

世界建筑大师优秀作品集锦

THE MASTER ARCHITECT SERIES

KISHO KUROKAWA

黑川纪章



中国建筑工业出版社

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Selected and Current Works



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景 泉 门晓莹 译
楚先锋 校



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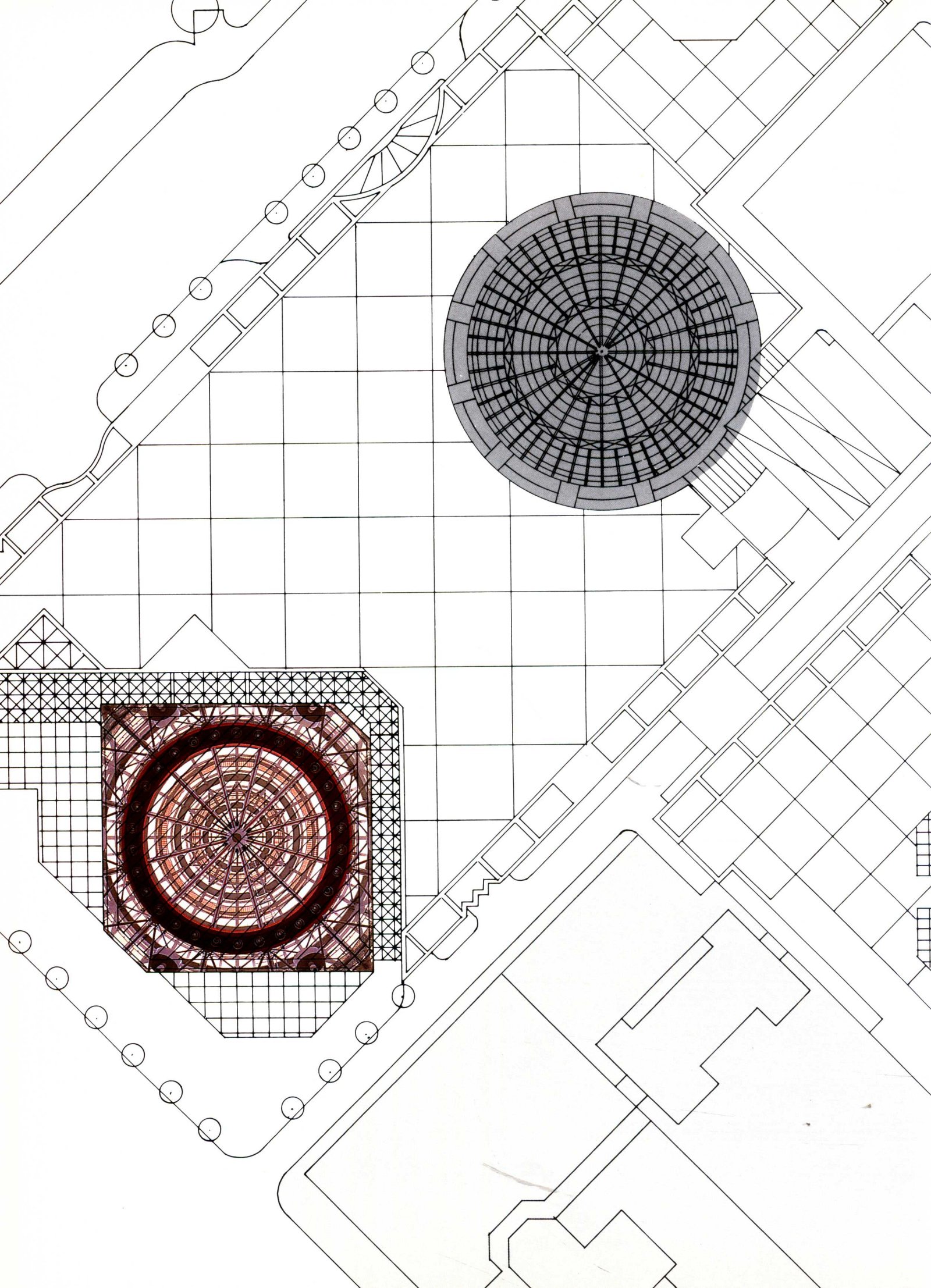
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Introduction

Introduction

导 言

从机器原理时代到生命原理时代
黑川纪章

From the Age of the Machine Principle to the Age of Life Principle

By Kisho Kurokawa

伴随着 20 世纪全球发生的巨大变革，建筑师的职责也发生了重要的变化。由于建设规模的不断扩大，建筑师们开始接触一些如摩天大楼、大规模城市更新等方面的项目，设计组需要来自各个领域的专家的配合，包括土木工程、土壤工程、结构工程、交通规划、城市规划、商业、经济、景观美化、风力工程、通信、经济技术、灾难防范、逃生工程、安全设计、室内设计、灯光和艺术等。在海外工作时，当地专家提供的有关本土的文化、传统、宗教和法律的知识是十分必要的，一个建筑师必须具备与这些专家良好沟通和配合的能力。

