

# UNIVERSITY ARCHITECTURE

大学建筑

李婵 编/译

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### Introduction

前言

With the advancement of research and education in the 21<sup>st</sup> century, tertiary education has been posing an increasingly higher demand for its facilities. In response, concepts like high technology, energy-efficiency and sustainability have successfully found their way to the architecture for universities, institutes and colleges. The book aims at presenting the present-day campus facilities by introducing a number of recently-completed projects, some of which were built for internationally-renown universities and institutes such as Georgia Institute of Technology, University of Edinburgh and National University of Singapore.

University Architecture is the second book among the Architecture Book Series published by DMP. The book covers forty-four projects from all over the world, including America, Europe, Asia, Australia and Africa (mostly from North America and Europe). Here you may find contributions from world-renown architects such as KPF and FOA. Most of the featured projects have received various awards, such as AlA Awards, RIBA Awards and Chicago Athenaeum Awards.

The carefully-selected projects are categorised into four chapters: Teaching & Administration Facilities, Research & Laboratory Facilities, Mixed-use Facilities, and Other Facilities. In each chapter, ten or twelve projects are presented in an alphabetical order. Each project is introduced with plenty of images, a brief statement, and several plans or diagrams which contribute to the professional reference value of the volume. In the index, contact information of each architecture firm involved is given.

当高等教育进入21世纪,随着科研、教学水平的飞速发展和进步,我们对高等教育的场馆也提出了越来越高的要求。高新科技、绿色环保、可持续发展,这些理念正在越来越多地体现在大学建筑的设计中。如今的世界大学建筑呈现出怎样的景象?本书将通过近年竣工的一批优秀的大学项目(其中不乏国际知名学府,如佐治亚理工学院、爱丁堡大学、新加坡国立大学等),全面、翔实地为您展现。

《大学建筑》是我社推出的"建筑系列丛书"之一,集中展现了44个来自世界各地的大学建筑项目,地域上涵盖了五大洲,以欧美为主。书中有世界顶级建筑公司的作品(如KPF建筑事务所、FOA建筑事务所),且多数项目曾获各类奖项,包括国际知名的美国建筑师联合会大奖(AIA)、英国皇家建筑师协会大奖(RIBA)、芝加哥雅典娜神庙奖(Chicago Athenaeum)等。

在内容上,本书按照建筑的功能用途分为四章,分别是:教学楼、实验楼、综合楼、其他。每章10或12个项目,按照其英文原名的字母顺序编排。除了大量的图片、翔实的说明之外,每个项目还配有多张技术图,包括平面图、立面图、剖面图、透视图、详图等,具有丰富的专业参考价值。书后的索引中提供了设计师的联系方式及其收录项目所在页码,方便查找。

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Greenspun Hall, Greenspun College of Urban Affairs University of Nevada, Las Vegas
Physicum and ExactumHelsinki University
Rural Clinical School The University of Queensland
Samundra Institute of Maritime Studies Indian Maritime University
<b>Texas A&amp;M Engineering College</b> <i>Texas A&amp;M University at Qatar</i>
The Blizard Building Queen Mary College, University of London

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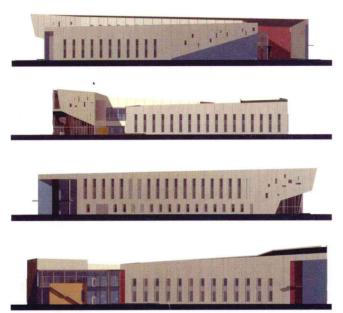
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## 佛罗里达国际大学 Alvah H. Chapman Jr. Graduate 小阿尔瓦·查普曼商学院研究生院 School of Business

Florida International University

Architect: Kohn Pedersen Fox Associates Location: Miami, Florida, USA Completion: 2008 GFA: 9,000 m<sup>2</sup> Photography: H.G. Esch, Smith Aerial Photography & Claudia Uribe

建筑设计: KPF建筑事务所 项目地点: 美国 佛罗里达 迈阿密 建成时间: 2008年 建筑面积: 9000平方米 图片摄 影: H.G.埃施、史密斯空中摄影公司、克劳迪娅·乌里维



Flevations 立面图

1. Aerial view

2. 建筑南面

3. Main entrance of the building



The identity of the Alvah H. Chapman Jr. Graduate School of Business at Florida International University in Miami merges a strong link to the Americas with the image and actuality of a modern facility.

