

当代世界建筑经典精选(6)

阿勒普联合设计事务所

ARUP ASSOCIATES

Selected and Current Works



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阿勒普联合设计事务所

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编者按

阿勒普联合设计事务所拥有一大批高水准的建筑师及相关专业人才。多年来,该所的设计作品在英国屡屡获得各种奖项,且十余次获得英国皇家建筑学会奖。阿勒普把建筑学科定义为:“开创令人心身愉快之路”。阿勒普的成功在于两个合作的成功:企业内部的紧密合作,企业与业主的紧密合作。

现代建筑工程已不仅是建造房屋的概念,而日益变得综合与复杂。不仅需要建筑、结构、水、暖、电的设计师,还需要规划、法律、环境、机械、造价控制等专业人才。所以,阿勒普推崇的工作方法是将各相关专业的人才组成一个多学科协调合作的设计小组,并且在同一个工作空间下一起工作。在这个空间里,全体成员一起面对业主,从而得到第一手的信息。小组成员之间可以随时交流各自的独到见解,相互启迪、不断创新,及时掌握各专业工种的进度,随机协调。在不知不觉中,将不同专业不同成员的设计决定融合成一体,形成一个完美的方案。这种工作方法大大减少了项目负责人的协调力度,其优势在历年的项目设计,尤其是一些大规模的城市改建项目设计中得以验证。

当今世界,所有城市普遍面临着新建建筑如何与原有建筑协调匹配、如何融入已有的自然景观的棘手问题。阿勒普在杜鲁门有限公司总部大楼、英国中央电力局总部大楼、伦敦劳埃德保险公司总部大楼的设计中,采用环境设计的概念,使新建筑既沿循了城市发展的轨迹,又形成了新的点缀和镶嵌。

阿勒普的另一杰出贡献是在恢复历史建筑原貌的同时赋予其现代使用功能,并使之协调得完美无缺。在许多成功的工程实践中,较著名的有马尔廷(MALTING)音乐厅、伦敦皇家战争博物馆。

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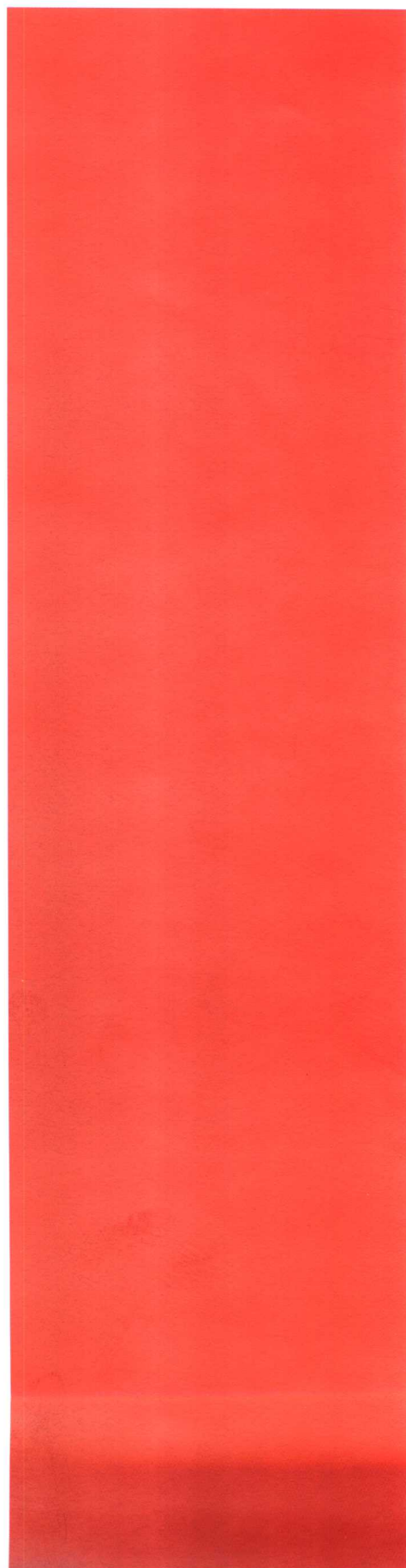
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Introduction



Introduction

Arup Associates — Five Perspectives

What we build should always be a whole, an entity, and the job of designing it is very much the job of giving it the wholeness of a work of art and the inevitability of the perfect tool.