以我个人为例，除以建筑设计事务所作为我活动的主要基地外，我还代理很多其他实体。如“社会工程学院”是一个“思想容器”，涉及广泛的研究领域，包括政府政策研究、对私人公司的商业援助、刺激当地经济的方法、项目选址评估和观点调查。“城市设计咨询有限公司”则从事社区规划、城市规划、城市重建、公园设计、景观、经济技术等领域的工作。自 1979 年以来，我还担任了“日本文化与设计理事会”会长之职，它是一个由日本的一些顶尖的学者、作家、音乐家、设计师和艺术家组成的组织。同时，我已经作为日本首相府的政策制定研究委员会顾问达 24 年。我的经验从家具设计领域到城市规划领域被广泛地应用，不论是在日本还是在海外，我经常在大型项目中担任协调的角色。

现在建筑师的职能已扩展至需要协调一个复杂的、具有广泛领域的专家组，建筑师的构思能力和领导才能变得愈发重要了。我尽最大努力以确保每个工程都具有最好的质量，使之不愧于其在历史中的位置，而不追求完成大量的工程。用历史的眼光来看，每一座建筑，今天看来都是文化珍宝，不论它是公众的，还是私人的，都代表了它们那个时代的精神。建筑师如果不能了解当代的精神和需要，不能预测未来，他们就不能满足委托人的需求，他们的工程也不会被后代所铭记。

因此，在建筑设计中我强调哲学、“解读”当前社会、预测未来，同时关注各种建造工艺的最高水平，包括室内设计和家具设计。

恰好在编辑我的作品集之际，我们来讨论一下关于“共生哲学”，或者说在生命原理时代的创作这个话题——在过去的 35 年里，它一直指导着我创作的作品。

The huge social changes that have occurred around the world during this century have been accompanied by major changes in the role of the architect. As the scale of construction increases, and architects become involved in projects such as skyscrapers and large-scale urban redevelopments, the design team needs the cooperation of specialists from all fields, including civil engineering, soil engineering, structural engineering, transportation planning, business, urban planning, economics, landscaping, wind engineering, communications, eco-technology, disaster prevention, evacuation engineering, security, office layout, interior design, lighting, and art. When working overseas, the cooperation of specialists in the host country is necessary to provide input concerning that country's culture, traditions, religions, and laws. The architect must have the capability to coordinate these specialists.

In my case, in addition to the architectural design office which is the primary base for my activities, I also represent a number of other bodies. The Institute for Social Engineering is a “think tank” involved in a wide range of research, including government policy research, business assistance for private companies, measures to stimulate local economies, assessments of project sites, and opinion surveys. Urban Design Consultant Inc. is involved in such areas as community planning, urban planning, urban redevelopment, park design, landscaping, civil engineering, and eco-technology. Since 1979 I have also represented the Japan Culture and Design Council, a group of Japan's leading scholars, musicians, designers, writers, and artists, and I have served as an adviser to the Policy-making Study Committee of the Prime Minister's Office for 24 years. Utilizing my experience in fields ranging from furniture design to city planning, I often play the role of coordinator for large-scale projects, both within Japan and abroad.

Now that the role of the architect has expanded to include the coordination of a complex, wide-ranging team of specialists, the architect's conceptual ability and leadership qualities have become even more important. Rather than complete a greater number of works, I try to make sure that each work is of the highest quality, deserving its place in history. Seen historically, all the buildings which are today seen as cultural treasures, whether they are public or private, express the spirit of their own times. Unless architects are able to discern the spirit and needs of the modern age and also predict the future, they cannot respond to the demands of their clients and their work will not be remembered by future generations.

Therefore, in the design of a building I emphasize philosophy, “read” the present society, and predict the future, while taking care that the highest standards of craftsmanship are applied to every aspect of the building, including interior design and furnishings.

On the occasion of the compilation of this collection of my works, it is appropriate that I discuss the philosophy of symbiosis—or creation in the age of life principle—which has consistently guided the works I have created over the last 35 years.

如果用一个词来描述 20 世纪，我们可以称之为“机器原理时代”。机器的每一个部件都有十分明确的功能。通过重复生产这些部件并且进行精密的组装，一个相同类型的机器可以被再生产，以至可以批量生产。在 20 世纪，以功能性与合理性为目标的现代社会观念，恰巧遵循了机器的概念。

机器时代发展于工业社会，机器是欧洲中心主义的象征。在最初发明了蒸汽机之后，随之而来的是汽车和飞机的出现，机器已经成为西方社会现代化的象征。它已经成为西方社会荣耀的源泉，也成为全世界人民的梦想。现代化已经意味着西方化与机械化。人们相信，这种强行进入的西方社会的价值观系统和文化会把幸福带给全人类。机器成为科技和经济的象征，同时也成为普遍主义和政治霸权的象征。在机器时代，经济和科技的功能得以增强，用以建立经济和军事强大的国家。从这个意义上讲，20 世纪在各个方面已经成为机器时代。

新陈代谢运动，作为我的建筑思想的最初来源，也开始成为对这个机器时代的挑战。“这个时代已经从机器原理时代转向生命原理时代”，这是我在 1959 年的预言，在 20 世纪的最后几年，这个预言已经渐渐成为事实。

“生命”和“机器”最基本的区别在于机器排除所有无用的和含糊的事物，它完全建立于物理连接、功能、理性的原理和效率的基础之上。相反，“生命”则包含一些元素，如无用的、暧昧的、不可知的和闲散的事物。它是一种互动的、不断建立的动态平衡。如果“机器”代表着均质化时代，“生命”则代表着多元化时代。

