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汉英对照 (韩语版第379期)

韩国**C3**出版公社 | 编 大连理工大学出版社

大学建筑:

# 华丽的转变

University Buildings

The Looming Shift

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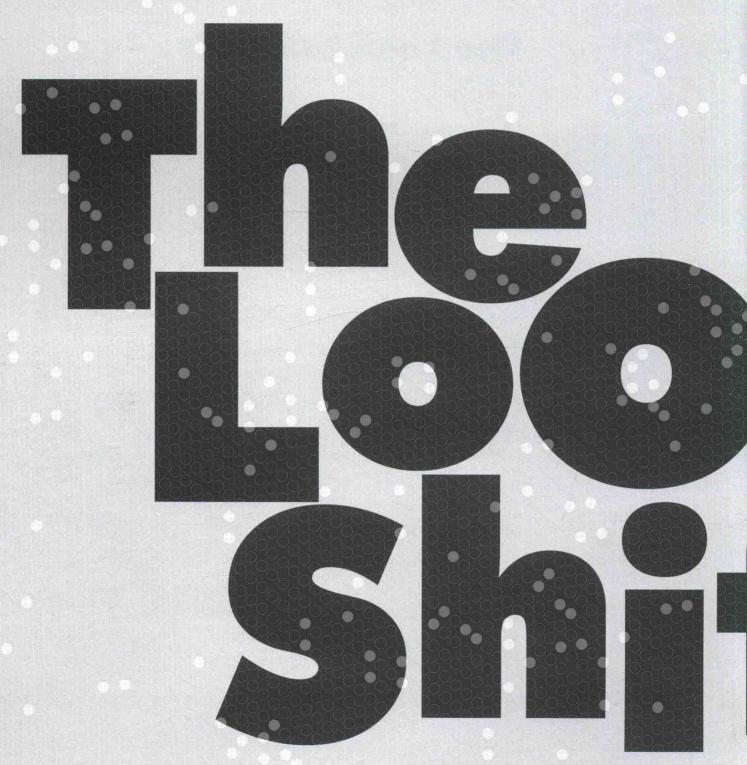
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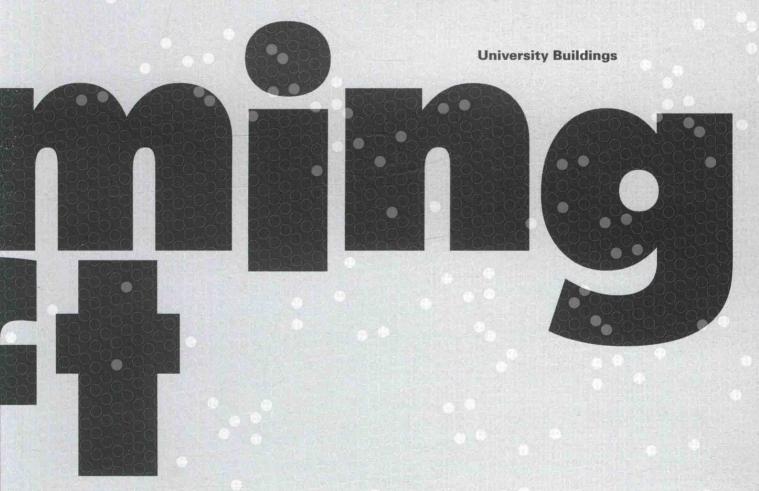
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在过去的几十年里,教育建筑正在发生巨大的改变。随着社会对民主、平等、多样化教育体系的需求不断增加,全世界的大学都在逐渐改造自己的传统建筑。

在过去的几年里、《C3》杂志已经报道了很多关于这种改变的建筑项目,试着从不同的角度来描述这一现象。Marco Atzori在《C3》310期中讨论了社会中的社会性及经济因素对新大学建筑类型和建筑语言特征的影响。

