





世界建筑典藏2

WORLD ARCHITECTURE COLLECTION 2

华怡建筑工作室 编译

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本丛书是一套介绍世界建筑精品的图书。其涵盖面极为宽广,收集了近几个世纪以来,在人类历史上非常有影响力的一些精品建筑。每一个建筑作品本身就是一个非常具有说服力的建筑设计的范本,再加上世界级摄影大师对建筑作品的逼真诠释以及建筑评论界专业人的分析,无疑会引领读者进入新的意境,真切感受每一个建筑的魅力。

本书是该套丛书的第2本,包括以下几个建筑:

大分体育场(黑川纪章)

北欧国家大使馆柏林(贝戈+帕奇能)

波茨坦-圣苏奇的夏洛登堡(卡尔·弗雷德里克·辛克尔)

德累斯顿的BGW公司办公楼 (LOG ID事务所)

本书内容丰富、装帧精美,不仅可以为广大建筑设计师提供非常有价值的参考,同时也能够为相关专业院校师生了解世界建筑提供信息来源,当然也能够成为建筑爱好者的珍藏。

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版权登记号:图字: 01-2003-0947

图书在版编目(CIP)数据

世界建筑典藏. 2/华怡建筑工作室编译. - 北京: 机械工业出版社, 2003.9 ISBN 7-111-12899-0

I.世. Ⅱ.华. Ⅲ.建筑设计-作品集-世界 Ⅳ.TU206

中国版本图书馆 CIP 数据核字(2003)第 071140 号

机械工业出版社(北京市百万庄大街 22 号 邮政编码 100037) 责任编辑:彭礼孝 封面设计:张静 北京雅昌彩色印刷有限公司印刷·新华书店北京发行所发行 2003 年 9 月第 1 版·第 1 次印刷 920mm×1240mm 1/12·16 印张·280千字 定价:178.00元

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[编 者 按]

《世界建筑典藏》丛书收集了世界各地极具代表性的建筑,我们策划出版这套丛书,目的就在于开阔国内建筑设计水平提供一定的参考。同时也可以成为相关专业院校师生的辅导资料,对提高建筑的鉴赏水平有很大的帮助。希望我们的工作能够为广大的建筑设计专业人士、学生以及建筑爱好者提供一个认识世界建筑的窗口,也欢迎广大的读者给我们提出宝贵的意见。