生命原理时代的建筑将在“信息社会”中发展。从机器原理时代向生命原理时代的转变，同时也是从科学、技术、经济和军事的统治向信息、创造、艺术和文化时代的转变。

也许我们可以称之为权力时代向权威时代的转变。权力是通过经济或军事的手段获取的，但是真正的权威则只能通过传统和艺术、文化的创作获得。

生命的现象是一种动态平稳，可以看作运动和变化的内部关系。我们也可以说创造力的存在才产生意义。生命的、动态的和新陈代谢的过程总是把外部元素与内部情况结合起来，并不断调整它们来适应周围环境，21 世纪的城市和建筑应具备这样的特征。

If we were to describe the 20th century in a phrase, we could call it “the age of the machine principle.” Each part of a machine has a clear function. By reproducing those parts and assembling them with precision, a machine of the same type can be replicated, and mass production is possible. The idea of modern society in the 20th century, with its aims of function and rationality, conforms perfectly with this concept of the machine.

The age of the machine evolved within industrial society. The machine also became a symbol of Eurocentrism. Beginning with the invention of the steam engine, and followed by the appearance of automobiles and aeroplanes, the machine has been the symbol of modernization in Western society. It has been a major source of pride in Western society and has become the dream of people around the world. Modernization has come to mean Westernization and mechanization. The imposition of Western value systems and cultures was believed to bring happiness to all humanity. The machine was a technological and economic symbol, as well as a symbol of universalism and political hegemony. The age of the machine increased the role of the economy and technology, creating nations that were economic and military giants. In this sense, the 20th century has been the age of the machine in all respects.

The first source of my own architecture, the Metabolism movement, began as a challenge to this age of the machine. “The age is shifting from an age of the machine principle to an age of life principle.” This is a prediction that I made in 1959. Today, in the last few years of the 20th century, the prediction that we would move from an age of the machine principle to an age of life principle is gradually coming true.

The essential difference between life and a machine is that a machine eliminates all idleness and ambiguity. It is constructed entirely on the basis of physical connection, functional, rational principles, and efficiency. In contrast, life includes such elements as uselessness, ambiguity, the unknown, and idleness. It is a flowing interrelation continuously creating a dynamic balance. If the machine represents an age of homogenization, life represents an age of pluralism.

The architecture of the age of life principle will develop within an “information society.” The shift from the age of the machine principle to the age of life principle is also a shift from science and technology, and the dominance of the economy and the military, to an age of information, creativity, art, and culture.

Perhaps we could also call it a shift from an age of power to an age of authority. Power is gained through economic or military means, but true authority can only be attained through tradition and through artistic and cultural creativity.

The phenomenon of life is a dynamic balance, which could be called a moving and changing interrelation. We could also call it the existence of a creativity that produces meaning. The dynamic and metabolic process of life, which is always incorporating foreign elements and external conditions into itself and adapting them to suit its environment, suggests the way for the architecture and the cities of the 21st century to follow.

如果生命原理时代存在美好的秩序，那将是通过一种动态平稳来维持的秩序。它将会不断运动、徘徊和变化，但不是混乱：它是新秩序的先驱。

自1959年开始的30年间，我一直不停地致力于追求生命原理时代的建筑。从1960年新陈代谢运动开始，我在追逐中间区域、模糊、质变等观点的过程中，一直引用了生命系统、生物学、生态学中的概念和词汇。我是有意识这样选择的，因为我致力于机器原理时代向生命原理时代的转变。

20世纪的物理学相信，组成世界万物的元素，都是遵循各种秩序的，古典的牛顿力学支持了现代哲学、现代艺术和现代建筑。

这种对世界的见解、这种客观的唯理性和现代理性主义，是被伽利略和他的理论、牛顿和他的物理学、欧几里得和他的几何学、拉瓦锡和他的化学、达尔文和他的生物学所创立并长久维持下来的。所有这些理性的科学可以被统称为“布尔巴基体系”或是公理化的方法，它是建立在存在着一种基本存在和客观测量手段的假设基础之上的。

这种客观的理性主义代表了欧洲思想的保守趋势。这种趋势已成为主流，在这其中我们可以发现柏拉图、亚里士多德、笛卡尔、笛卡尔主义语言学家乔姆斯基和哈贝马斯。

然而，在这种主流之外尚有其他见解。梅罗-庞蒂，一位法国的哲学家；他论断了人是具有矛盾性的，这与笛卡尔的“脑体二元论”是相悖的。阿多诺“非同一论”的哲学思想也与整体的概念相悖。亚瑟·凯思特勒构思了“子整体”——局部与整体的共生。这些哲学被称为新哲学，但他们在本质上是同共生哲学一致的。

物理学家大卫·波姆发现了“内涵有序性”，利用非线性分析解释了自然界中以前认为是无序的现象。数学家曼德布罗特创立了“分形几何”。哈肯创立的“协同论”指出了若干子系统通过积极的联结，形成像“孤波”一样大空间的、短暂的、实用的秩序。这种科学被称为“新科学”，但它本质上与生命原理或共生哲学是一致的。

生命原理时代的哲学、科学、文学、音乐都将是问题导向的、目标导向的、非布尔巴基体系的，与我过去30年来所倡导的共生哲学是相关联的。

If there is to be any order of beauty in the age of life principle, it will be a dynamic balance that maintains its order, while always moving, roaming, and changing. This is not chaos: it is the precursor of a new order.

