
Edward Bawden (Graphic Design).
Barnett Freedman (Graphic Design).
Roger Furse (Stage and Film Décor).
Eric Carlton Ottaway (Road Passenger Vehicles).
Honorary R.D.I. :—
Prof. Kaare Klint (Denmark—Furniture).
Mrs. Astrid Sampe-Hultberg (Sweden—Textiles).

Until a permanent appointment can be made, Henry-Russell Hitchcock, professor of art at Smith College, Massachusetts, will be acting director of the college's Museum of Art.

Mr. W. K. Wallace, C.B.E., has been appointed chairman of the Building Research Board in succession to Sir George Burt.

The Essex County Council has authorized the allocation of a sum not exceeding 1 per cent of the total cost for adorning school buildings with sculpture, mural painting, etc.

Exhibitions: Current and Recent

The easing of the paper situation makes it possible for the REVIEW *to resume its former practice of commenting on selected exhibitions of painting and sculpture, and this it proposes to do from now on, in Marginalia, month by month. A monthly paper cannot, of course, give an up-to-the-minute report of each exhibition as it comes on; a number of those which will be noticed will of necessity belong to the category of 'recent' rather than 'current.' To make the feature more useful, for both present and future reference, the closing date of the exhibition will be given at the end of the mention in each case.*

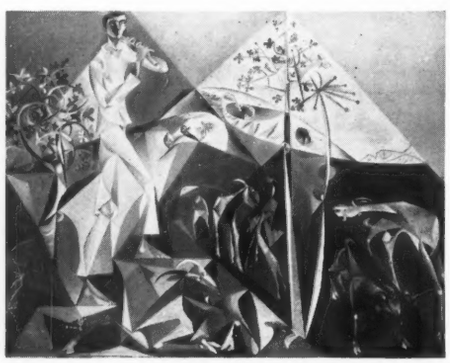
John Craxton's war-time exhibition at the Leicester Galleries must have sent many people away with the impression that here was a young painter, of indubitable talent, who was rather too inclined to rely on a fashionable iconology of toadstools and sunflowers instead of setting out to find his own mode of expression. He was not so much an artist in search of a subject as an artist who scarcely seemed to be bothering to look for one. As his recent exhibition at the London Gallery showed, his subsequent experiences, and the impact of Greece in particular, have changed all that. In the Greek landscape, and the Greek physiognomy, Craxton has found just what was needed to give content and

stiffening, as it were, to his art, and has emerged as one of the few contemporary painters one could imagine, in time, doing large-scale decorations for a modern building. (July 30).

On the other hand William Townsend, who recently had a show at Roland, Browse and Delbanco's, is a painter whose relationship towards architecture is that of its interpreter (which Craxton never could be). Townsend is able to compose the broadest kind of townscape without losing the personalities of the individual buildings, in uncovering which his eye is allied to the kind of knowledge without which the eye alone is never, for this purpose, enough. Some of the best pictures in his recent exhibition were of blitzed sites; in these, far from being concerned with the dramatic implications of the subjects —with what, after all, they all have in common —he accepts them for the perfectly normal aspect of the city scene that they have become and concentrates on distinguishing the unique and particular characteristics of each. REVIEW readers will have looked at his 'Canterbury Cathedral, Eastern Transept' with special interest. (July 20).

Among other recent exhibitions that should be mentioned have been the big memorial exhibition of Mark Gertler's work, organized by Thomas Balston, at the Whitechapel Art Gallery (July 23) and Agnew's summer exhibition of old masters, which always contains something of architectural relevance, and this year was particularly rich in Guardi. (July 30).

The summer exhibition at the Redfern Gallery, which is now on, includes paintings, drawings and prints by most of the contemporary English and French artists one can think of from A to Z—or anyhow from Ayrton to Wynter. (October 31). At the Hanover is a remarkable exhibition of sculpture in iron by Reg Butler. At first sight some of the pieces exhibited may be thought to resemble Calder's 'stabiles' (illustrated on pages 117-119 of this issue), but, unlike Calder, Reg Butler works entirely in *wrought* iron and steel, not in wire and sheet metal. There is nothing constructivist about Butler's work; he is more concerned with the expressive possibilities of his chosen material than with formal qualities in the more architectural sense. Thus the centre of gravity of his largest, and very impressive, figure, 'Woman 1949'—it stands over seven feet high—is well off the line of its actual supports. This is an exhibition which no one who is concerned with the present and the future of that highly elusive thing known as English sculpture should miss. (August 13).