参加本书翻译的有:盖旭东、潘峰华、严妍、吴春苑、傅莉、田胜泉、孔德喜、吴伟伟、李旭、刘峰、胡泊、肖振鹏、张超等。

在此特表示鸣谢。



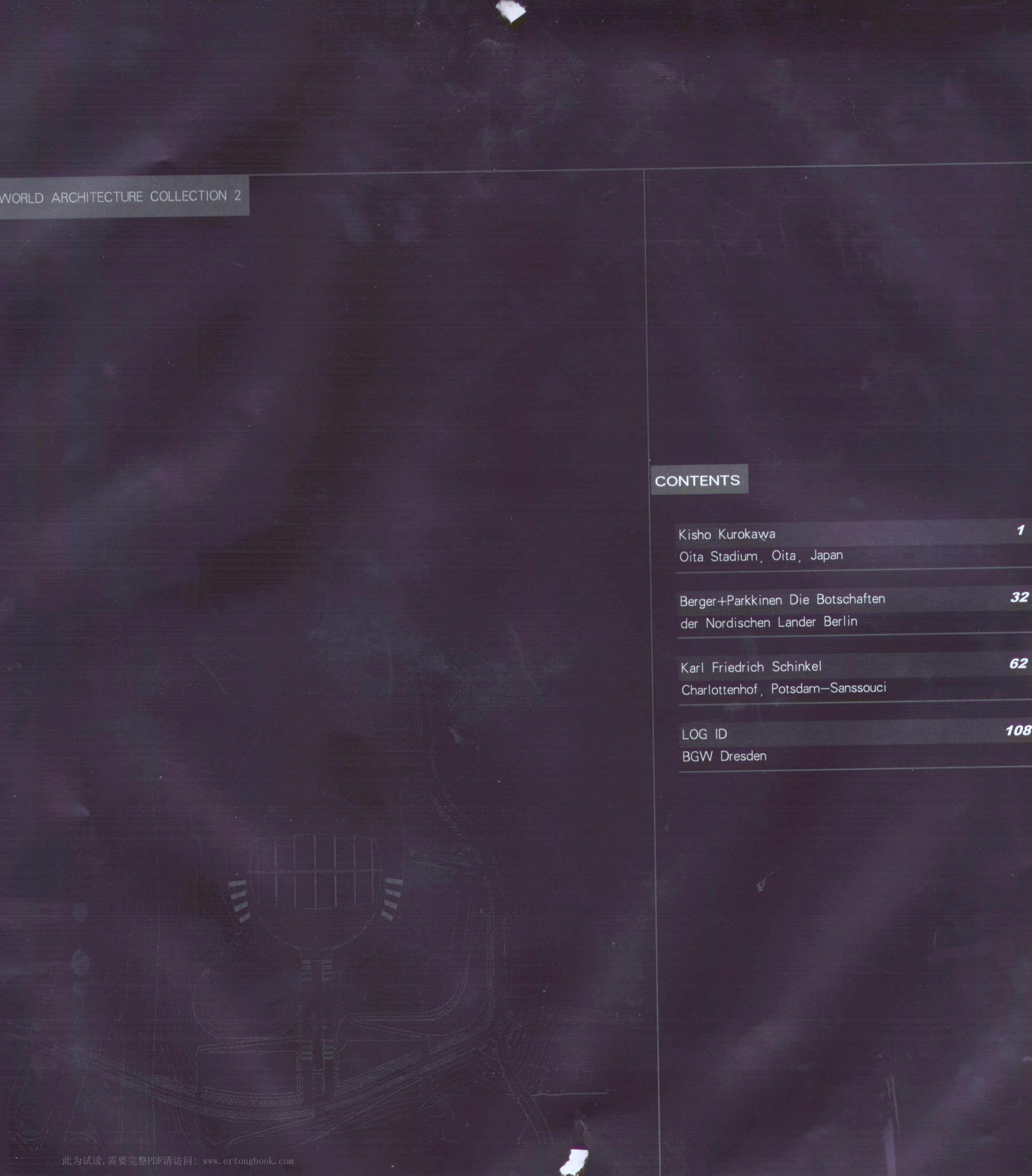






目 录

黑川纪章 大分体育场,大分,日本	1
贝戈+帕奇能 北欧国家大使馆, 柏林	32
卡尔·弗雷德里克·辛克尔 夏洛登堡 波茨坦-圣苏奇	62
LOG ID 德累斯顿的BGW公司办公楼	108





黑川纪章 大分体育场,大分,日本

被称为"大眼睛"的大分体育场是 2002 年世界杯足球赛的比赛场馆之一。在世界杯之后,它还将作为 2008年日本国家运动会的比赛场馆再次使用,在将来它的规模还将继续扩大,成为大分地区的一个大规模的功能齐全的体育公园。

整个项目的面积为225公顷,在主要的足球场之外,还设置有一些其他的设施。其中包括健身、训练和膳宿设施,一个植物池、两个多功能运动场,两个橄榄球和英式足球练习场,一个垒球场,还有网球场和其比赛区。

主体育场内有一个开放的跑道可以用于田径比赛,同时跑道的中间部分可以作为足球场。座椅一直被排列到足球场的边界附近,这使得在有足球比赛的时候,观众可以近距离地观看比赛。当体育馆被用作田径比赛时,跑道就要被使用,因此在这里设置了可收回的座位系统。而且可开启的屋顶意味着这座体育场一年四季都可以被使用。

这座体育场非常优美地坐落在大地上,温和的曲线和球形的设计更增加了它的美感。对于球形的选择,黑

川纪章说,这是"对于抽象符号的表达"。这个球体的形状同样也使得可开启的屋顶可以沿着它的弯曲的表面运动。同时在屋顶上使用了一种透光率为 25 %的聚四氟乙烯膜结构,这就使得体育场在白天的时候不需使用人工光源。为了使足球场能够获得合适的日照方向,椭圆形的屋顶会沿着南北轴的方向开启。在屋顶和下面的观众席之间,设有细长的通风天窗一直到屋顶线以下。这些间隔的狭长切口是被设计来增加体育场内部空间的宽敞感。在最初的设计完成之后,又有一个新想法出现了,在主横梁上设置一个可以移动的摄像机,它可以通过电视向全世界提供一个特殊的动态画面。

丹尼斯·夏普曾在伦敦的建筑联盟学习建筑学,在利物浦大学学习过建筑史,他曾是伦敦皇家建筑师学院的院长,并在1998年设计过有关黑川纪章的展览。小林浩二由于他所拍摄的当代建筑的精美照片而著名,以前他作为摄影师为日本建筑学杂志《新建筑》工作。

Kisho Kurokawa Oita Stadium, Oita, Japan

Known as the >>Big Eye<<, the Oita Stadium is one of the chosen venues for the next World Cup in 2002. It will be reused for the second stage of the Japan Inter—Prefectural Athletic Competition in 2008 after the World Cup, continuing to grow in the future to become a large—scale all—purpose sports park for Oita.

The whole site covers an area of 225 ha and has several facilities outside the main football stadium. These include fitness, training and accommodation facilities, a botanical pool, two multi-purpose athletic fields, two rugby and soccer practice pitches, a softball field, tennis courts and other game areas.