In the three decades since 1959, I have consistently aimed at an architecture of the age of life principle. From the Metabolism movement of the 1960s through my pursuit of such ideas as intermediate zones, ambiguity, metamorphosis, and the philosophy of symbiosis, I have always employed the concepts and vocabulary of life systems, biology, and ecology. This was a conscious choice on my part, because I aimed to transform the age of the machine principle into the age of life principle.

In the physics of this century, it has been believed that the elements which compose all things are therefore the basis of all order, and these elements are controlled by the principle of symmetry. Classic Newtonian dynamics supports modern philosophy, modern art, and modern architecture.

This view of the world, this objective rationality and modern rationalism, was created and perpetuated by Galileo and his theories, Newton and his physics, Euclid and his geometry, Lavoisier and his chemistry, and Darwin and his biology. Common to all these rational sciences is what is called the “Bourbakian system,” or the axiomatic method, which is based on the assumption that an ultimate existence and objective methods of measurement exist.

This objective rationalism represents the orthodox current of European thought. It is the main current, in which we find Plato, Aristotle, Descartes, the Cartesian semiologist Chomsky, and Habermas.

However, outside the main current there are other views. Merleau-Ponty, a French philosopher, posited an ambivalence of the human body that was opposed to Descartes’ mind-body dualism. Adorno’s philosophy of non-identity rejected the notion of wholeness. Arthur Koestler conceived of the “holon”—the symbiosis of the part and the whole. These philosophies are called “new philosophies,” but they agree in essence with the philosophy of symbiosis.

David Bohm, a physicist, discovered “implicated order,” which explains phenomena of the natural world previously thought to be random in terms of a non-linear analysis. Mandelbrot, a mathematician, invented a fractal geometry. Haken’s “synergetics” refers to the principle by which many partial systems, through their combined activity, become a giant spatial, temporal, and functional order like Soliton. This science is called “new science,” but it agrees in essence with the life principle or philosophy of symbiosis.

The philosophy, science, literature, and music of the age of life principle will all be problem-oriented, target-oriented, non-Bourbakian, and linked to the philosophy of symbiosis that I have advocated these past three decades.

同科学、哲学一样，技术也随着生命时代曙光的到来而面临着重大的变革。一些自然现象迄今为止仍被认为是太复杂，以至于无法按常规来理解和领会，而现在的分形维数则揭示了其规律。这证明了“二元论”中的秩序与混乱的绝对对立只是暂时的。生命原理说明秩序中包含着混乱，混乱中包含着秩序。共生哲学是战胜“二元论”的哲学。

新陈代谢建筑寻求通过对现代技术和材料的积极运用，来表达历史传统和文化特性。20 世纪的建筑和现代主义建筑是伴随着工业社会的建立与成熟而发展起来的。而我们现在正在从工业社会走向信息社会。今天的日本，超过 70% 的 GNP 是从非工业性的经济部门中产生的，如金融、通信、生命科学、广播、出版、科研、教育、设计、休闲、艺术、服务和分销。

工业社会或现代建筑时代的机器，是我们看得见的机器——如蒸汽机、汽车和飞机。然而，信息社会的技术很大程度上是无形的。媒体和信息技术的出现，例如电视、卫星广播和微机通信，具有震撼世界的力量，并带来了无形技术时代的诞生。信息时代的技术将日益成为无形的技术，因此，用可见的、高技术的机器直接表达我们的时代也愈加困难了。

生物工艺学和微机通信越来越远离机器时代的技术，并向生命原理时代靠近。

信息时代的建筑——生命原理时代的建筑，它将是一种不仅仅具有实用功能，同时也具有物质以外的内涵的建筑。简单地说，产生于 20 世纪 60 年代的新陈代谢原理基于两个原则：历史性和共时性。

新陈代谢运动不排除任何特定的时间区间，而试图在单个建筑中同时表现过去、现在和未来。我们所说的历时性是距过去、现在和未来的距离都相同的位置的一种观念。如果我们采用这种思想，我们就不会像现代建筑那样，摒弃历史和传统。特别是历时性赋予我们在建筑中有引入未来概念和图像的自由。同时，对历史也是如此。换言之，建筑可以在过去、现在，直至未来的过程中生长和变化。

这种生长和变化是新陈代谢的第一原理，同时也是生命的基本原理，在机器时代是看不到的。城市的新陈代谢概念是 1963 年阐明的，将植物细胞和神经元作为它的先例。它是一个经过规划的成长、变化的城市。

Not only science and philosophy but technology as well is facing a major transformation as the age of life dawns. Certain natural phenomena thought until now to be too complex to apprehend as ordered now reveal their order in a fractal dimension. It turns out that the absolute opposition—the dualism—between order and chaos has been only provisional. The principle of life shows us that there is an order that includes chaos, a chaos that includes order. The philosophy of symbiosis is a philosophy that triumphs over dualism.

The architecture of Metabolism sought to express historical tradition or cultural identity while making active use of modern technology and materials. The architecture of the 20th century and the architecture of Modernism developed alongside the establishment and maturation of industrial society. Today we are moving from an industrial society to an information society. In Japan today, more than 70 per cent of the GNP is generated in non-industrial sectors of the economy, such as finance, communications, life science, broadcasting, publishing, research, education, design, leisure, art, services, and distribution.