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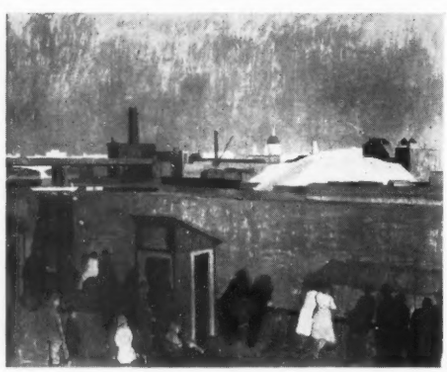

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1, Pastoral, to P.W. *by John Craxton.* 2, South Bank from Westminster, *by William Townsend.* 3, (*top of page*) Woman, 1949, *by Reg Butler; this is a photograph of the model for the figure, taken in the sculptor's studio.*

Railway Buffet Cars (Design)

The introduction by British Railways of a new type of mock-Tudor restaurant-buffet car has aroused considerable criticism, and many pens have flown to many sheets of paper. On June 27 there was a lively debate on the subject in the House of Commons, extracts from which are given below.

Mr. Driberg (Maldon): 'A few weeks ago the country was electrified by the news that the Railway Executive or British Railways were about to entertain their passengers with a new kind of buffet-car, or, as it became known, tavern-car, embellished and adorned in mock-Tudor style. Words fail me, for once, to express the full horror and disgust that I felt when this announcement was made, and I think it will save time if I simply quote a sufficiently concise letter, of three sentences only, that appeared in *The Times* shortly afterwards:—

"*Sir,—The appearance on British Railways of tavern cars dressed up to look like old English inns with painted brickwork and false beams is the* reductio ad absurdum *of the mania for the fake antique. These cars are ridiculous, even by the silliest roadhouse standards. It is deplorable that a public authority should set such an example.*"

That letter was signed by the Director of the Victoria and Albert Museum, the Principal of the Royal College of Art, the Chairman of the Council of Industrial Design, the President of the Architectural Association, the President of the Design and Industries Association, the Principal of the Architectural Association School of Architecture, the Chairman of the Council of the Royal Society of Arts, the hon. secretary of the Society of Industrial Artists, the Chairman of the Institute of Contemporary Arts, the Master of the Faculty of Royal Designers for Industry, and by a former chairman of the Industrial Art Committee of the Federation of British Industries.'

. . . 'the arrangements behind the bar are excellent: they are in the most gleaming, modern style. There is no trace of Tudor whimsy behind the bar; all is purely functional. There is, however, one criticism that has to be made, and has been made fairly widely—that is, that though the windows, absurdly enough, have to be lattice windows, I do not see why they should be so high that you cannot see the scenery at all. That is also characteristic of the newest style of dining car. Apparently the idea is to hurry you along, so that you do not linger admiring the landscape after you have eaten the delicious meal.'

. . . . 'What is needed is, first, a consistent design policy for the nationalized industries; and, secondly, that design research should be up-graded to the same level as technical and marketing research. Incidentally, I would make a point which may perhaps be of practical value also in the export trades: that all industries should develop what may be called "pilot lines," in the contemporary idiom, to meet the inevitable change of taste in the American market. There are influences in the United States which are weaning the public taste from the antique. When this change of taste is fully developed, we do not want to be left standing.

Apart from this momentary aberration, transport has led the way in this country in modern design. We can be proud of what has been done by London Transport over many years, especially in contrast with transport in Paris or New York. I would conclude, if I may, with a short quotation from a book which I am sure will appeal to my hon. Friend the Parliamentary Secretary, for it is by Mr. Christian Barman, who is now Publicity Officer to the British Transport Commission. He speaks about these great new opportunities. He says:

"*Nowhere have these opportunities been more clearly apprehended and more skilfully utilized than in the transport undertakings in the London region that in the interval between the two wars came under the inspired management of the late Frank Pick. It has been truly said that only two other men, Sir Christopher Wren and John Nash, have made a contribution to the physical aspect of London comparable to that which we owe to these undertakings. Through their buildings, rolling stock and equipment generally, as well as through their posters and many other forms of publicity, they have made an impact which is not only physical but something having the quality of a moral force. . . .*

"*There is no reason why the part played by public transport in our visual education should be confined to London. . . . A large part of our transport equipment is either worn out or obsolete, and much of it must of necessity be renewed as soon as labour and materials can be spared for this purpose. Our new stations and other buildings, our new roadside transport furniture, our new locomotives and vehicles, will be the best in the world if we set about this business properly. They will be the best, not because it is our wish that other nations should admire us and envy us, but because we know that first-class environment makes the kind of people we intend to be.*"

A shoddy Tudoresque monstrosity is not a first-class environment.'