在《C3》352期《公共领域、运动设施和学校之间的连接点》一文中,Andrew Tang本人探讨了大学校园中的公共空间、运动相关设施的设计:"新的设施不仅仅专注于运动场地、储物柜和健身房的建设。身体和头脑已经成为队友,对于确保整体成功同样重要。"大学建筑有一个十分显著的改变,即从城市中心纪念碑式的存在转向体型更小功能更灵活的实体。关于这一点,Aldo Vanini在《C3》353期《自由与功能》一文中已经讨论过。在《C3》374期《流动的学习空间》一文中,Isabel Potworowski曾指出,大学建筑发展最显著的一点可能是从以教师,学者及其工作为中心转变为以学生为中心,满足学生的需求已经超

越了遵循旧的教育模式。Potworowski解释说:"随着知识经济、新技术和灵活教育项目的出现,学生们对何时、何地、以何种方式学习有了更多的选择和控制权,这使得他们在竞争社会地位和资金时,能优先享受大学提供的服务。大学已经对此做出响应,以自然元素和自然景观为特色,模拟一个学院草坪的环境,提供大而灵活的以学生为中心的主动学习空间。"

在本书中,我们收集了一系列近期完成的和大学相关的项目,目的是将其添加到我们正在进行的对大学建筑及相关空间的分析中。所选项目共同点中最为明显的一点是空间越来越以学生为中心,功能明显反映了当今学生的生活方式,建筑似乎主要是为学生设计的,学生是主要的客户和使用者,是大学建筑的首要关注点。

在《大学,一种流动的生活方式》一文中,Paula Melâneo对灵活性,多功能性以及最近建成的大学建筑和相关设施的使用流动性这一概念进行了研究。Melâneo认为,这一重大转变与"全球化以及大学生人口不断增加的流动性"有关,"这是一种国际现象,因为现在有很多成功的国际互换项目,交换生来自世界各地"。这篇文章深入介绍了这

Educational buildings are significantly changing over the course of the past decades. Universities around the world are gradually adapting their traditional buildings following the growing demand in society to have a more democratic, equal and diverse education system.

C3 has covered several facets of this change in the past years, trying to depict this phenomenon from different points of view. Marco Atzori in C3 #310 discussed the impact of social and economic factors of society on the typological and linguistic characteristics of new university buildings.

In "Connecting Dots between Public Realm, Sports and School" (C3 #352) Andrew Tang concerned himself with the public spaces and sport-related facilities annexed to universities buildings: "New facilities are focusing on more than just sport fields, lockers, and weight rooms. The body and mind have become teammates, each as important as the other in ensuring their collective success". The notable change which university buildings underwent from monumental presences in the city to more permeable and flexible entities has been discussed by Aldo Vanini in "Liberal and Functional" (C3 #353). In "Learning in Fluid" (C3 #374) Isabel Potworowski pointed out what is perhaps the most remarkable aspect of the evolution of university buildings: the inversely proportional transition of academic institutions from centres built around teachers,

scholars and their work, to student-centred buildings where the needs and demands of learners have superseded the old academic models. Potworowski explained that: "with the advent of the knowledge economy, new technologies, and flexible educational programmes, students have more choice and control over where, how, and when they learn, making them privileged customers to which universities cater as they compete for status and funds. Universities have responded by providing large, flexible spaces for active student-centred learning, often featuring natural elements or views to nature, simulating the environment of a college lawn".

In this book, we collect a series of recently completed university-related projects to add to our on-going analysis of university buildings and related spaces. The most prominent aspects which the presented projects appear to have in common is the fact that their spaces are increasingly student-centred, their functions patently reflect today's students' lifestyle, and that the buildings seem to be designed chiefly for the students, these latter considered as main client/user, and prime focus of the architectures.