The machines of industrial society, of the age of modern architecture, were machines we could see—the steam engine, the automobile, and the aeroplane. The technologies of an information society, however, are technologies that are largely invisible. The appearance of media and information technology that have the power to shake the world, such as television, satellite broadcasts, and computer communications, has given birth to a new age of invisible technology. The technology of the information age will increasingly become an invisible technology, so that it will be increasingly difficult to express our age directly using a visual, high-tech image of the machine.

Biotechnology and computer communications are moving further and further from the technology of the age of the machine and are approaching the age of life principle.

The architecture of the information age, the architecture of the age of life principle, will be an architecture not only of function but also of meaning. To put it in its simplest form, the theory of Metabolism which emerged in 1960 is based on two principles: diachronicity and synchronicity.

The Metabolist movement sought not to exclude any particular time period but to express the past, present, and future in a single architectural space at the same time. What we call “diachronicity” is the idea that we are now standing at an equal distance from the past, the present and the future. If we adopt this way of thinking, we need no longer discard history and tradition, as modern architecture did. In particular, diachronicity allows us the freedom to actively introduce concepts and images of the future into our architecture, and to refer to history at the same time. In other words, architecture can grow and change from the past to the present and into the future.

This growth and change is the first principle of Metabolism and is also the basic principle of life which cannot be seen in the machine. The Metabolist concept of the city, enunciated in 1963, took plant cells and nerve cells as its precedent. It is a city of growth and change, a programmed city.

如前所述，新陈代谢建筑并不是源于机器的相似物，而是源于正在成长的、有生命的有机主义或生命原理。新陈代谢的第二个原理就是不同文明的共生。

美国经济学家罗斯托夫的理论，即发展中国家通过“拿来”阶段走向成熟阶段，然后进入高度发达的消费文化阶段。这对 20 世纪 60 年代的很多领域都有影响。以这种观点来看，一个国家的文化将逐步发展，直至西方化。事物发展依此设计，全世界逐步西方化和均质化是惟一的、自然的结果。由这个学校所教育的思想观念，是依据西方文明的价值观和标准所创造的一元的世界文化。全世界将存在惟一的图标。实现这一图标的武器，在语言领域是世界语，在建筑领域是国际风格。世界语是欧洲语言的国际版本，拉丁语。现代建筑运动可以说是一种被设计为以国际风格的名义在全球传播欧洲文化的运动。

归根结底，这种哲学是一种文化霸权，以试图来减少世界的所有文化，直至一元化。对文化发展“阶段”的信仰也是根植于这种观点的。今天，这种欧洲中心主义在全世界仍然处于绝对的支配地位。

然而，利瓦伊·斯特劳斯的结构主义告诉我们，世界的许多不同文化并没有被归入同一个发展等级。他发现每一种文化都是独立的，有各自截然不同的意义。每一种文化都各自有一种结构体系与世界文化结构中的其他部分相联系。世界的文化结构体系是由不同文化结构的相互关联组成的。文化多样性的存在和不同文化的共生，已经被认为是真正有价值的事情。我想把这个新陈代谢的第二个原则看作是国际主义向多元文化论的类型转换。

生命原理的建筑还要把重点放在变形和演化上。建筑不能仅仅将分解和解构的元素机械地重组并建造起来。城市也不能简单地由独立的建筑积聚而成，突变、调整或城市规模的跳跃都是必要的。

在一些变形现象——如从毛虫到蝴蝶、从蛋到鸟、从细胞或组织到人中，或在一些突变中，我们可以看到生命原理中的形式和尺度的间断变化、情感的跳跃、信息的连接。哈肯的“协同作用”所阐释的“共振”与“孤波”也是这种变形的例子。

使变生、演变和飞跃成为可能性的原则也许就是对不同维数空间的调整，是对中间空间的介入、对不同元素的介入。变生和突变在实现生命原理和在不同维数空间建立相互联系中起着重要作用。人们之所以在看到中世纪教堂的空间、富勒穹顶、机场和火车站的巨大结构、充气帐篷、中庭、天井、走廊、柱廊、街道时会感动和兴奋，就是因为这些空间暗示了意外的变化，它们是非凡的维数空间。

As I said earlier, the architecture of Metabolism derived not from the analogy of the machine but from the analogy of a growing, living organism or living principle. The second principle of Metabolism is the symbiosis of different cultures.

The theory of the American economist Rostow, that developing countries pass through a “take-off” stage leading to a stage of maturity, and then to a stage of highly developed consumer culture, was an influence on many fields in the 1960s. In this view, a country’s culture gradually develops until it approaches that of the West. According to this scheme of things, it is only natural that the entire world will gradually be Westernized and homogenized. The ideal taught by this school of thought is a unified, one-dimensional world culture created according to the values and standards of Western civilization. A single icon was to exist for the entire world. The weapons for realizing this icon were, in language, Esperanto, and in architecture, the International Style. Esperanto is an international version of a European language, Latin. The Modern architecture movement, in other words, was a movement designed to spread European culture, under the name of the International Style, around the globe.

