

走向未来建筑

TOWARDS FUTURE ARCHITECTURE

郭小平 编著

GUO XIAOPING



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序言

本书共16章，分别从不同方面讲述未来建筑创作，提出了值得建筑师们思考的课题。

作者依据进化的基本原理和生态学的理论，分析了人、建筑与自然生态之间的关系，并从能源和人类资源的角度论述了建筑的本质及现代科技在建筑中的应用的重要性，从而提醒建筑师在建筑创作中承担起保护自然与生态的责任。

在建筑的创作应重视光和空气的要素，并采用科技手法有效利用。建筑产业化和现代建筑的外围护墙的新技术的应用大大提高了建筑品质，是解决社会日益关注的能源节约和能源开发问题的有效途径，并使社会得以持续发展。

交流所涉及的公共空间和私有空间为和谐社会提供了必要条件，美和个性使建筑充满生机，使人们得到极大的精神享受。

作者在每章提供了相应的案例，这些案例主要来源于德国著名建筑师事务所克里斯多夫·英恩霍文（Ingenhoven and Partner）的实践作品，这些建筑充分反映了作者书中提出的创作理念。由于作者在英恩霍文建筑师事务所从事建筑创作共8年，并参与了多个项目的创作实践，因此，他对项目案例的创作理念及解析更具说服力。

这是一本值得建筑师阅读的书。

李欢张
2009.5.20.

Preface

This book has 16 chapters, with content showing the impact on the future of architectural design from different aspects, proposing subjects well worth to consider for those who are engaged in this creative work.

From the basic principles of evolution and ecology theory, the author analyzed the relationship between people, building and the natural ecosystems. In view of energy and human resources, the author discussed the nature of the building and the importance of the application of modern science and technology in the construction, thus reminding architects to assume the responsibility for the protection of the nature and the ecosystems in their architectural creation.

The elements of light and air are being emphasized, and the effective use of modern technology is taken in today's architectural design. The industrialization of construction and the application of new technologies in modern architecture greatly improved the quality of building, seeking

the solution of energy conservation and energy development which got increasingly widespread concern, thus promoting the sustainable social development.

The communication involved in both public and private spaces provided the necessary condition for a harmonious society; beauty and personality build full of vigor, so that people get a great spiritual enjoyment.

In each chapter, the author provided appropriate cases, mainly from the practical works by the famous German architect firm Christopher Ingenhoven (Ingenhoven & Partner). These buildings fully reflect the author's design philosophy. As the author had been engaged with architectural design at Ingenhoven Architects for eight years and participated in multiple projects, his creative concepts and resolutions are more convincingly depicted in this book.

This is a book worth reading for any architect.

Guanzhang Wu
2009. 05.20

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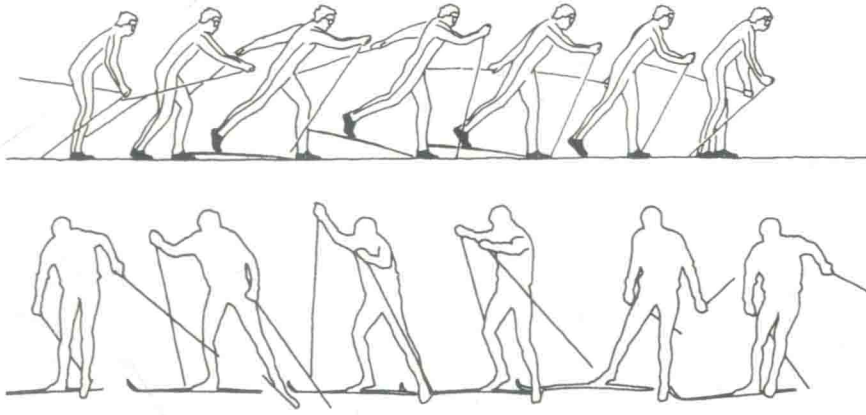
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1 进化

EVOLUTION

生物和植物的进化过程可以成为新一代建筑师的指导，它的演变历程可以启迪建筑师进行创作。如果我们想做出成绩，就必须长期学习匹配、兼容、发展的进化系统。

THE NEW GENERATION OF ARCHITECTS MAY TAKE
ENDLESS INSPIRATIONS FROM THE EVOLUTION
OF LIFE, STRIVING FOR ADAPTATION, MATCHING,
COMPATIBILITY, OPTIMIZATION AND PROGRESSION
INDEFINITELY.