The Parliamentary Secretary to the Ministry of Transport (Mr. James Callaghan): . . . 'A deluge of adverse expert opinion has fallen upon the Railway Executive, but I am bound to say it has been very good for business. The use to which these tavern cars have been put has exceeded the wildest expectations of the revenue that the Railway Executive ever hoped to get. Because of that I am sure the Railway Executive is grateful for the adverse criticism which has followed them about. The fact seems to be that nobody likes these tavern cars except the

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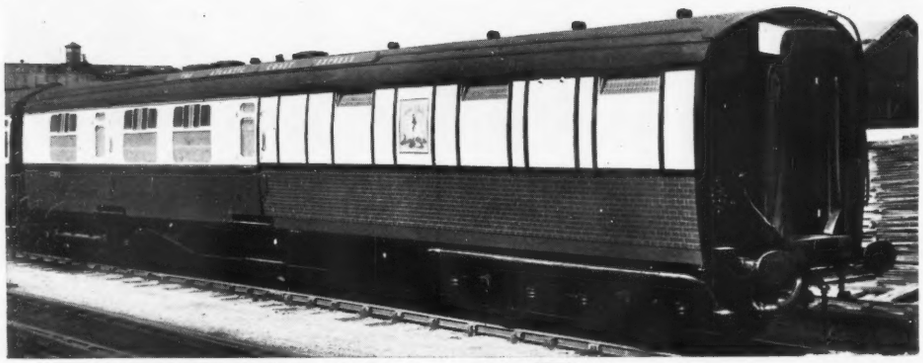

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1 shows the new railway buffet car as part of a crack train, the Atlantic Coast Express. This photograph shows clearly the imitation brickwork, plaster and timbers, together with the olde tyme inn sign, painted on the metal coachwork. 2, bar and servery, complete with beams and leaded lights. Right, Osbert Lancaster's comment in the Daily Express.

What's the use of the Railway Board going to all this expense building up an old-world Dickensian atmosphere when you engine-drivers constantly report for duty without your false whiskers?

continued from page 130]

public, and the public have flocked to them and have found, as my hon. Friend the Member for Maldon (Mr. Driberg) said in his very temperate and reasonable speech, that they are well laid out inside and have many conveniences for the smaller sort of meals than the full-scale meal you get in the dining car.

My hon. Friend commented on some of the creditable points in these cars. There is one other I would draw to his attention, and that is the excellent accommodation that is provided for the staff. They have got something which is new in this field. They have got accommodation reserved for them—the sort of thing we should all like to see—on a scale which is better than any previous buffet car or restaurant car I have seen.'

Mr. H. Strauss: 'Is that any reason for making it Elizabethan?'

Mr. Callaghan . . . 'the Minister is not responsible—I ought to make that point straight away—for this design or for the type of carriages that are produced. That is the job of the Railway Executive. What the Minister obviously is interested in is that the bodies such as the Council for Industrial Design, the Royal Fine Art Commission, and this sort of body, should have the opportunity of making their views known to the British Transport Commission. The hon. Member for Bedford (Mr. Skeffington-Lodge) asked whether they had been consulted about these particular tavern cars. The answer is that they were not consulted. They knew nothing about it. I am sure my hon. Friend would not expect me to say, or give an assurance, that they should have the last word on matters of design so far as the railways are concerned. Indeed, quite the contrary.

What I think we shall find is that the British Transport Commission will be able to give

[continued on page 134

continued from page 132]

lessons to many of these bodies in the field of railway design, and that their staff, designers and machinery are such as will enable them to take up the challenge of my hon. Friend. Here is an opportunity—and I readily accept what he has said—for a nationalized industry to lead in public taste. I can say, on behalf of the Transport Commission, that I am certain they will want to take up that challenge. My hon. Friend quoted from a Penguin just written by Mr. Christian Barman. He can be comforted by the fact that Mr. Barman holds a high position in the Transport Commission.'

Mr. Baird (Wolverhampton, West): 'Why was he not consulted?'

Mr. Callaghan: 'I have not said whether he was consulted, because I have not inquired into that point. As the machinery develops—and these cars take a long time to get from the drawing board—I think we shall find the Transport Commission need not bow the knee to anyone in the matter of public taste. I am bound to say that too much "hoo-hah" has been made about these restaurant cars. There has been a lot of exaggerated language used by people who have not been within half a mile of them; they are nondescript. If I may say so, if they had been tenth-rate coaches in chromium and glass they would probably have passed and we should not have heard anything about them. But that would not be good enough litter. I want them to be first-rate in any material that is used. . . . I think that this will prove to have been a very profitable matter in more ways than one for the Railway Executive. The pioneer of this is the man who has designed the new double-decker coach that is to appear in south-east London in the Autumn. He has great imagination and enterprise. He has done very good service, and I should not like to think that what has happened in this case will make the Railway Executive timid again, but that they can go ahead with the machinery they have devised and see that the canons of good taste are properly observed. I think that the result will then be something of which the Commission can be proud.'