In emphasising the need to integrate all of the design decisions relating to a project, Ove Arup inspired a very particular view of design and a way of working. He advocated small, closely knit teams of designers, all working in the same space and having a continuity of work on a few jobs at a time. It was a way of working that he felt could enable the team to learn from and appreciate each other's unique qualities and where "the question of leadership need hardly arise, each member taking the lead in his own subject . . . even the professional demarcations may fall away".

It was this philosophy that was enthusiastically adopted as the basis for the foundation of Arup Associates in 1963. As buildings have become more complex and varied, so those who commission them need more comprehensive advice, not only in matters of design, but also in planning, construction, law, engineering, environmental servicing, cost control and contract management. Consequently, the practice has developed the skills and organisation to tackle design projects within a framework of small, multi-disciplinary teams that include architects, structural and environmental engineers, cost estimators and interior designers. Those design teams work directly with the client from the development of the brief and formation of initial design responses to the preparation of production information and the settlement of the final account.

This is a way of working which, as the projects illustrated in this book so clearly demonstrate, has successfully developed ideas that are sensitive to the environment and human needs, yet which also obviously profit from technological innovation.

Experience in the design of industrial buildings, laboratories and research facilities encouraged a particular concern within the practice for the integration of structure and the rational order established by the building process itself. These concerns, developed in early projects such as those for CIBA and Evode, were subsequently refined in the design for the Department of Mining and Metallurgy at the University of Birmingham. This design was planned on a tartan grid within which routes for the distribution of services were clearly designated between a series of structural tables. The form of this project was based on a framework that grew out of detailed studies of building uses and highly original interpretations of the systems of structure, servicing and construction.

The subsequent work of Arup Associates built on this remarkable foundation. Designs for educational institutions and for other clients keen to improve the design of the workplace, enabled those systemic approaches to be developed and refined.

During the late 1960s, the master plan for a new university at Loughborough, followed by proposals for new buildings there, and for the Horizon Project in Nottingham, further explored the potential of the tartan grid. The designers dissected those buildings in a series of drawings and models, identifying the components and plotting their assembly with painstaking precision. This unusual concern for the making of buildings, combined with innovative construction techniques, made these large and complex projects realisable in a short time and to unusually high standards of design and finish.

The problems of designing new corporate offices encouraged the same designers to consider how best to realise the benefits of this rational systemic approach while at the same time responding to the particular requirements of sites within sensitive natural landscapes or the dense fabric of cities. The design of new headquarters buildings for corporate clients, such as those for Truman Ltd, CEGB, Lloyd's of London at Chatham, Wiggins Teape or IBM, demonstrated highly original resolutions to the often apparently conflicting demands of system and setting.

Developed over a 15 year period, the designs of these projects, clearly inspired by the collaborative efforts of the multi-disciplinary team, transformed attitudes about the nature of office workspace, building form and envelope. In these projects the structure of the building not only defines inside space and outdoor room, but has also been designed to incorporate concepts of environmental design. Ideas about site planning and orientation have been developed to inform both building configuration and tectonic detail. So at Truman Ltd, Lloyd's of London, CEGB and Gateway 1, the structural bay and building fabric are exposed so as to clearly define places to work, to create spaces for services and to be thermally responsive. At Truman Ltd and Lloyd's of London at Chatham, these systems have been ordered to reveal traces of the city and sensitively repair urban sites; the designs for the CEGB and Gateway 1 reinstated natural landscapes on the suburban edge.

These explorations of the areas of conflict between system and setting have influenced the geometries of plan; the formation of outdoor spaces to link the wider context with the indoor room; the materials used; and the design of responsive external skins. The ideas contained within the designs of these projects were tested in use and thoughtfully developed in subsequent schemes for Leslie & Godwin, Legal & General, Royal Life and Lloyds Bank.

At the same time, Arup Associates were making an outstanding contribution to the restoration of historic buildings and the creation of new spaces for music and performance. The Maltings Concert Hall, designed for Benjamin Britten, was the first of many important projects that established within the practice skills to create design that combined modern uses with the restoration of historic buildings. Designs for the Henry Wood Hall, the Scottish Opera in Glasgow and the Buxton Opera House all restored historic buildings and returned them to use, while the Music School added new buildings to the campus of the University of East Anglia. More recently these skills have been extended in the designs for the phased long-term development of the Imperial War Museum in London and the competition-winning scheme for the new Cultural Centre in Istanbul.