In "University as a Mobile Way of Life" Paula Melâneo examines the idea of flexibility, multifunction, and fluidity of use in the most recent university buildings and related facilities. Melâneo relates this significant shift to the "globalisation and the 些全球化空间共有的特点:它们"应具有适应性,考虑新工作过程以及学习方法,同时促进社会交往。它们应具有随时可改变的开放性,足够灵活以应对未知,容纳不同,满足不同的功能与使用要求,"Melâneo解释道。

在《灵活. 流动. 未来: 当代学院建筑》一文中, Heidi Saarinen分析了大学建筑的逐渐转变,它们在某些情况下转变成了"生活机构. 思想库. 研究领军者,商业机构,公司甚至小型城市。" Saarinen研究了新建筑与新技术对学生学习经历的影响,以及"这些当代"学习机器"发挥学生学习生活机构与场所功能的方式。从这篇文章可以看出,如今的高校开始逐渐关注学生们使用和感受学习区域、设施和灵活空间的方式。"学生的体验是首先要考虑的问题,还要有设计良好的住宿、社交与娱乐环境,且基准极高," Saarinen解释道。

在《大学:图书馆与学习服务》一文中,Fabrizio Aimar仔细观察了很多建筑的特点,那些建筑正逐渐成为高校建筑设施中的配套设施,满足了不同学生群体的一系列要求。这些配套设施所具有的新功能不仅成为各个院校的卖点,还可以作为高校教学战略与整体学生体验的

基础部分,在招标说明书中展示出来。例如,Aimar认为,"必须通过实验室项目给予创新学习足够的关注,实验室项目以实操为中心,就像工作室一样,有助于探索作为不同项目特点的表现力和多维度"。这些建筑在功能与类型上都各有不同,其中包括艺术与文化中心、创业与发展中心,运动大厅以及学生社团中心。

本书的目标是清晰地向大家描述高校在形式, 功能与特点方面是如何改变的, 以满足数量不断增长的学生们的需求, 这些学生来自世界各地, 性格迥异, 要求也越来越多。

increasing mobility of the university population, [...] as an international phenomenon, with a great success of the international interchange programmes, mixing students from all over the world". This section offers an insight on the characteristics that these globalised spaces have: they "should be adaptable, considering the new work processes and study methods, and at the same time foster socialization. They should have the openness of being changed (during a day long or during its lifespan), with the flexibility to perform the unexpected and integrating otherness, responding to a diversity of functions and uses" explains Melâneo.

In his "Flexible, Fluid, Futures: Contemporary Faculty Buildings", Heidi Saarinen analyses the gradual transformation of university buildings into "life institutes, idea banks, research leaders, businesses, corporations and even mini cities in some cases". Saarinen explores the impact of new buildings and technologies onto the students' learning experience, and "the way these contemporary 'learning machines' function as institutions and places for learning and student life". From the article, it emerges that the universities are increasingly focusing on the way students use and perceive learning areas, facilities and flexible spaces. "The student experience is on top of the agenda with well-designed accommodation, social and recreational environments also expected and the benchmark

is set high" explains Saarinen.

In "Universities: Library and Learning Services" Fabrizio Aimar scrutinises the characteristics of those buildings that are growingly becoming accessory to the main university functions, meeting a series of demands from the students cohorts. These new functions are not only a strong selling point for each institution, but also presented in the prospectuses as fundamental part of the pedagogic strategy and the overall student experience in the university. For example "emphasis must be given to the creative learning through laboratory projects centred on doing, as in the case of workshops, useful to explore the expressive and plural dimensions as peculiarity of individuals" holds Aimar. Such buildings vary in function and type, including art and cultural centres, start-up and development centres, sport halls and student community centres.

The aim of this book is to provide a clear picture of the way the university is changing in its forms, functions and characteristics in order to meet the demand of a growing, exigent and always more varied student population all over the world. Silvio Carta

大学,一种流动的生活方式

# University as a Mobile

在过去的30年里,各种各样不同的因素使大学校园的结构发生了变化,为了满足新的需求而变得更加复杂,这些因素包括教育的电子化、互联网作为一种研究工具而被广泛使用以及它们在教学项目上的成果等。

全球化与大学生人口流动性的不断增加不仅仅发生在国家之间,它们更是一种国际现象,随着交流项目所取得的巨大成功,将来自世界各地的人们聚集在一所新的更大的大学"大熔炉"中。

In the last 3 decades, different factors, such as the computerization of education and the extensive use of internet as a research tool, and their consequences on the pedagogical programs, led the university campuses to become more complex structures as a response to the new needs.