The building starts at two storeys in height and spirals around the courtyard to reach approximately three storeys at the board room, above the main entrance lobby. The new business school will have two faces: to the exterior, it will be wrapped in a precast concrete panel system with three levels of sandblasting to create texture and pattern. Within the courtyard and in the slivers of spaces between the building bars, borrowing from the Florida vernacular, it holds vividlycoloured stucco walls, a palette inspired by pre-Columbian art to honour the cultural heritage of the largely Latin and Hispanic student body. The building is designed to be environmentally site-specific, with window patterns, arcades, and sun screens designed to address the predominantly hot Miami climate.

The phased design creates two distinct communities - one for students, another for faculty - linked by proximity, formal expression and materials. Phase One houses classrooms, administrative offices, a multipurpose facility, a 300-seat auditorium and student support spaces. Phase Two contains academic centres and faculty offices.

The first courtyard is anchored by a grand staircase, which recalls Mayan stepped structures and provides an informal gathering place for students and faculty. Classrooms are accessed through an open-air arcade, taking advantage of Miami's subtropical climate. The second courtyard, delineated by a water basin, forms an enclave for faculty offices.

Oriented to optimise and capture the prevailing winds from the west, the buildings are sliced at their corners to temper and ventilate the landscaped interior courtyards. In conjunction with water basins and dense plantings, the breezeways ensure that the courtyards are comfortable, even during the hottest hours of the day. By night, the open corners reveal the illuminated courtyards to the surrounding campus, creating a welcoming and dynamic environment for the many students who attend evening classes at the school.

位于迈阿密的佛罗里达国际大学小阿尔瓦·查普曼商学院研究生院的形象,通过现代的设施,跟美国的形 象紧密相连。

这座建筑从两层的高度开始。围绕庭院盘旋上升。达到大约3层的高度。那里是会议室。在主入口大厅的上 面。这所全新的商学院有两种外立面:外部由预制水泥板包裹,有3层的喷砂处理,以产生质感和图案。庭 院内部,在建筑钢筋之间的各个狭长空间内,借用了佛罗里达当地的建筑风格,采用的是色彩明艳的粉刷 墙壁,用这种前哥伦比亚时代的艺术是为了呼应这里大量的拉丁、西班牙、葡萄牙裔的学生的文化遗产。 这座建筑的设计特别关注环境方面,特别考虑到了所处的特定环境,窗户制式、连拱廊、遮阳屏风都是为 应对迈阿密的炎热气候而特别设计的。

这是一个分段设计,创造出截然不同的两段:一部分给学生,一部分给教师。两部分通过接近、形态上的 表现和材料连接在一起。第一部分包括教室、管理办公室、多功能大厅、能容纳300人的礼堂,还有学生活 动空间。第二部分包括几个学术中心和教师办公室。

第一个庭院有一段巨大的楼梯,使人想起玛雅人的建筑结构,同时又为学生和教师提供了一个非正式的聚



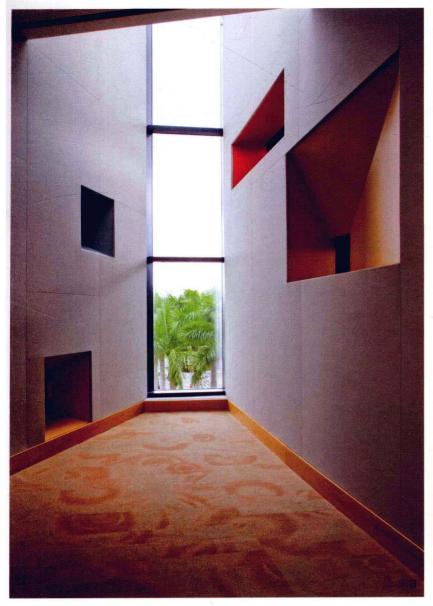






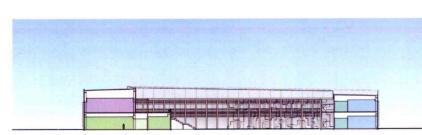
- Entrance to the courtyard
   Courtyard
   Circulation space
   Signage in the lobby