The main stadium features an open track for athletic events as well as the football pitch. Seats are placed right up to the edge of the pitch to bring spectators close to the action at soccer matches. To change over for track events a retractable seating system was developed. The retractable roof means that the stadium can be used all the year round.

The stadium sits elegantly on its site, enhanced by the gentle curves of its spherical design. The choice of the sphere, Kurokawa says, is >>an expression of abstract symbolism<<. This spherical shape also enables the retractable portion to move along its curved surface. The use of Teflon membrane panels with 25 % light permeability obviates the need for artificial lighting during daylight hours. In order for the pitch to get proper exposure to sunlight the elliptical roof opening runs along the north-south axis. A main arch with perpendicular horizontal sub-members follows the elliptical shape of the roof opening. Between the roof and the spectator seating below the surrounding mountains can be seen from a slender ventilation clerestory set just below the roof line. This slit of space is designed to create a feeling of openness inside the stadium. Since the original design, an idea emerged of fitting a moving camera on the main beam to deliver special dynamic images for television audiences around the world.

Dennis Sharp studied architecture at the Architectural Association School of Architecture in London and architectural history at Liverpool University; he was curator and designer of the Kurakawa exhibition by the Royal Institute of British Architects in London in 1998. Koji Kobayashi is famous for his distinguished photographs of contemporary architecture; previously he worked as a photographer for the architectural Japanese magazine Shinkenchi—ku.