Globalization and the increasing Mobility of the university population, not just within the countries but also as an international phenomenon, following the huge success of international exchange programs, gather and mix people from all over the world in a new great university "melting pot".

If the University had once been a stage for the prestigious masters to spread their

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大学, 一种流动的生活方式\_University as a Mobile Way of Life/Paula Melâneo

# Way of Life

大学曾是那些知名人士传播知识与交流思想的舞台,而现在,院校已成为关注学生及其幸福感的系统,不但优化了学生们的学习条件,还争取增加学生们在不同的高校空间内停留的时间。

这些空间应具有适应性, 能够预见工作过程以及学习方法的变革, 同时也能够促进社会交往。除此之外, 这些空间还应具有随时可改变的开放性, 足够灵活以应对未知, 容纳不同, 满足不同的功能与使用要求。

knowledge and ideas, nowadays the institutions are systems that tend to focus its attention on their students and their wellbeing, optimizing learning and study conditions, considering the increasing periods of time they spend within the different university spaces.

These spaces should be adaptable, overseeing the evolution of the work processes and study methods, and, at the same time, foster socialization. They should have the openness of being changed (during a day long or during its lifespan), with the flexibility to be capable to perform the unexpected and integrate otherness, responding to a diversity of functions and uses.

前几个世纪我们所熟知的大学机构起源于欧洲,我们可以称它为古希腊学术界的一份遗产。在古希腊学术界中,学习过程只基于一种方向,那就是基于老师们的知识,这一点也反映在高校的空间设计上。在中世纪,大学作为一种高等教育与学历证书颁发的机构,由修道院与宗教学校转化而来。其成立时间为1088年,成立地点为意大利的博洛尼亚,当时大学仍处在基督教的背景之下。20世纪的大学具备精英特质,有时也是一种权力机构,能反映政治及各类思想,其建筑本身也代表着优秀的教育形象(或是一种政治制度)。

过去的大学虽然被认为是精英机构,但也在20世纪60年代晚期和20世纪70年代早期因陈腐守旧而经历了结构上的变革,如1968年的五月风暴。政府的激励项目、对教育的社会意义的认识以及国家对教育的财政资助都给予人们更多的学习机会,也让当时的大学对公众比以往更加开放。当代的大学是一个更加民主的体系,接近于那种学者与

The university, as the institution we have known in the last centuries, has its origin in Europe. We can say it is a heritage of the Antique Greek Academia, where the learning process happened in just one direction - based on the teacher's knowledge - and the spaces reflected it. In the Middle Ages, "university" evolved from monastic and religious schools to the first university – as a higher-learning and degree-awarding institute – founded in 1088 in Bologna, Italy, still within a Christian context. Last century revealed a university with elitist characteristics, sometimes as an institution of power, mirroring politics and ideas, the building itself thought of as an image of excellence in education (or of the political regimes on the behalf of it).

These universities of the past, thought of as an elite institution, became obsolete and went under stages of some structural changes during the late 1960's and early 1970's, as a reflex of the May 1968 events. Government incentive programs, the awareness of the social importance of educa-

大师聚集地的感觉,在那里,学术主题经常被横向讨论与分析。高校空间让大学理想地成为一个整体,同时又不失多功能性。在现有的建筑中,物理层级被过滤掉,用户、教师、学生以及研究人员一同共享高校空间。

这些空间正不断适应如今的"潮流",这种潮流的特征就是如今高校人口的生活方式主要以流动性的概念为基础。总之,教师、学生和研究人员都通过不断的旅行,从参与国际交流项目中获益并积累丰富的知识和新的经验。另一个重要的方面就是教学方法、学习方法与研究方法的改变,如今的焦点是电脑、互联网和内联网等工具。这种改变增加了以流动的方式选择学习空间的可能性。