At the bottom of this philosophy is a cultural hegemony that seeks to reduce all the cultures of the world to a single dimension. A belief in “stages” of cultural development is also inherent in this attitude. Today this Eurocentrism still conclusively dominates the world.

Lévi-Strauss’s Structuralism, however, teaches us that the many different cultures of the world are not organized into the same hierarchy of evolution. He discovered that each culture is autonomous and has its own distinct significance. Each has a structure that is related to others in the structure of the world. The structure of the world culture is the interrelation of different cultures. The existence of a plurality of cultures, and the symbiosis of different cultures, has come to be recognized as something that is truly valuable. I think of this second principle of Metabolism as the paradigm shift from internationalism to interculturalism.

The architecture of the life principle will also place importance on metamorphosis and transmutation. Architecture cannot be created merely by mechanically recombining elements that have been disassembled and deconstructed. A city cannot be created simply by amassing individual works of architecture. A sudden mutation, mediation, or a jump to city scale is required.

In such phenomena as the metamorphosis from caterpillar to butterfly, from egg to bird, from cell or organ to human being, or in sudden mutations, we see the life principles of discontinuous change of form and scale, emotional leaps and informative linkage. The “sympathetic vibrations” and the “soliton” explained in Haken’s synergetics are examples of this metamorphosis.

The principle that makes metamorphosis, transformation, and leaps possible is the mediation of space of a different dimension, the intervention of intermediary spaces, and the intervention of different elements. Metamorphosis and mutations play important roles in the operation of the life principle and create interrelations between different dimensions. The reason that people are moved and excited by the spaces they see in the great cathedrals of the Middle Ages, the Fuller Dome, the huge

由于上述原因，为了统一分散的、解构的建筑，我已开始将注意力转移到个人与公共、内部与外部、历史与未来、人性与技术之间的联系或者说中间领域。我相信，中间领域或者变形原理，使我重新获得了暧昧的、矛盾的、丰富的技巧，而这些正是那些坚持二元论和两项对立论的反对派们迄今为止仍然抵制的。过渡区或抽象的相互关系，同变通元素一样具有十分重要的作用，它允许对立的元素在共生中存在。

中间领域也是具有独特的日本文化的一个词，“间”表示存于相对要素或抽象的相互关系之间的中间领域。在16世纪的日本传统建筑中，有一种叫做“数寄屋”的建筑，这种建筑的走廊或“缘侧”就是一种在室内与花园之间的中间领域。这种“缘侧”使建筑与自然之间形成一个连续的空间和中间领域：可以被描述成存在于变形空间或中间空间“共生空间”之中。

中间领域或抽象的相互关系，在实现内部空间与外部空间的共生中起着重要作用。这种内部与外部的共生，可在日本文化中看到多种形式，例如：京都许多传统房屋的方格正立面，在街道与建筑之间建立了过渡空间。随着这第三种空间、中间空间的建立，一个丰富的、充满暧昧和矛盾的建筑被创造出来，而暧昧和矛盾正是西方二元论和二元对立论所拒绝的。

半公共空间是一种介于私人 and 公共之间的空间，丰富了城市景观。作为生活空间的街道、无用空间、中庭、门、小型公园都是半公共空间的范例，是变形空间中的重要角色。

在一种叫做“能乐”的日本传统戏剧艺术的审美观中，一种被称为“静隙”的对白之间的沉默，即“无为的时间间隔”得到了很高的评价。书法中行与行之间的空白空间——“留白”，是另外一种重要的中间空间或抽象的相互关系。

共生哲学与佛学思想具有深刻的联系；事实上，共生哲学构成了佛家思想最基本的原则。

1600年以前，弱小的日本国只有一个办法能够在强大的邻国——中国旁边幸存下来，那就是积极吸收中国文化和其他外国文化。通过与其他文化的共生，日本才能保护自己的文化的特性。今天的日本仍然对其他文化有着不同寻常的求知欲。

structures of airports and railway stations, air domes, atriums, patios, galleries, colonnades, and street space, is because these spaces suggest unexpected changes; they are spaces with extraordinary dimensions.

For these reasons, in order to unify divided, deconstructed architecture, I have directed my attention to the relation, or the intermediate zone, between private and public; the part and the whole; the individual and society; architecture and natural environment; architecture and city; the interior and exterior; history and the future; and humanity and technology. I believe that the theory of the intermediate zone, or metamorphosis, has allowed me to recover an ambiguous, ambivalent and rich artistry that dualism and binomial opposition have rejected up to now. Intermediate zones or abstract interrelation play an important role as the common element that allows opposing elements to exist in symbiosis.

The intermediate zone is also an expression of the distinct character of Japanese culture. *Ma* is the intermediate zone or abstract interrelation that exists between two opposing elements or spaces. In the traditional Japanese architectural style of the 16th century, called *sukiya* architecture, the verandah, or *engawa*, is an intermediate zone between the building interior and the garden. The *engawa* allows the building and nature to become a continuous space or interrelation: to exist in symbiosis in what could be described as “metamorphosis space” or intermediate space.

Intermediate zones or abstract interrelation play an important role in achieving the symbiosis of interior and exterior space. This symbiosis of interior and exterior can be seen in many different forms in Japanese culture. For example, the lattice facades of many traditional Kyoto houses create an intermediary space between street and architecture. With the establishment of this third kind of space, this intermediate space, a rich architecture can be created, full of the ambiguity and ambivalence that Western dualism and binomial opposition rejected.

