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A General Theory of Architecture : An Abstract

Through the dynasties building was never regarded as merely to build in this central kingdom. In spite of the social, technical and professional renovations since the late 19th Century, the nature of building has, in the author's view, hardly become any simpler, even though it might have been more frequently defined as individual and seemingly unrelated projects. It seems to the author that building has been even more intensively interlocked with other aspects of life. However, such links appear to have been somewhat neglected in the theory and practice of the contemporary profession. Holistic thinking, folk wisdom and common sense, which had proved so effective in history, are largely lost. The theoretical basis of various modern schools are in question; Practitioners also feel the limitations of existing premises of the discipline. In the following ten chapters the author endeavours to re-establish a wider and more general framework of architecture based on which the craft of architecture may be further developed and rejudged in its full meaning.

Thus, to the author, architecture is really about how and why the built environment comes into being. It is only natural that the framework is constructed on an inter-disciplinary basis. The author tries to let his arguments grow out of what is thought to be traditional architecture, taking in all the contributions from other disciplines as he could. Interestingly, this approach well reflects the path of the professional development in China. Taking into account the high percentage of practising architects amongst the professionals working for the built environment in China, the framework would have its profound and unique implications in the country.

The theoretical framework is, however, no denial of the existing body of knowledge. It has been a long tradition for a master builder to think in a holistic way, both in the East and in the West. If it could be said that in the recent past professional division has affected this way of thinking, much useful knowledge has been gained, particularly in tackling individual aspects of building. The author argues that it is high time we put all what we have gained together, and set out towards a widened and deepened discipline of architecture, for which this book is one of the first steps.

The author also thinks of the book as his answer to the compelling needs for theory generated by the unprecedented large scale construction and reconstruction in the country. No doubt, the proposed framework itself will also be further developed in practice.

I. A Theory on Settlement

— Settlement provides the context in which most buildings are proposed, designed, built and looked at. Without settlement the meaning of architecture cannot be fully disclosed.

— Architecture and nature are an integrated body; The natural environment should be regarded as one important component of architecture in the sense of habitat.

— Buildings, the void within them and the tamed environs are all parts of architecture in its general sense.

— Urbanisation is a unique and important form of settlement. It has complex impact on the function, form and style of architecture.

— In all, settlement has to be the first and foremost subject of concern in architecture. In China, the rural-urban transition has given the subject even greater significance.

II. A Theory on Regionalism

— Buildings are to be considered as artifacts that are deeply rooted in the region where they are located.

— The region is, firstly, a geographical one. Natural conditions set up various perimeters in designing and building.

— Also, historic and cultural differences help to formulate unique characteristics in the buildings of the region.

— Regionalism in architecture can be viewed in terms of

rational design, conservation of cultural heritage and wise use of local resources.

- Cities often function as centres of a region.
- In all, architecture is architecture of the region.

III. A Theory on Culture

- Architecturally, there had prevailed Eurocentrism.
- However, today's world is a world of cultural pluralism. Consciousness of one's own cultural tradition and cultural heritage has contributed towards re-discovery and reflections upon his cultural identity. Local traditions no longer play a minor role in architectural design.

- Nonetheless, advancement of technology and communication has accelerated the process of cultural assimilation; The crisis of cultural identity is generally felt.

- There is no need to go into vernacular eccentricity. Instead we must go deeper for the cultural essence.

IV. A Theory on Science and Technology

- We are faced with technical possibilities as well as economic feasibility. One can only strike the balance according to social and economic well-being of the people.

- There is no justification to be against technology. For countries like China there ought to be a great advancement in science and technology. The question is, there is need for a multi-layered structure ranging from high technology to ap-

propriate technology, and to traditional craftsmanship, whose continuation is under great threat.

— Also, there must be a balance between technologicalism and ecologicalism.

— In all, science and technology have to be viewed comprehensively, in terms of human welfare, society, economics and ecology. They are to be adopted in building according to local conditions.

V. A Theory on Policy and Legislation

— Policies must result from systematic and scientific research rather than anything else.

— Legislations are crystallisation of such research and practical policy-making.

— In China there is a great need for far more rational and comprehensive legislative control in planning and management.

Establishment of policy and legislation should be regarded as major components of reform.