Commissions to design a large new financial centre at Broadgate on a 3.2-hectare site in the heart of the City of London, and the creation of a new international business community at Stockley Park on 140 hectares of contaminated land near London Airport, generated an increasing interest in gathering a broader range of skills in the multi-disciplinary team. With the collaboration of geotechnical engineers, transportation planners, archaeologists, landscape architects and construction specialists, new ideas and concepts in urban design have been developed.

This experience has led to an increasing involvement in the design of large and complex projects, several in Europe. Proposals commissioned for the design of new business communities in France, Hungary and Germany integrate public and private uses in innovative plans for site, landscape and buildings.

Following the success of earlier projects for sports buildings at Liverpool, Riyadh, Goodwood and Wentworth, the practice has also recently developed proposals for new stadia. Planned to act as catalysts for the larger scale urban regeneration of extensive sites in Berlin and Manchester, these projects were prompted by plans to host major international sporting events and were developed in close collaboration with developers and builders. They each outline ingenious ways of integrating large new sports buildings with a mix of other uses to reconstruct the city. A new urban stadium designed to provide facilities for the 1995 Rugby World Cup while also regenerating an important segment of the city, is currently under construction in Johannesburg.

This broad range of outstanding work in the design of building and city emphasises the skills of these particular designers and the significance of their multi-disciplinary approach. Ove Arup defined architecture as "a way of building which delights the heart". It is that vision which clearly continues to inspire the commitment and collaboration of designer and client at Arup Associates. The responses of our clients that follow vividly describe the nature of those collaborations.

Brian Carter
Arup Associates



Stanhope Properties PLC

The overriding hallmark of Arup Associates' work is quality and good design. Yet what does this mean? How are quality and good design perceived? Of course it depends on who you are. For some, it is purely a matter of a building's elevation. For others, it is perhaps the ergonomics of the interior details, or the efficiency in use of a building, or simply the amount of marble and granite. From the point of view of a professional developer, it concerns the relationship between value and cost; the balance between user needs, aesthetics, investor expectations and what is deliverable. Good design for the developer is the integration of these often conflicting requirements, constraints and influences.

Arup Associates' truly multi-disciplinary method of team working creates an unusually good synergy between a large range of disciplines. Their style of working — a whole team working together in one large space, with regular inter-team critiques — particularly suits their innovative approach. They tackled issues such as efficient use of energy and materials long before it was fashionable to do so. The experience and trust built up in these groups result in quick and reliable responses to complex problems. Their work is characterised by deceptively simple designs which typically solve a range of issues at once, integrating structural and environmental engineering with architectural design.

Another distinctive feature of Arup Associates' work is the humanity of their approach. Shunning the temptation simply to produce architectural icons, they prefer instead to search for a more lasting quality of urbanism which is so sadly lacking in most post-war British construction. This approach is exemplified especially by Stockley Park and Broadgate, two major developments in which pieces of London were repaired and recreated. The original master plans demonstrate a thinking that starts with the design of the open space, only then following on with designs for actual buildings. External and internal realms thus become united to create an integrated environment.

Such complex projects test to the limit the competence of all involved and provide the acid tests of excellence in the design process. Nowhere is this more apparent than at Stockley Park, now widely acclaimed as Europe's leading business park. Arup Associates' multi-disciplinary approach shines under such circumstances. Architecture, master planning, landscape design, land reclamation, pollution control and civil engineering had to be combined with an understanding of what was then a new property concept — the business park — all to be delivered against a very challenging budget and timescale. Without their skills, ingenuity, imagination and sheer professionalism Stockley Park would not have become the success it is today.

Excellence in the end result can only be achieved by excellence in all the increasingly complex and lengthy processes of research, planning, design and construction. Quality is not an optional extra, and can never be bolted on afterwards. It is, rather, a question of skill, commitment and loving care. Arup Associates' work consistently manifests an understanding of this concept. Their designs provide beautiful and appropriate environments and promote good personal interaction, at the same time meeting all the requisite technical demands: these are huge achievements.

Vincent Wang
Director, Stanhope Properties PLC