大学建筑应欢迎这种改变,它不仅可以提供有吸引力且健康的学习和工作空间,也可以提供具备社交功能、能够促进整合与推动人际关系发展的空间。

tion and monetary aid, gave the population access to studies and made the university more open to all. The contemporary university is a more democratic system, closer to the sense of "a community of masters and scholars", where academic subjects are discussed and worked transversely. The spaces hosting the institutions ideally function as a whole and are conceived or transformed to be multifunctional. In the existing buildings, the physical hierarchies are diluted and users, teachers, students and researchers share the spaces. These spaces are continuously adapting to today's "liquid times", where the university population is more and more characterized for having a way of life based on the concept of Mobility. In general, teachers, students and researchers are constantly traveling, benefiting from interchange programs to participate in international projects, collecting extensive knowledge and new experiences. Another important aspect is the transformation of teaching, learning and research methods, focused today on tools such as the computer, internet



加拿大多伦多瑞尔森大学新学生学习中心 Ryerson University's New Student Learning Center in Toronto, Canada

为了满足这些需求,空间的一个主要特点便是灵活性。设计时可以设计成混合或多用途的空间,没有特定的功能,配备方便控制的照明设备和声效系统。它们可通过可移动的家具分割成多个开放,流动的空间,几个活动可以同时进行;也有更加封闭和私密的空间,供小组成员会面和工作,供个人专心工作。

高校空间的另一个重要特性是空间多样性。它们可以通过自身的特点如颜色、材质、照明类型以及噪声级很容易地与其他空间区分开来。本文提到的大多数项目只是其中的一部分,它们仅代表着高校设施中的一小部分,服务于学生及其社交活动。高校空间的设计更多地趋向于关注学生们的舒适度并为他们提供舒适的环境,反映出其对于学生流动生活的尊重。它们在校园中都有着极强的空间形象与特征,同时它们也被认为是一种欢迎学生并与学生及环境有着密切关系的结构。有些项目的大学校园使用人数比一些小型城市的居民人数还多,因

此它们角色的重要性在于能开发学生们的脑力和社交技能,提升个人的自立性与自信。

其中的一个特例是Toni-Areal综合中心建筑,其设计理念与以往的高校空间完全不同,因为它不是属于校园内的一个补充设施,它本身就是校园。事实上,它就如同一个小型城市一样为瑞士苏黎世大学艺术与应用科学专业的学生们服务。EM2N事务所将一座旧工厂改造为一个24 400m²如建筑师所说的那种"集教育,文化与住房于一体的中心"。这座建筑运行模式复杂,功能齐全,例如,包括专为不同科目设置的学习空间,文化空间(音乐厅,图书馆,电影院、展览厅等),社交空间(屋顶花园、自助餐厅、咖啡吧、露台、室内广场等)以及公寓式宿舍。这里的空间类型多样,从专为公众使用与社交活动所设置的大型开放空间到专为个人使用所设置的小型封闭式空间等,不一而足,这也使它成为一个全天有人使用的空间。

and intranets. This expands the possibilities of choosing a space to study, in a more mobile way.

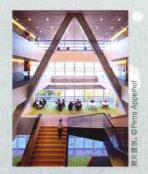
University buildings should welcome them, providing not only appealing and healthy spaces to study and work, but also spaces that offer a social function, fostering integration and human relations.

To respond to these requirements, the main characteristic of the space is flexibility. This can be translated into design by hybrid or multipurpose spaces, with no specific function, with easily controllable lighting and acoustic systems. They can be divided into open and fluid spaces, with movable furniture, where several activities can take place; and more closed or private spaces for small groups to meet and work closely, or for individuals to work intently.

Another important quality is the diversity of space. They should be easily identifiable by their physical characteristics, such as colors, materials, lighting type or noise level. Most of the projects presented in this chapter are a small part of a

whole. They represent part of the university's facilities and are directly related with students, dedicated to their studies and social activities. Designed with special attention to students' comfort and to integrate students, and provide them comfort, the spaces reflect the respect for their mobile way of life. They all have a strong image and identity within the campus and are thought of as structures to welcome students, creating a close relation with them and with the surrounding complexes. Some of these projects serve university campuses that have more users than the number of inhabitants of some small cities, hence the importance of their role is in these systems in developing intellectual and social skills, individual empowerment independence and self-confidence. The exception is the Toni-Areal building where the conceptual approach is completely different because it does not work as a complementary facility inside the campus, but as the campus itself. In fact, it functions as a small city serving the