— To achieve good results there must be an integration of top-down management and bottom-up growth. In a vast country such as China it is particularly meaningful to encourage technical research and policy formulation focusing on the specific social, cultural and economic conditions of the local regions. More room should be left for the regional and local community in working out their own solutions to improve the built environment, and promotion of regional and local research centres would help to construct systematic policies and

legislation. In so doing local education and local professional practice may also find their chance of full development.

VI. A Theory on the Profession

— The role of the architect has been always changing in history. There is a process of evolution.

— In the contemporary world, the transition, contradiction and crisis of the profession are far more prominent. There are more restraints over the realm of practice; There are a relative over-supply of architects in the developed countries and under-supply in developing countries; There are changes in the organization of practices and in the relationship to the client. These are some of the many existing and potential challenges.

— In ancient China an architect was in charge of overall planning and design. However, the majority were treated simply as craftsmen and the discipline of architecture had little theoretical development. Today, much still remain to be done to advance the profession.

— The profession has much to do in research and consequent policymaking. In public participation it acts as a co-ordinator amongst policy-makers, technical specialists and the local community.

— In all, architects and physical planners have the capability of integrating human and technical sciences as well as of integrating image and logical thinking, so much so they are to play the major role in settlement planning and design and to

see the schemes through final completion.

VII. A Theory on Education

— The Modern Movement had great impact upon modern architectural education. The difference amongst the old and the new schools also brought about confusion and contradiction in teaching. So is the case for Post-modernism. It is not easy to speculate on the influence of various schools but it must be said that in most of the schools theory is often detached from practice.

— One significant development is the emergence of urban design, which in fact must not be left alone for any student of architecture.

— Environmentalism and environmental design also broadened the scope of architectural education.

— In China there were only master-disciple crafts-telling before modern education was imported from the West. The scale and scope have been much increased since, but many problems still remain. However, there has been one unique contribution in China that students are always encouraged to take up real projects in their graduation design.

— One important aspect of architectural education, which is often forgotten by many, is to popularise the culture of architecture. No doubt there are gaps between high designs and folk craftsmanship and through education more may be achieved for mutual understanding. This may also help to strengthen the democratisation process of public participa-

tion.

— In the future a much wider range of training has to be offered so that those wish to take up architecture are able to find their way through; The quality and quantity of training need to be raised; Most importantly, a high professional standard and morale must be established.

VIII. A Theory on Art

— First of all, the settlements themselves must be looked at as the most magnificent works of art. Their nature of art are expressed in terms of integrity, dynamics, identity and efficacy.

— The question of art vs. science, i.e., freedom of creation vs. rational thinking and necessity can only be resolved dialectically based on architect's imagination and creative mind.

— The art of architecture has to be constructed on concepts of urban design. Issues in urban design, such as new concepts in conservation areas, traditional context in new areas, cultural identity and character etc., would inspire new solutions in design.

— In all, the pursuit of form of art is there throughout the whole process of planning and design. In order to achieve satisfactory form of built environment, efforts must start from the very beginning of master planning. During the whole course of master planning, detailed planning, urban design and building design, artistic attention has to be paid to different aspects

of form, each of which, on the other hand, is closely linked in the process. It must be emphasised that urban design is the natural field of architects, and it should be treated as such, i.e., it is to include urban design as part of the process of architectural design.

IX. A Theory on Methodology

— There has been a tradition for architects to have systematic and holistic thinking. In the West this could be traced back to Vitruvius.

— In modern times systematic and holistic thinking presuppose cross-disciplinary, inter-disciplinary and trans-disciplinary research.

— The preferred methodology is to be constructed on the understanding of the trans-disciplinary nature of architecture. Our aim is towards a trans-disciplinary approach in the realm of human settlements.

— The basis of the framework is set up on such a methodology which makes use of modern scientific discoveries, methods and instruments, which could cope with the interlocking relationships in the complex systems, and which could lead to effective resolution of the parts as well as the whole. The methodology could be applied to various problems at hand, such as project programming, comprehensive design and policy-making. It also provides a framework for project research and management. On the other hand, it would help to review the structure of architectural education, and the systems

in planning and building management.

X. The General Framework

— The general framework tries to re-establish architecture in a comprehensive context, i.e., the context of inhabitation and society.