- 1. 庭院入口 2. 庭院 3. 交通走道 4. 大厅标识









会场所。通过一段无顶连拱廊就来到教室,这种连拱廊特别适合迈阿密的亚热带气候。第二个庭院以水池 为主要特色,为教师办公室创造出一块飞地。

建筑的朝向设计是为了最佳地利用这里的西风,建筑的角都经过切割,为了使内部景致优美的庭院的通风更好。除了水池和密集的植物,还有微风能保证庭院的舒适度,即使在一天中最热的几个小时。夜晚,开放的各个角向周围的校园展示着里面有照明的庭院,营造出一种动感的环境,仿佛在召唤着上晚课的学生走进来。

### Awards:

Chicago Athenaeum Museum of Architecture & Design, American Architecture Awards, 2008

Construction Association of South Florida Craftsmanship Awards, 2008

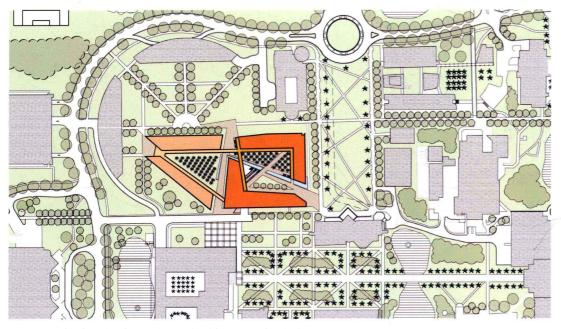
### 所获奖项:

2008年芝加哥雅典娜神庙奖——美国建筑奖 2008年南佛罗里达州建筑协会技术奖

Sections 剖面图



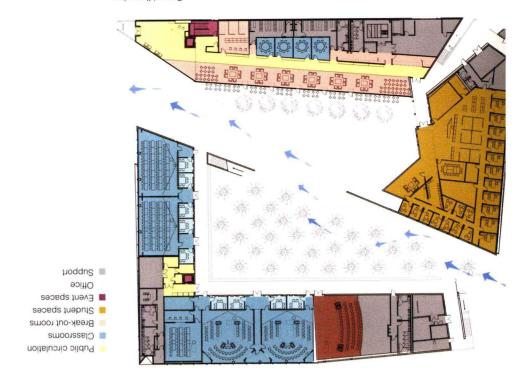
- 1 300-seat auditorium
- 2. Common space
- 1. 能容纳300人的礼堂
- 2. 公共空间