丹尼斯·夏普 大分体育场,一个最新的体育场馆设计的先例。

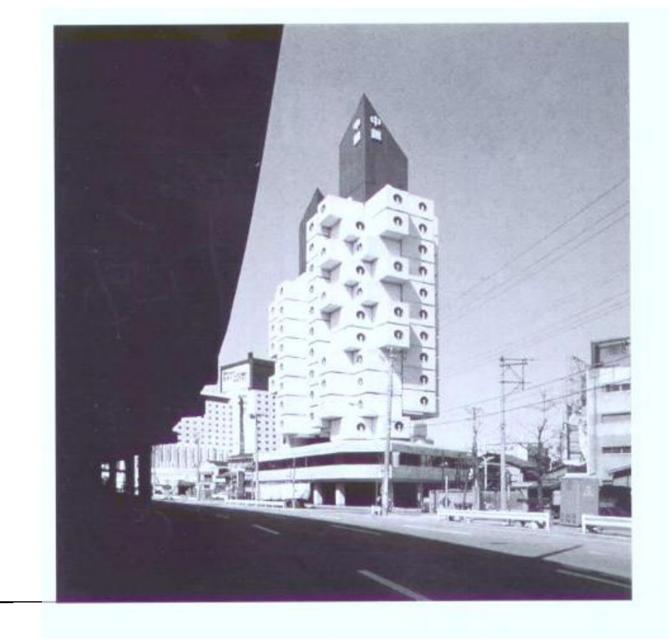
大分体育场创造了一个新的体育场馆设计的先例, 它强调了黑川纪章对于建筑环境和自然的共生现象的持 续研究。体育场坐落在当地的运动公园里,是地区运动 计划中所使用的主要体育场馆。这座体育馆是专门为 2002 年世界杯足球赛和 2008 年第二届国家运动会设计 的。这所精致的体育馆被规划在一片景色很好的地段 内。它给观众提供了一个舒适的、有自然通风的体育场, 并且还有一个可开启的屋顶。在设计过程中涉及到了许 多要考虑的因素, 诸如使屋顶平稳移动所要求达到的标 准,新的体育综合设施和体育场馆的效率,尤其要关注 的是场馆维护,场馆基础设施,电视和新闻传播问题等 等。这种类型的公共建筑以及这些相关问题都会对自然 景观产生影响,并且互相作用产生一种具有当地特征的 影响。在黑川纪章看来,这里存在着非常重大的关系, 他多年来一直对建筑设计和自然的共生现象抱有浓厚的 兴趣。这是一种"共同生存"的状态,就像黑川纪章所 说的, 这是"一种两个或者更多的有机体之间的相互关 系,他们不仅仅是互惠互利,而且是彼此需要"。

黑川纪章和新的"生命原理时代"

黑川纪章相信, 建筑应该反映我们所生活的这个世 界。他指出,我们的世界已经无情的发生了改变,对于 建筑文化来说, 已经从依赖机器的时代跨入了一个新纪 元,他把这个新时代称为"生命原理时代"。

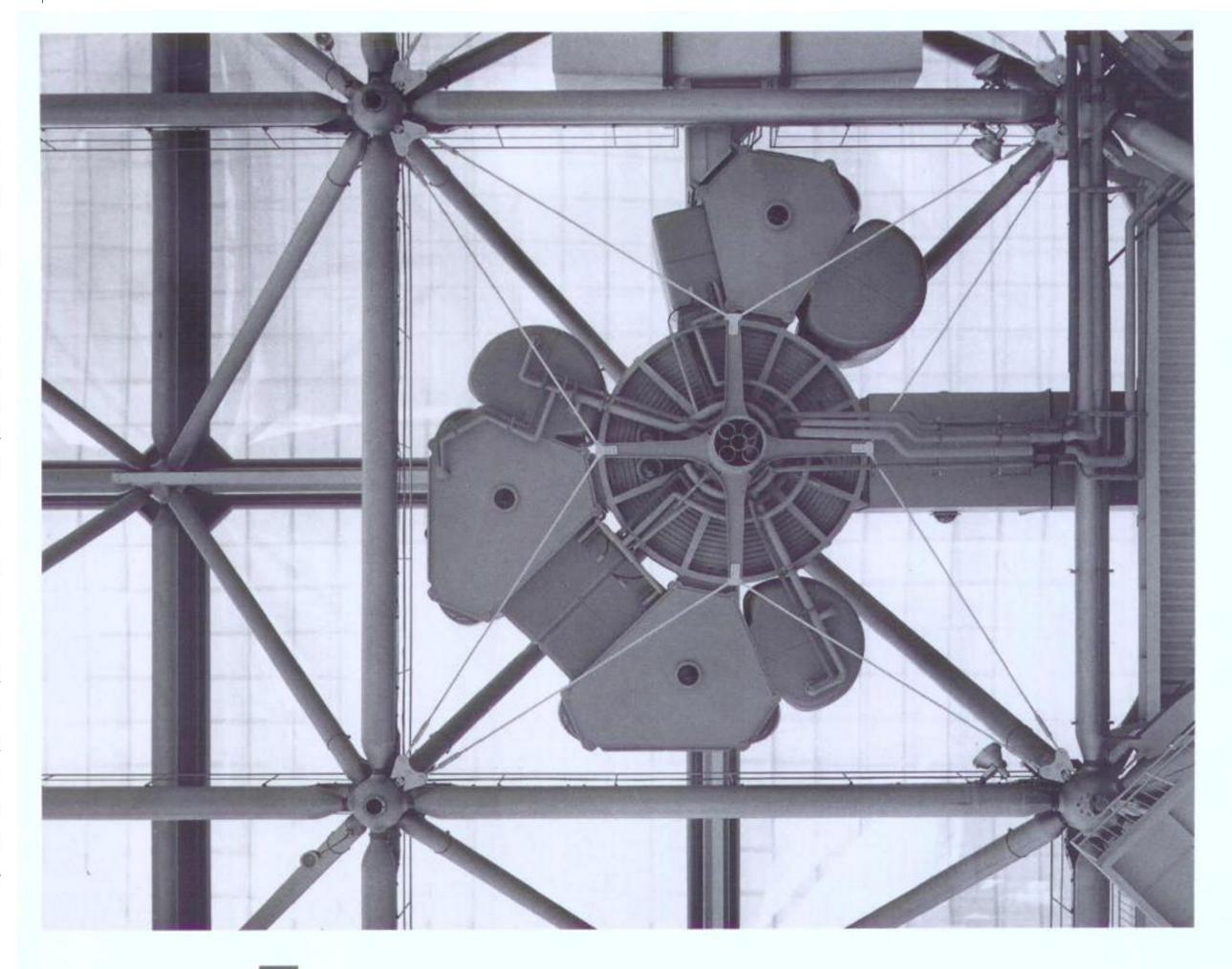
有关这个概念,黑川纪章曾在他以前发表的非常著 名的总结性论文"从机器原理时代到生命原理时代"中 作过非常详细的解释, 这也正好与这次黑川纪章作品的 大型国际回顾展的主题相符合。这次展览涵盖了黑川纪 章40年来作为建筑师、城市规划师和思想家的作品,这 个展览于1998~2000年间在巴黎、伦敦、芝加哥、柏林 和阿姆斯特丹举行。最近,这个展览还将在日本巡回展 出。