Semi-public space, an intermediate space between private and public space, enriches urban space. The street as a space for living, useless space, atriums, gates, and pocket parks are all examples of semi-public space which also plays an important role as metamorphosis space.

In the aesthetic of the traditional Japanese dramatic art called *Noh*, the interval of silence between words, which is called *senjima*, the interval when nothing is done, is highly regarded. The “blank” white space between strokes of calligraphy is another important intermediate space or abstract interrelation.

The philosophy of symbiosis has a profound link with Buddhist thought; in fact, the philosophy of symbiosis forms the very basis of Buddhist philosophy.

Sixteen hundred years ago, the only way for the tiny country of Japan to survive next to its giant neighbour China was for it to actively absorb Chinese culture and that of other foreign nations; by living in symbiosis with other cultures Japan could preserve its own identity. Today Japan still has a remarkable curiosity regarding other cultures.

两项对立的共生，例如：建筑与自然的共生、传统与最先进技术的共生、细致与大胆的共生、秩序与混乱的共生等等。不同文化的共生，是理解日本文化本质的重要概念。

工业社会和现代社会在事物上附加了很高的价值。相反，信息时代不是物质时代，是关系时代。在这个年代，建筑将成为关系的建筑。建筑与其周围环境的关系将更具有内涵。建筑工程之中的各个不同空间之间的关系将产生新的内涵。

将一项建筑工程首先分解为若干元素，然后自由地重新部署和拼装它们，这种方法是信息时代的建筑表达手法之一。因此，应在任何可能的情况下避免对称，以表达复杂的关系。在空间与空间、形式与形式之间设置无功能的开敞空间，从而产生动态的、流动的、文化交融的建筑或建筑关系。

京都龙安寺石头的布置，就表达了抽象的相互关系或者说抽象象征主义。园林设计师的创造力在于更注重石头的位置或石头间的关系，而不是石头的形状，或者说更注重中间领域。这种自由的空间布局风格是很宝贵的。

现代化和工业社会时代认为可见的事物更有价值。可见的资产——如高级公寓、豪华轿车或财产，在工业社会是人的等级和地位的象征。在信息社会更重要的是人与人之间的关系、信息、传统、隐藏于物理形式之后的哲理和建筑与其周围环境的关系。

在今天生命科学的前沿，生命被定义为“一种存在和关系，它们创造了内涵”。这种关系创立了抽象象征主义的新概念。

从新陈代谢到共生，在我所做的工作中，有两点是始终一致的。第一，如前所述，与以机器为象征的现代建筑相反，我一直努力以生命的原理和生命的系统来表达时代的精神；第二，我致力于如何以一种全世界人民理解的方式，将文化的特性融入当代建筑中的课题研究。

我刻意从生命科学和生物学的术语中选择“新陈代谢”、“变形”和“共生”。将我建筑的主题命名为新陈代谢、改变、生长、变形、中间领域、关系、共生和抽象象征主义，超越二元对立论或二元论，表达了生命系统或生命原理的最重要特征。

今天，共生的概念已渐渐成为许多领域的最新题目，包括生命科学、物理学、生物化学、艺术和建筑。

The symbiosis of binomial opposites, such as the symbiosis of architecture and nature, the symbiosis of tradition and the most advanced technology, the symbiosis of delicacy and boldness, the symbiosis of order and chaos, the symbiosis of different cultures, is a key concept in understanding the nature of Japanese culture.

Industrial society and modern society place a great deal of value on things. The information age, on the other hand, is an age not of substance but of relations. In this age, architecture will become an architecture of relations. The relationship between architecture and its environment will produce meaning. The relationship between the distinct spaces within the work of architecture will create new meaning.

The method of first dissecting a work of architecture into its elements and then freely relocating them and reassembling them, is one of the methods of architectural expression in the information age. As a result, symmetry is avoided whenever possible in order to realize flexible relations. Placing non-functional open space between space and space, form and form, produces a dynamic, flowing, intercultural architecture or architecture of relation.

The arrangement of the stones in the stone garden of Ryoanji temple in Kyoto is an expression of the spirit of abstract interrelation or abstract symbolism. The creativity of the artist who designed the garden is concentrated more on the placement or relation of the stones than on their shape or on the design of intermediate space. The freer style of arrangement is valued.

The age of Modernism and industrial society was an age that valued the visible. Visible assets—grand mansions, luxury cars, and property—symbolized a person's rank or status in industrial society. More important in an information society will be human relations, information, tradition, the philosophy behind physical forms, and the relation between architecture and its surrounding environment.

At the forefront of the life sciences today, life is being defined as the “loci and relations that create meaning.” Such a relation creates new concepts of abstract symbolism.

There are two points that are consistent in all my work, from Metabolism to Symbiosis. The first, as I have mentioned before, is that I have always attempted to express the spirit of the age in terms of the life principle and living systems, in contrast to modern architecture, which has taken the machine as its symbol. Second, I have addressed the subject of how cultural identity can be incorporated into contemporary architecture in such a way that people the world over will understand it.