From this fascinating interchange, three points of major interest arise. First, it must be freely admitted that the interest and knowledge displayed by Mr. Driberg and his supporters were not likely to have been generated in the House twenty years ago, and the one good point to which this whole dreary business has given rise lies in the demonstration it has afforded of the informed criticism on matters of taste which is now available within the House itself.

Second, the fantastic implication contained in Mr. Callaghan's extremely inadequate reply, that the design of the cars is justified by the number of the public using them. If one's presence in any particular bar is to be taken as signifying approval of the interior decoration we shall all have to be a lot more careful where we drink. Thirst will not wait on visual re-education.

Third, if as Mr. Callaghan supposes, 'the Transport Commission will be able to give lessons to many of these bodies in the field of railway design' then the taxpayer's money is going down the drain. For, of the signatories of the original letter to *The Times*, a large proportion were those of the heads of institutions for which the State is wholly, or in part, financially responsible. If the taxpayer is called on to support bodies officially concerned with improving and developing standards of design, it is a little hard for him to have their efforts nullified by another State concern, the financial burden of which also falls on his long-suffering shoulders. In this field the sooner the Ministry of Transport realizes that if you keep a dog it is necessary to bark yourself the better.

From Colony to Nation

An Exhibition under this title was recently held at the Art Institute of Chicago. As its excellently prepared and illustrated catalogue tells it consisted of both 135 paintings (including West's celebrated *Death of General Wolfe* from Ottawa) and 120 photographs of buildings. The combination is too rarely attempted over here, in spite of its evident value. The stages by which America developed from Colonial uncouthness to a style of her own comes out most illuminatingly by comparisons between painting and architecture. The architectural section was arranged by Turpin Bannister and divided into Medieval Survivals (the Middle Ages for the American go right into the seventeenth century), Colonial Classicism (reflecting Wren, Vanbrugh, the Palladians, Adams, Holland and Soane), Public Buildings of Colony and Republic (with Jefferson and Latrobe as the high-lights), and City Planning (with New York 1660, Philadelphia 1683, Washington 1790, etc.).

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continued from page 134]

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Acknowledgments

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Appointments

UNIVERSITY OF HONG KONG
CHAIR OF ARCHITECTURE

Applications are invited for a new PROFESSORSHIP IN ARCHITECTURE. The starting salary is £1,075 a year rising by annual increments of £50 to £1,325 a year, plus Expatriation Pay of £475 a year, and a variable High Cost of Living Allowance (at present £517 10s. a year). First Class sea passages, and living accommodation at a rental of £200 a year, are supplied.

Applicants should possess a degree in Architecture of a British University and the Fellowship of the Royal Institute of British Architects. They should have both academic and practical experience. The successful candidate will be expected to take up his duties by the end of 1949 at the latest.

Applications should be sent in triplicate together with testimonials and the names of two referees to the Secretary, Association of Universities of the British Commonwealth, 5, Gordon Square, London, W.C.1 (from whom further information may be obtained) not later than 15*th August*, 1949.

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Salary £625 per annum (N.Z.)

Further particulars and information as to the method of application may be obtained from the Secretary, Association of Universities of the British Commonwealth, 5, Gordon Square, London, W.C.1. The closing date for the receipt of applications is 31*st August*, 1949.

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Application forms and further details of the post may be obtained from the undersigned on receipt of stamped and addressed foolscap envelope. Applications must be returned to the Principal within two weeks of the issue of this advertisement.

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Education Office,
Warrior Square,
Southend-on-Sea.
25*th June*, 1949.

For Sale

COMPLETE EXCLUSIVE BATHROOM SUITE consisting of:

1. 6 ft. by 2 ft. 9 in. Cream Enamelled Bath complete with surround in onyx marble.
   Large Wall Mirror 6 ft. by 6 ft. with curved top and surrounded with box electric light fittings.
2. Cream Enamelled Pedestal Wash Basin with large onyx marble surround. Pedestal formed of large Eagle with outstretched wings—6 ft. spread.
   Large Wall Mirror 7 ft. by 5 ft. 9 in. surrounded with box electric light fittings.
3. Cream Enamelled W.C. Pedestal with wooden cover.
4. Cream Enamelled Bidet with wooden cover.
5. 12 in. by 9 in. onyx marble Soap Receptacle in shell formation.

The above fittings may be seen in Gloucestershire by appointment. Apply to the COUNTY ARCHITECT, SHIRE HALL, GLOUCESTER.