黑川纪章的突出的事业生涯首先经过了初始阶段和 战后创新阶段, 当时他是一个非常大胆并且具有创新意 识的建筑师和城市规划师团体——日本新陈代谢派的创 始人之一。这个日本新陈代谢派组织中包括 文彦、大 高正人、菊竹青训和川天登,他们相信,生物学的过程 (原生质) 是与建筑和城市发展密切相关的, 他们将个 体建筑的明显的个性视为一个更为广泛的秩序的一个组 成部分, 比如建筑体系或者快速发展的城市。这意味着 要重视生产和毁坏之间不断循环所带来的环境限制,以 及可以发展变化的动态区域中的万物。因此新陈代谢派 关注可以自我更新的城市,并且在城市中加入新的可行 性元素。

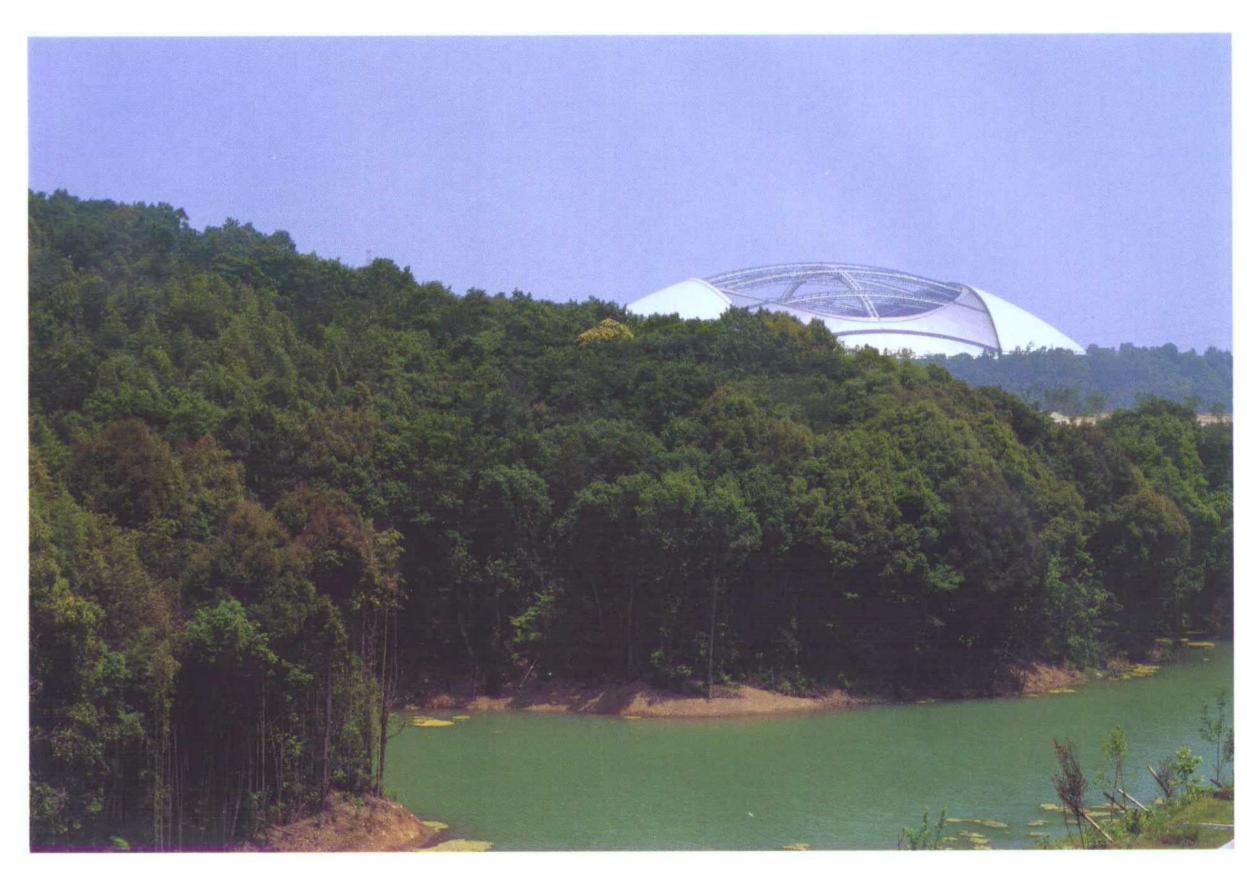


黑川纪章,中银舱体楼,东京, 1972年。(摄影:大桥富夫) Kisho Kurokawa, Nagakin Capsule Tower, Tokyo, 1972. (Photo: Tomio Ohashi)

黑川纪章, 舱体房屋, 主题展览馆, 1970年世界博览会,大阪、1967~ 1970年。(摄影: 大桥富夫) Kisho Kurokawa, Capsule House, Theme Pavilion, Expo' 70, Osaka, 1967-1970. (Photo: Tomio Ohashi)







黑川纪章、螺旋体城市, 1961年。(摄影:大桥富夫。) 从北侧看去的体育场全景。 Kisho Kurokawa, Helix City, 1961. (Photo: Tomio Ohashi.) General view of the stadium from the north.

Dennis Sharp

The Oita Stadium, a new precedent in sports—stadium design

The Oita Stadium creates a new precedent in sportsstadium design and underscores Kurokawa's continuing search for a symbiosis between the built environment and nature. Planned as the main facility for the prefectural sports programmes it is located in the prefectural sports park. The stadium has been specifically designed for the World Cup 2002 and for the Second National Athletic Meet of the Inter-Prefectural Athletic Competition to be held in 2008, The stunning new building is set in a beautifully landscaped site. It offers the spectator a comfortable, naturally ventilated stadium with an adjustable roof and a design that is in line with the standards now required for the smooth running and efficiency of new sporting complexes and stadia particularly with regard to sustainable, infrastructural, televisual and transportation issues. These issues and public-use buildings of this kind make an impact on the natural landscape and exert a local influence. They are of great concern to Kurokawa, who has, over many years fostered an interest in the symbiosis of design and nature. This means a state of >>living together << -as he calls it-in which >>a relationship between one or more organisms is not only advantageous but necessary to both << .

Kurokawa and a new >>Age of Life<<

Architecture, Kisho Kurokawa believes, should reflect the world in which we live. He claims that our world has moved inexorably from an architectural culture based on commitment to the machine into a new epoch which he calls the >>Age of Life<<.

This concept he has explored in great detail in a wellknown summary essay >>From the Age of the Machine to the Age of Life<< published in the book that coincided with the major international retrospective exhibition of his work. It covered some forty years of work as an architect, urban designer and thinker and was shown in Paris, London, Chicago, Berlin, and Amsterdam between 1998 and 2000. It has more recently been on tour in Japan.

Kurokawa's distinguished career began with a pioneering and innovative post—war phase when he was one of the founders of a group of daring and innovative architects and urbanists, the Metabolists. The Japanese Metabolist group which included Fumihiko Maki, Masato Otaka, Kiyonori Kikutaki and Noboru Kawazoe believed that the biological process (protoplasm) could, in relation to architecture and urban growth, refer to the visible individuality of buildings as part of a larger order, e.g. a building system or a rapidly changing city. It meant the recognition in environmental terms of a continuous cycle of production and destruction and the creation of dynamic areas that could grow and change. Metabolism looked at cities that could regenerate themselves and that could have new and viable elements added to them.