I intentionally took the terms “metabolism”, “metamorphosis”, and “symbiosis” from the terminology of the life sciences and biology. The themes of my architecture, namely metabolism, change, growth, metamorphosis, intermediate space, relation, symbiosis, and abstract symbolism which transcends binomial opposition or dualism, are all expressions of the most important features of life systems or the life principle.

Today the concept of symbiosis is becoming the newest theme in many fields, including life science, physics, biochemistry, biology, electronics, medicine, philosophy, art, and architecture.

共生医学或整体医学是研究通过与其他组织、细菌，包括病毒的共生来延长生命的方法。模糊计算机和模糊机器人就是为之输入模糊程序。在有关我们的环境问题的文章中，生态学被置于越来越重要的位置，它强调人类与其他生命的共生。在所有这些新方向中，有一个共同的主题，即“共生哲学”或“生命原理”，一个超越了现代化和机器之外的主题。

我强烈地反对部落制、民族主义、种族主义或历史相对论。我相信新时代建筑的目标是普遍性和地域性文化的共生，是不同文化的共生。这就是为什么一些经过智能化处理的表现方式是如此重要的原因，如在那些相对立的元素中建立动态的中间空间，或萃取传统和特殊文化。经过萃取，建筑的外在表达形式、符号、象征将产生多元的、矛盾的内涵。信息社会时代是个体和地域特征十分宝贵的时代，人们将寻求多种方式去阅读和理解建筑的外在形式。

传统具有两方面，一方面是我们可见的历史——风格、装饰和传统符号；另一方面是我们看不见的传统——思想、哲学、艺术、宗教和生活方式。因此，我们也可以用最新的材料和最先进的技术来表达传统。正因为这样，我们寻求的传统是一种无形的精神。我们必须发挥我们的聪明才智，找到一条可以通过当代的建筑将这种传统带入生活的道路。

我们必须继承现代建筑最伟大的成就：抽象的和智能的处理方式。抽象观念在现代建筑、现代艺术和现代哲学中非常普遍。抽象观念和抽象几何学是全球共通的语言，我试图以此来表达不同文化及其区域、自然的特性。例如，通过对一些全球通用的抽象几何图形的位置进行重新排列，包括圆形、长方形、新月形、圆锥体，我们可以创造不同的内涵。通过强调轴线和对称的布局，我们可以表达西方文化的精髓；而以一种不对称、不规则的方式来布置图形，可以表达日本文化的精髓。

日本的传统文化是通过位置的细微差异来创造出微妙差别的，以此产生了新的内涵。所有的日本传统艺术——音乐、书法、插花、能乐剧以及数寄屋建筑，它们共有的特征是在位置中创造微妙个性的艺术。

通过利用当地的材料或高技术材料，也可能使相同的抽象几何图形创造出不同的内涵。埃及金字塔和贝聿铭的金字塔有着迥然不同的内涵，贝氏金字塔是理解抽象象征主义的实例。

There is a symbiotic medicine, or holistic medicine, that is researching methods of increasing longevity by living in symbiosis with other organisms and bacteria, including viruses. There are fuzzy computers and fuzzy robots with ambiguity programmed into them. We see an increasing value placed on ecology in the context of our environmental problems, which involves the symbiosis between human beings and other livings. If there is one common theme to be found in all these new directions, it is the “philosophy of symbiosis” or “life principle”, a theme that moves beyond the theme of Modernism, the machine.

I am strongly opposed to tribalism, nationalism, racism, or historicism. I believe the goal of architecture for the new age is the symbiosis of universal order and regional culture, the symbiosis of different cultures. That is why expression based on intellectual manipulation, such as the establishment of dynamic intermediate spaces or the abstraction of traditions and specific cultures, which lies in between the opposed elements, is so important. The formal architectural modes of expression, signs, and symbols, will produce multivalent, ambivalent meanings, by process of abstraction. The age of the information society will be an age when the identities of individuals and regions will be valued. Multiple ways of reading and interpreting formal architectural expression will be sought.

Tradition has two aspects. One is the history that we can see—styles, ornaments, and traditional symbols. The other is the tradition we cannot see—thought, philosophy, aesthetics, religion, and lifestyle. Therefore we can also express tradition through the newest materials and most advanced technology. In this case, the tradition that we seek to engage with is an intangible spirituality, and we must apply our intellects to find a way to bring it to life in contemporary architecture.

We must inherit the greatest achievements of modern architecture: abstraction and intellectual manipulation. Abstraction is common to modern architecture, modern art, and modern philosophy. I attempt to use the abstraction and the abstract geometry that are our shared global languages to also express the specific identities of different cultures, their regionalism, and their nature. For example, by rearranging the placement of such shared global abstract geometrical forms as the circle, the cone, the rectangle, and the crescent, we can produce different meanings. By emphasizing symmetry and the axis, we can express the spirit of Western culture; by arranging forms in an asymmetrical, irregular fashion we can express the spirit of Japanese culture.

That tradition of Japanese culture is to create subtle distinctions by delicate differences in placement, which create new meanings. What all of the traditional Japanese arts—music, calligraphy, the *Noh* play, flower arrangement, and *Sukiya* architecture—have in common is that they are arts of creating subtle distinctions in placement.

It is also possible to use the same abstract geometric forms and create different meanings by using local materials or hi-tech materials. The pyramids of Egypt and I.M. Pei's pyramid have very different meanings. Pei's pyramid is an intelligible example of abstract symbolism.