Arts and Applied Sciences' students of the Zurich University in



荷兰乌得勒支大学新教育中心 Education Center for Utrecht University in the Netherlands

斯诺赫塔与蔡德勒合伙人建筑师事务所在加拿大多伦多的瑞尔森大学创建了新学生学习中心,这个14 200m²的空间只是一个综合性建筑的一部分,该综合性建筑可容纳38 000名学生。这栋八层的学习中心容纳了各种各样的空间。在这里,学生们不仅可以与其他用户进行互动,也可以与这些空间本身进行互动。建筑师解释称,这里"鼓励学生把这里看作属于他们自己的空间"。

建筑师们为每个楼层定义了不同的自然主题,这些主题以不同的颜色和材质呈现出来。较大的空间被设计成自由地带,既宽敞又灵活,内设可移动的非正式家具(例如,"沙滩"与"天空");小型封闭式的空间是专门为个人学习与小组工作而设置的(例如,"森林"或"花园");也有一些典型教室(例如,"太阳")。作为校园的大门,这栋建筑自身的设计完全融入了原有的都市建筑中,它还是课间可以停留的场所,模拟全天体验,成为这所大学的地标性建筑,就像一座灯塔邀请学生们

Switzerland. EM2N converted a former factory into a 24,400m<sup>2</sup> "location for education, culture and housing", as explained by the architects. The building operates in a complex way, hosting various uses, such as learning and study spaces for different disciplines, areas dedicated to culture (music and concerts halls, library, cinema, exhibition areas, etc.) and social areas (rooftop garden, cafeteria, coffee bar, terraces, interior squares, etc) and accommodation floors with apartments. Its enormous spatial diversity, ranging from large open spaces for public use and socialization to small closed areas for more individual use, makes it a space that is living 24 hours per day. Snøhetta and Zeidler Partnership Architects created Ryerson University's New Student Learning Center in Toronto, Canada, as a 14,200m<sup>2</sup> part of a larger university complex with 38,000 students. A variety of spaces is offered in its 8 floors, where the users are invited to interact not only between themselves but also with the spaces. As explained by the designers, the building "encourages students to make the space their own."

在此进行各种活动。建筑玻璃立面上带有印刷花纹,这种样式可以控制和阻隔自然光和热,同时也可以给人们提供独特的视角欣赏整座城市。

如建筑师总结的那样,"从秋到春,从期中到期末,学生们将在这座未来图书馆中不断积累经验与记忆"。如果如今的计算机、媒体以及互联网的广泛使用可以让人与人之间的关系逐渐疏离,那么斯诺赫塔的学生学习中心就是一个展示如何通过建筑均衡社交活动,使人们再次聚集在一起的很好的例子。

Ector Hoogstad建筑事务所设计的乌得勒支大学新教育中心的基座也有类似的功能,新教育中心是一个大型教育综合项目的一部分。这个教育中心的设立初衷是为学生、教师与研究人员提供一个"能激发灵感且设备完善的工作环境与会议中心",建筑师如是说道。

大多数较大的社交区域都位于一层, 学生们可以直接穿过自行车

The architects have defined different nature-related themes for each level of the building, reported by the colors and materials used. The larger spaces are thought as free-zones, wide and adaptable, with casual and movable furniture (such as the "Beach" and the "Sky"). Smaller and confined spaces are those aimed for individual study or small-group work (such as in the "Forest" or in the "Garden"), and there are also some typical classrooms (in the "Sun" level). Besides its design, as a gateway to the campus, completely integrated in the existing urban fabric, the building's stimulating all-day-long experiences – as a place to be in between classes – also makes it function as a landmark for the university, like a lighthouse inviting student activity. Its glazed facade exposes a printed pattern that controls the natural light and heat, and at the same time links the city while offering occasional views.

As concluded by the architects, "From autumn to spring, midterms through final exams, students will continue to create their own experiences and memories out of this library