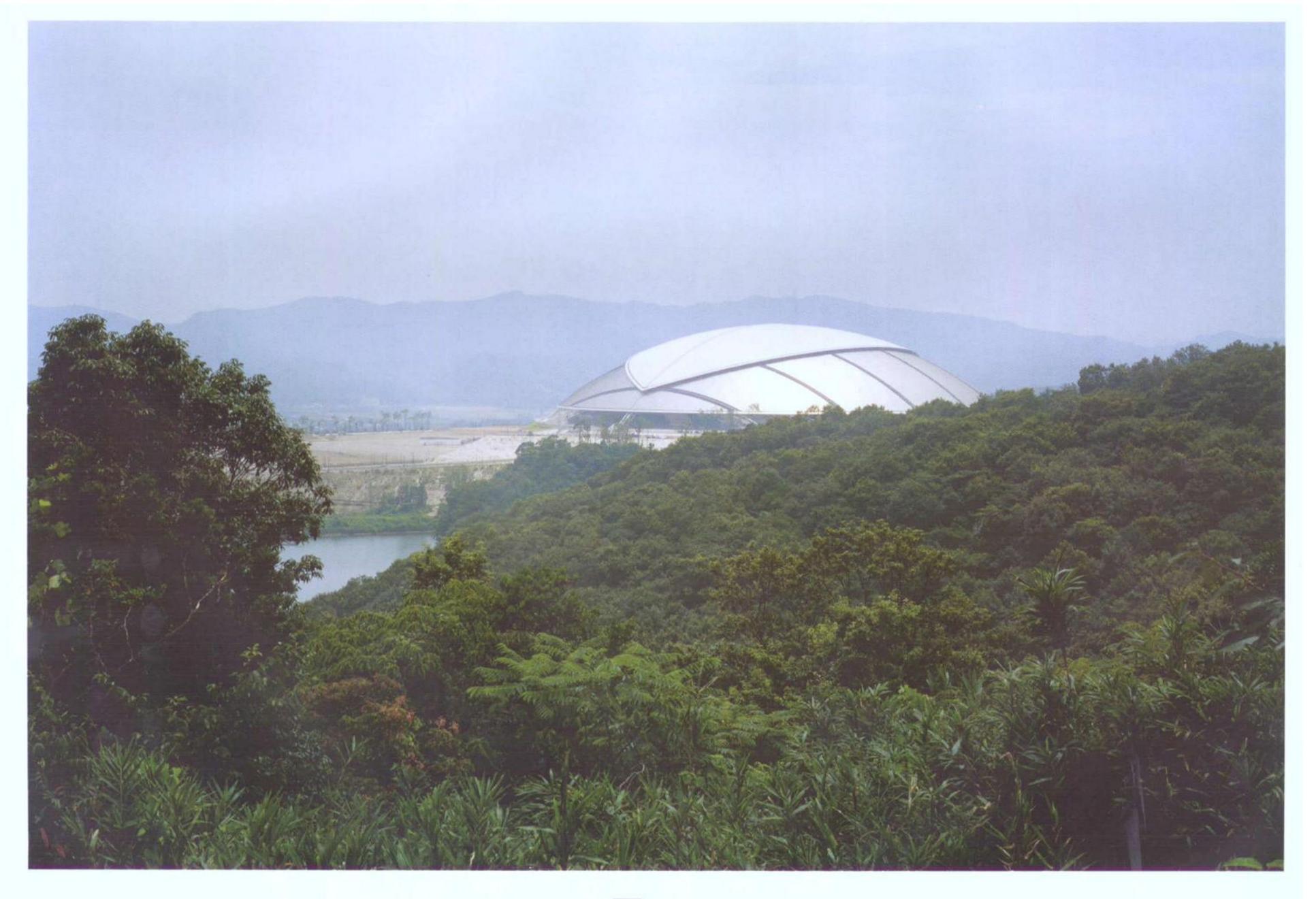
在新陈代谢时期,有过两个被广泛关注的项目方案,它们分别为丹下健三的东京湾计划和黑川纪章的螺旋体城市,螺旋体城市的设计是从汉森和克里克发现的脱氧核糖核酸那 里得到灵感,最终做出了一个螺旋体的模型来表达这一设计。

黑川纪章的螺旋体城市计划是一个巨大的构筑物,在这里,黑川纪章试图找到一个城市街道、建筑和房屋的综合体。这个计划背后的主要动机是为了提供一种实际的方法来解决在现代的城市中存在的问题,这里架设了可以跨越陆地和海洋的桥梁,并且可以根据需要伸出或者缩回。他的这一时期的设计包括了巨大并且复杂的三维螺旋塔盘旋在水面之上,同时在这个塔中也设置了与地面的联系。

螺旋体城市在设计中考虑了在一个国家里缺乏城市生活空间这一问题。可以利用的土地在日本可能是最为宝贵的物品。人口密度是一个现实的问题,它使得居住空间非常的昂贵,并且限制了单独的居住单位的尺度。在这样一个国土面积狭小而又人口众多的国家里,空间就是金钱。在黑川纪章的新陈代谢阶段中,他就面临了这一挑战,并且不久,他就开始对一种灵活的建筑形式感兴趣,即让人进入到可灵活移动的舱体里,进行居住和办公。这些舱体单位为最典型的居住模块,而且这些舱体可以预制,其价格与现有的住宅单位的价格相当。黑川纪章曾与航海集装箱厂商密切合作,以期找到一种装配及运输这些舱体的方法。

1972 年设计的位于东京中心的中银舱体楼,在混凝土井筒内部有一个焊接的钢制框架构筑物。它是作为更为巨大的巨构的一个片断原型而建成的。黑川纪章的高层办公舱体逐渐发展为"信息树", 1976 年建成的大阪索尼中心塔楼就是在这一原则指导下完成的。

从西北方向看去的体育场全景。
General view of the stadium from the north—west







黑川纪章, 索尼中心塔楼, 大阪, 1972~1976年。(摄影: 大桥富夫。)

弗莱尔・奥托和波恩德・弗雷德里希・罗姆博格、温西德尔露天剧场的屋顶、德国、1963~1968年。(摄影: l・L・斯图加特。)

Kisho Kurokawa, Sony Tower, Osaka, 1972-1976, (Photo: Tomio Ohashi.)

Frei Otto with Bernd Friedrich Romberg, roof over the open—air theatre in Wunsiedel, Germany, 1963—1968, (Photo; IL, Stuttgart.)

Two widely published projects from the Metabolist period were Kenzo Tangei's Tokyo Bay scheme and Kurokawa's Helix City which was inspired by Watson and Crick's discovery of DNA and the resulting helical models that depicted it.