2

张、复杂的，甚至不可预见。现代人的生活和工作常常处于紧张、苦恼、无助的状态，物质需求往往超越了心理需求，它们之间需要协调以使人放松。

建筑可以减少压力，平衡心理，使我们的生活状态放松，使生活趋于简单和轻松。人们重视建筑的原因在于它是我们生活的基础，它是构成城市最基本的元素，它在一种平衡的状态和环境下不断发展着。

转换

“Entropiee”在希腊语中是“转换重归”的意思。转换在物理学中是一个热动力和不可逆转的量的系统。在一个封闭的系统里，在条件允许的状态下产生转换，周围的每一个事物将发展为平衡的状态，平衡是转换的结果。

极少主义

建筑在非紧急的状态下将外表形象和体量弱化，以达到与周围环境的和谐，称为“极少主义”。这里的极少主义的概念不仅限于形式，而是在能源方面、经济方面也要遵循极少主义原则。



3



4



5

2. 滑雪
3. 香港九龙住宅
4. 西双版纳的傣族民居，这一传统的木结构住宅已有一千多年的历史
5. 蜂巢

2. Skiing
3. Residential area in Kowloon, Hong Kong – 1000 years without architectural planning
4. Xishuangbanna Dai houses, the traditional wood frame house than a thousand years of history
5. Honeycomb

1 进化 EVOLUTION



6. 新北京四合院
7. 根据出土文献绘制的复原图，乌克兰，年代约公元前28000年。场地尺寸：12m × 4m。图片：DETAIL Zeitschrift fuer Architektur Serie 2000, 6
8. 公元前700年的尼尼微石雕
9. 蒙古包是蒙古族的住房，它的图案对称、美观，结构简洁，在游牧时可以随拆随立，适应游牧生活，图片为一家人搭建的蒙古包
10. 奥迪场馆——进化后的结果

6. New Beijing courtyard
7. Reconstruction of tent based on remains found in Ukraine, ca.28,000 BC, plan dimensions:12x4m. From: Andrew Sherratt(eg). Picture: DETAIL Zeitschrift fuer Architektur Serie 2000, 6
8. Tent in Nineveh, ca, 700 BC.
9. Yurt is a Mongolian housing, symmetrical pattern it beautiful, simple structure, with the legislation with the demolition of the nomadic is to adapt to the nomadic life, the picture for a person to build yurts
10. Audi venues - evolutionary results

Evolution, derived from the Latin "evolvere", refers to a process of gradual and progressive change (over millions of years) in the gene pool of a population by environmental alteration, natural selection and genetic drift. All life forms experience evolution.

The process of evolution

In the model of scientific experiments, we simplify the evolutionary process as a continuous chain or a spiraling disk component. Due to outside influence, the evolutionary process starts with the change of the stable status into the unstable, and then triggering a new structural generation, followed by the demise of the old structure and the formation of a new status which becomes stable. This status further develops and blends into the new circulation system. Therefore, it can be inferred that the evolutionary system updates its internal organization while seeking the stability in the controversial status. In principle, a large amount of data indicates the existence of the internal competing yet simultaneously mutual satisfying conditions within the evolutionary status.

Strength

energy, technique, concision and nature, these are the essences skiing embraces. The application of new technologies from various fields has brought revolutionary development to this athletic sport: lighter ski equipment and skiwear improves the balance and speed in jumping and sliding, and enhances the experience of thrill, elegance, freedom and dynamic. Skiing is a manifest of evolution and optimization. The ultimately achieve scientific results.

The vast majority of the past or present buildings are created without the careful planning by architects due to economic, cultural, or historic reasons and folklore customs. As architects, we cannot change the past but the future by adhering to the principles.

Professional responsibilities allow architects to keep their faith. If every architect were able to adhere to the principles, errors could be minimized. We need to accumulate experience and to try to open up the way of the future architecture. Mimicking the evolutionary process, the experience will be streamlined, restructured and improved,