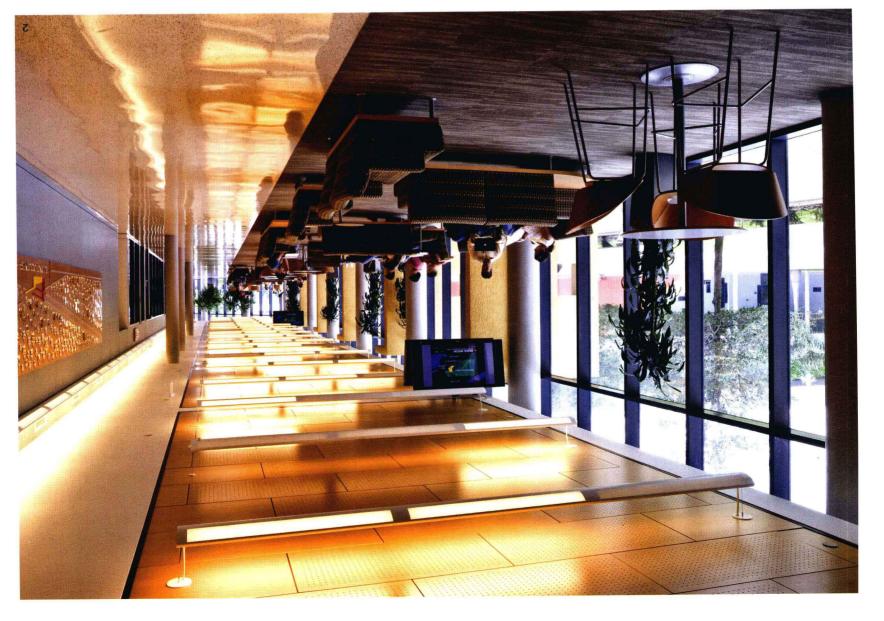
Site plan 总平面图

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Ground floor plan 图面平ヨー



公共交通 效室 数息室 外生生林间 学生林间 活态公室 无态公室









- 1 Multipurpose facility
  2. Multipurpose facility
- 3. Classroom
- 1. 多功能厅 2. 多功能厅 3. 教室

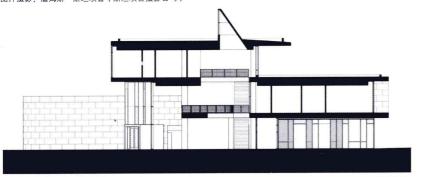
### 拉波维兹工商与经济学院 Economics

## 明尼苏达州大学德卢斯分校 Labovitz School of Business and

University of Minnesota, Duluth

Architect: Perkins+Will Location: Duluth, Minnesota, USA Completion: 2008 NFA: 6,200 m<sup>2</sup> Photography: James Steinkamp / Steinkamp Photography

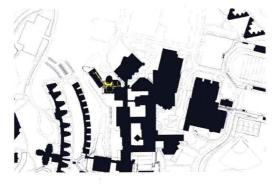
建筑设计:珀金斯+威尔建筑事务所 项目地点:美国 明尼苏达州 德卢斯 建成时间:2008年 实用面积:6200平方米 图片摄影: 詹姆斯・斯坦坎普 (斯坦坎普摄影公司)



Section 剖面图



Structural analysis 结构分析图



总平面图

The existing campus of the University of Minnesota Duluth was organised around a series of connected classroom buildings along a north-south axis. The resulting mega-building, while succeeding in providing protection from harsh northern Minnesota winters, failed to create separate identities for the various schools housed within. The new Labovitz School of Business and Economics, positioned at the north end of the campus, shifts to an east-west axis in order to give more definition to the campus, especially as it is approached from the north. It also begins to define a quadrangle between the academic buildings to the east and residential buildings to the west.

The various programmatic components of the building are articulated both in their massing and their material expression. A two-storey base of administrative and instructional spaces, clad in weathering steel, slips under two horizontal floating concrete planes that define the faculty offices. The offices extend over Kirby Drive where the concrete wraps down to the ground to form a gateway to the campus. Entry to the building is from the north, into a glazed two-storey lobby that is the space between an elliptical auditorium and administration and instructional spaces. A three-storey circulation spine connects the lobby and existing buildings to the south.

The building's material palette of weathering steel and exposed concrete evokes Duluth's industrial history.

明尼苏达州大学德卢斯分校原校区的布局主要是沿南北轴分布的一系列教学楼。这个巨大的建筑群虽然能 够抵御明尼苏达州北部冬季的严寒,但却不能让其中各个学院的建筑体现自身的特征。新的拉波维兹工商 与经济学院坐落在校园北端,转而采取东西向轴线,让校园景致更加丰富多彩,而且该建筑还是从北面进 入,这就更强化了这层含义。这座建筑同东边的教学楼和西边的住宅楼一起,界定出一个四边形院落。 这座建筑包含多种功能用房,这从其体量和材料上都能体现出来。底层是两层的管理和教学空间,采用耐 候钢覆层,上面是两层的混凝土楼板,是教职工办公室。办公区跨越柯比车道,水泥板在车道处向下延伸 至地面,形成进入校园的一个大门。这座建筑的入口朝北,从入口进入一个玻璃幕墙的大厅,高两层,介 一座椭圆形礼堂和管理、教学空间之间。一条三层高的交通走道将大厅和南面的原有建筑连接起来。 这座建筑选取的材料,包括耐候钢和外露的混凝土,体现了德卢斯的工业历史。

World Architecture News, Design Award for Education, 2010

2010年《世界建筑新闻》教育类建筑设计奖



3. Front view











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