Kurokawa's design for a Helix City showed a megastructure in which he sought a synthesis of urban street architecture and individual house design. The main incentive behind the design was to offer practical solutions to modern city problems with structures that could bridge across land and sea, and expand or retract as the need arose. His designs from this period involved massive, three—dimensional towers snaking across water, but also creating a link with the ground.

Helix City took into account the specifics of designing in a country acutely short of urban living space. Usable land is perhaps Japan's most precious commodity. Density is a real issue, making living space expensive and limiting the size of individual accommodation units. Space is money in a small country with a relatively large population. During his Metabolist phase, Kurokawa was challenged by this reality and soon became interested in the idea of packaging spaces for people into flexible >>capsule<< dwellings and offices. These capsule units were prototypical living modules that could be prefabricated at a price comparable to existing housing units. Kurokawa worked closely with shipping—container manufacturers to find a key to assembling and transporting the units themselves.

In 1972 the Nakagin Capsule Building in Tokyo— a welded steel—frame structure inside a concrete jacketwas built as a prototype section of what was conceived as a much larger megastructure. Kurokawa's high—rise office cap—sules were developed as an >>information tree<<. The Sony Tower based on this principle was completed in Osaka in 1976.

所 铁 页



With the growing success of his Tokyo—based practice, Kurokawa soon moved on to designing buildings for cultural and commercial purposes while he was also developing a philosophy of architecture and life based on the notion of growth and change. He derives this notion from a theory of >>symbiosis<< that is widely reflected in other disciplines as well as in architecture. This important contribution to contemporary thinking is a view based on the advocacy of the principles of life I referred to earlier, which are seen by Kurokawa to have overtaken the Modernist ideas of the machine and its aesthetic.

It is a view that is clearly appropriate to the present day as it reflects our information—obsessed, electronic and computerised society. It also advocates non—linear thinking and seeks—Kurokawa insists—to bring together the heteroge—neous elements to be found in traditional cultures, cultures which themselves are continually challenging the dominance of the West and the methodologies of Modernism.

Kurokawa's views have a wide, universal relevance, as his recent books on >>symbiosis<< suggest_particularly Each One a Hero: A Philosophy of Symbiosis (Tokyo 1997). They are focused on change and on specific issues of architecture, construction and social, economic and physical planning. This vital aspect of change is seen as part of the wider Zeitgeist or the changing conception of a period that has moved towards nature and that values life more than machines aiming to enrich human life objectively through the environment, education, culture and experience. Thus the new >>Life Age<< is depicted as a thoughtful, humanitarian period that encompasses and enriches individuals through a striving for their own spiritual awareness and values: >> living<< things, in complete opposition to >>mechanical<< things. Through his writings, Kurokawa explains that his philosophy >>seeks the symbiosis of all the cultures on earth and forces a reconsideration of Eurocentrism and the intellectual models of Western culture <<.

This philosophy of >>symbiosis<< reflects Kurokawa's view that the world is ruled by change. Change, he claims, is something that Western thinking is not very good at, because it tends to rely on old-fashioned scientific judgements. In his view, the world is now a changed place dominated by new >>sciences<<, that are discovering and creating new multi-cultural relationships-symbioses-between people, forms and systems.

Kurokawa's philosophy of >>symbiosis<< was originally developed as a concept directly concerned with architectural and urban planning issues. It is its use of crosscultural connections and relevances that has caused its expansion into a world view.



肯佐尔・坦格和乌尔泰克、弗莱尔・奥托、 科威特运动中心方案、1969年。(摄影: I・L・斯图加特。)

弗莱尔·奥托和埃瓦尔德·布博纳、位于雷根斯堡的全天候游泳馆的屋顶、德国、1970~1972年。(摄影: I·L·斯图加特。) Kenzo Tange & Urtec and Frei Otto, Kuwait 8ports Oentre, 1969, project, (Photo: IL, Stuttgart.)

Frei Otto with Ewald Bubner, roof over an all-weather swimming-pool in Regensburg, Germany, 1970~1972. (Photo: IL, Stuttgart.)









"共生"这个词来于希腊文。它是指两种或者更多的有机生命体之间的关系,他们不仅仅是互惠互利,而且是互相需要,互相依赖。更为确切的说,在这个完整的哲学体系的后面,有一种更为明确的主张,他通过言论、著作和实际建筑作品将其表达出来,对整个日本及东南亚地区有着极其重要的意义。尽管最近那里刚刚经历了严重的经济危机,整个东南亚地区仍旧被视为拥有未来的地方。坐落于此的工程如黑川纪章的生态媒体城市就证明了这一点,毋庸置疑,它们将会在与信息时代的与生命相关的共生过程中拥有一席之地。黑川纪章目前正忙于在日本、中国和哈萨克斯坦进行一系列城市设计工程,他在更大范围内推广了他的理念,尝试将其放在变化更为强烈和迅速的情况下。然而,每个大工程都被新陈代谢的分解为更小的单位。这些单体的建筑仍然具有其重要性。因此我们也就可以理解,每一个新建筑工程都可以被视为一个原型,一个更大的议题的片断或者一个更为巨大的整体的缩微模型。

他新近设计的两座大型的足球场,分别位于丰田和大分,都属于这个范畴。这两个球场都是一个更大的综合体中的一部分,并且都与自然和它们的所在地段的复杂性有密切关系。在这二者之中,大分体育场作为 2002 年世界杯足球赛的比赛场馆而吸引了全世界的瞩目。2002 年的世界杯足球赛使得日本和韩国建设了大量的体育场馆,这些体育场大多采用了全新的结构。这不同于以往的在欧洲和美国的世界杯比赛场馆,这里有一种革新,它使得现有的设施发生了扩充和改变,由原来的实体结构转向纤细的杆件结构。