— It first of all tries to broaden the traditional domain of architecture so as to explain the buildings in full in the context of the settlement, i.e., the whole series from room to house, neighbourhood, towns and cities, and to the region. It may be said to be a humanistic view of space-time.

— Secondly, it points out that architecture is architecture of the region. The two can never be detached. This is a geographical view of space-time.

— Thirdly, it encourages cultural self-respect and the efforts to re-discover local cultural essence. This is the cultural view of space-time.

— It by no means underestimates the roles of science and technology. On the contrary, it suggests putting science and technology in the right places in society so that they may be best exploited. To do this, there has to be a full range of well-founded policies and legislations, and a healthy and well organized profession, which is supported by a good system of education. The goal of above is to achieve a higher level of production, and it may be called the economic view of space-time.

— The framework emphasises the significance of art in

architecture, and regards it as the ultimate goal of building. However, the art is to be understood firstly in terms of the creation of a livable inhabitation, i.e., a kind of general amenity rather than individual built form. This is my artistic view of space-time in architecture.

— Finally, it proposes a trans-disciplinary approach for the development of the discipline. The author's experience has shown that if used properly this approach would be a significant help in theoretical as well as practical work.

— To be an architect, not only must he grasp philosophy, science and art, but also must he have ideals and high morality. The framework also helps to deal with the relationship between ideals and reality. An architect must have his ideals and beliefs, as well he has to tackle the many practical problems in the real world. The gap between the two often brings about conflicts and contradictions in theory and practice, and there is no generalised answer to the question. However, a general framework of architecture may help one establish ideals in dealing with everyday problems, and on the other hand remind him of the reality when he is deep into his ideal world. It would assist one to keep the balance between what can be achieved and what is hoped for. The general framework asks an architect to have the dual quality of an idealist and a realist.



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目 录

前言	(1)
----------	-----

I. 聚居论

一、聚居	(7)
二、聚居—城市—城市化	(14)
(一) 城市化的世界发展	(14)
(二) 城市化与国家发展	(16)
(三) 中国城市的发展	(17)
三、居住与环境建设	(19)

II. 地区论

建筑 一、 <u>建筑与地区</u>	(26)
(一) 建筑与 <u>自然环境</u>	(26)
(二) 建筑创作思想的 <u>地区主义</u>	(30)
城市 二、 <u>城市与地区</u>	(32)
创作 三、 <u>建筑、城镇与地区资源</u>	(34)
(一) 关于地区的城镇、建筑发展与 <u>土地资源</u>	(35)
(二) 关于地区的城镇、建筑发展与 <u>生态环境</u>	(38)
(三) 保护地区的风景名胜资源	(41)

III. 文化论

一、世界文化源远流长	(50)
(一) 非“欧洲中心论”	(50)

	(二) 文化多元、天外有天·····	(51)
	二、当代建筑文化的横断观·····	(53)
	(一) 全方位的探索, 互相渗透·····	(53)
	(二) 众星灿烂——东方群星徐徐升起·····	(56)
	✓ 三、文化趋同与特色增辉·····	(62)
	(一) 文化趋同现象·····	(62)
	(二) 民族、地区特色的发挥·····	(63)
	(三) 从比较文化中发扬中国建筑文化特色·····	(64)

城市化
可持续性
中国

IV. 科技论

	✓ 一、技术的可能性与经济发展的现实性·····	(72)
	二、对中国城市建设技术科学水平的分析·····	(75)
	✓ 三、发展技术政策问题·····	(76)
	✓ 四、技术主义与生态主义·····	(82)

经济
水平
政策
研究

V. 政法论

	✓ 一、技术政策要有科学的基础·····	(90)
	二、法律与条例是科学研究的结晶·····	(91)
	✓ 三、规划设计、管理工作的法规问题·····	(92)
	(一) 城市的建设管理需要更为具体的法治·····	(92)
	(二) 科学的管理、建设、经营、维护·····	(98)
	四、政策、法治工作是改革的重要组成部分·····	(99)
	五、建筑管理的“自上而下”与建筑事业发展的 “自下而上”的结合·····	(100)

政法论
研究
中国

中国

VI. 业务论

	一、建筑师业务的发展·····	(107)
	(一) 建筑师职业的历史发展·····	(107)