The term >>symbiosis<< comes from the Greek. It aims for a connection between >>two or more organisms<< that is advantageous, but also necessary. More subtly, behind this whole philosophy there is the confident assertion—expressed in words and through projects—of the growing significance to the world of Japan and Southeast Asia. Although marred somewhat by recent economic crises, the region as a whole is still thought of as the place of the future. Projects such as his Eco—Media Cities testify to that, and they will undoubtedly find a place in the symbiotic processes associated with life in the information age. Now engaged on a series of urban—design projects for Japan, China and Kazakhstan, Kurokawa is putting forward his ideas on a big scale, testing them in situations of great and rapid change. However, each of the large projects breaks down metabolically into smaller units. The individual building still matters. It is therefore understandable that each new building project is treated as a prototype, as a fragment of a bigger issue or a miniature model of the wider whole.

The two major football stadia he has designed recently in Toyota and in Oita clearly fall into this category. Both are part of larger complexes. Both are closely related to nature and to the complexities of their sites. Of the two the Oita Stadium is attracting worldwide attention as a World Cup venue. The international football competition in 2002 has produced a number of new stadia in Japan and .Korea, most of which are new structures. This is quite unlike previous World Cup series in Europe and the United States that saw the renovation, expansion and transformation of existing facilities from solid to filigree design.

亚瑟·考尔姆比、温布利体育场的单层膜结构屋顶方案、伦敦、1967年。(来源: 托马斯·赫尔佐格, 充气结构、纽约、1976年。)

罗布体育建筑公司,千禧年运动场,加的夫,英格兰,1996~1999年。(摄影:罗布体育建筑公司。)

日本日建设计株式会社和塔齐纳卡公司,东京巨蛋,东京,1988年。(摄影:渡边一藤弘。)

罗布体育建筑公司、澳大利亚体育馆、悉尼、1999年。(摄影: 埃里克·西林斯。)

飞利浦·考克斯、理查德森和泰勒、悉尼足球馆、悉尼、1988年。(摄影: 里克·西林斯。)

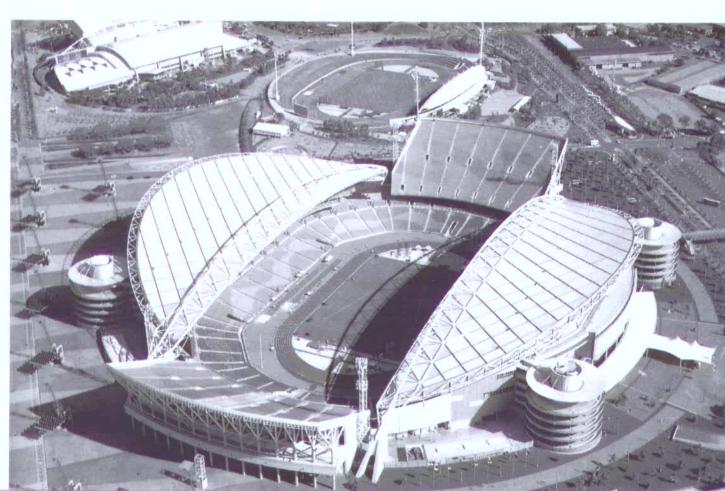
Arthur Quarmby, single—membrane roof over the Wembley Stadium, London, 1967, project. (From: Thomas Herzog, Pneumatic Structures, New York, 1976.)
Lobb Sport, Millennium Stadium, Cardiff, England, 1996~1999. (Photo: Lobb Sport.)

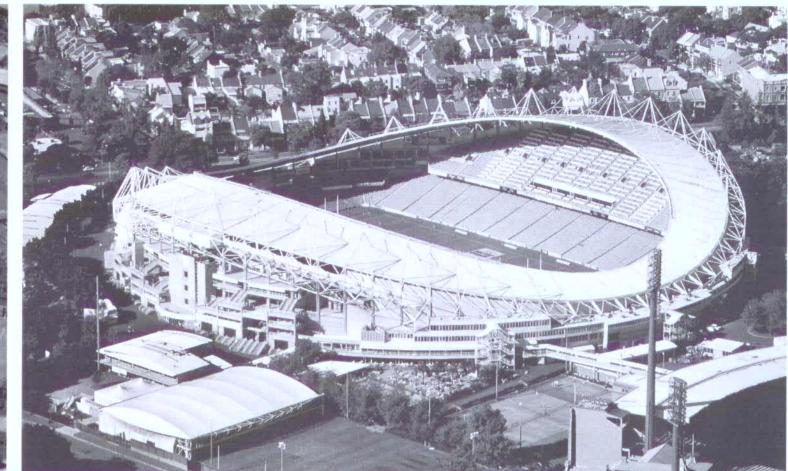
Nikken Sekkei and Takenaka Corporation, Tokyo Dome, Tokyo, 1988, (Photo, Hiroshi Watanabe,)

Lobb Sport, Stadium Australia, Sydney, 1999. (Photo: Eric Sierins.)

Philip Cox, Richardson and Taylor, Sydney Football Stadium, Sydney, 1988. (Photo: Eric Sierins.)







从西南方向看去的体育场全景。 General views of the stadium from the south-west.



从西北方向看去的体育场全景。

General views of the stadium from the north-west.

