QINGLONGHU FOOTHILL STRATEGY

Peri-urban Development Alternatives for Southwest Beijing

浅山区城市发展战略 北京西南部青龙湖案例与启示

Kongjian Yu, Adrian Blackwell, and Stephen Ervin Edited by Xiaoxuan Lu and Anne Clark Baker

> 俞孔坚 阿德里安・布莱克韦尔 斯蒂芬・欧文 著 陆小璇 安妮・贝克 編辑

A Studio Research Report from the Harvard University Graduate School of Design Departments of Landscape Architecture and Urban Planning and Design, Autumn 2012

哈佛大学设计学院景观建筑与都市计划设计系研究报告 2012年秋

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图书在版编目 (CIP) 数据

浅山区城市发展战略 北京西南部青龙湖案例与启示/俞孔坚等著. 北京:中国建筑工业出版社,2012.12 ISBN 978-7-112-14851-6

I. ①浅… Ⅱ. ①俞… Ⅲ. ①山地-城市发展战略-研究-北京市 IV. ① F299.271

中国版本图书馆 CIP 数据核字 (2013) 第 001231 号

责任编辑:郑淮兵 杜一鸣责任校对:张颖刘钰

浅山区城市发展战略 北京西南部青龙湖案例与启示

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中国建筑工业出版社出版、发行(北京西郊百万庄) 各地新华书店、建筑书店经销 北京嘉泰利德公司制版 北京方嘉彩色印刷有限责任公司印刷

开本:889×1194毫米 1/20 印张:6 字数:240千字 2013年1月第一版 2013年1月第一次印刷 定价:48.00元 ISBN 978-7-112-14851-6

(22903)

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The research of this studio would not have been possible without the generous support of the Harvard China Fund, which sponsored the travel of GSD professors and students to Beijing during February of 2012. Among the profound and rich experiences afforded by this funding were collaboration with professors, experts, and students from Peking University; meetings with Chinese planning and municipal officials; and access to the region and people of Qinglonghu. We appreciate the warm welcome and careful attention we were given by the many people we met on our travels, especially Dan Chen, Yungho Chang, Wang Shaogun, Ji Xianjiang, Zhao Zhen, Bao Dong, Rong Weijun, Lin Zhu, Man Yanyun, Zhang Tianxin, Han Xili. We are grateful to Professor Wu Honglin and the PKU students for their informative ideas and warm welcome; and to the office of Turenscape, which provided invaluable logistical and material support. At the GSD, Dr. Steven Handel spoke with us about ecological considerations; and visiting scholar Wang Fang provided valuable feedback and explained nuances of Chinese settlement in hilly landscapes. We thank Professors Andrea Hansen, Felipe Correa, Anita Berrizbeitia, Jane Hutton, Homa Farjadi, Michael Hooper, Mark Mulligan, Jason Lee and lan Lockwood for the expert insights they brought to our midterm and final reviews. Finally we thank Rahul Mehrotra, Charles Waldheim and Dean Mohsen Mostafavi for supporting this studio at the GSD.

All photos, unless noted otherwise, taken by the following: Anne Clark Baker, MLA (HARVARD GSD) Emily Gordon, MLA (HARVARD GSD) Kongjian Yu, Professor of Landscape Architecture (PKU) Xiaoxuan Lu, Teaching Fellow (HARVARD GSD)

The Harvard University Graduate School of Design is a leading center for education, information, and technical expertise on the built environment. Its departments of Architecture, Landscape Architecture, and Urban Planning and Design offer masters and doctoral degree programs and provide the foundation for Advanced Studies and Executive Education programs.

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本次设计课程的成功要感谢哈佛中国基金为哈佛设计学院的 教授和学生们 2012 年 2 月的北京之行提供的慷慨资助。在基金 的支持下, 我们的北京之行获得了丰富而难忘的经历, 其中包括 与北京大学的教授、专家与同学们的交流合作;与中国规划机构、 市政官员之间的多次会议和讨论;前往青龙湖地区了解当地的风 土文化。我们要感谢在北京之行的过程中给予我们热心帮助的人 士,其中包括汪少群、冀显江、赵圳、鲍栋、荣维俊、林竹、满 燕云、张天新、韩西丽。我们要特别感谢武弘麟教授以及北大学 生给予我们的热烈欢迎, 以及在整个过程中为我们提供的宝贵信 息;感谢北京土人景观与建筑规划设计研究院给予我们的无论是 后勤还是物质上的大力支持。哈佛大学设计学院的 Steven Handel 博士为我们耐心讲解生态设计理念;哈佛大学访问学者汪芳老师 在整个设计课程的过程中给予我们宝贵的回馈,并为我们细致地 解释了中国山区村落的特点。我们感谢 Andrea Hansen、Felipe Correa, Anita Berrizbeitia, Jane Hutton, Homa Farjadi, Michael Hooper、Mark Mulligan、Jason Lee, 以及 Ian Lockwood 等教授 在设计课的期中汇报、期末汇报中给予的专业而独到的见解。最 后,我们要感谢哈佛大学设计学院规划系系主任 Rahul Mehrotra, 景观系系主任 Charles Waldheim 以及设计学院院长 Mohsen Mostafavi 对这次设计课的大力支持。

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哈佛大学设计学院是建成环境界教育、信息和技术的顶级机构,下设建筑系、景观设计系和城市规划设计系,提供硕士和博士学位课程,以及进修学习和实践教学的机会。

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Contents

Afterword / Stephen Ervin 后记/史蒂芬·欧文

116

目录

04	Acknowledgements 致谢
-12	Foreword / Homa Fardjadi 序言 / 奥玛·法贾迪
16	Studio Introduction / Adrian Blackwell 课程简介 / 阿德里安·布莱克韦尔
20	The Foothills Strategy: Finding Places for China's 500 million New Migrants / Kongjian Yu 浅山区战略: 为中国 5 亿新移民寻找家园 / 俞孔坚
24	Growth of Beijing 北京的城市扩张
28	Qinglonghu Township 青龙湖镇概况
30	Qinglonghu in Context 青龙湖镇区域背景
32	Site Analysis 场地分析
34	Land 十地
36	Biota 生物
38	Water 水文
40	People 人文
42	Infrastructure 基础设施
44	Settlements 聚落
46	Regional Strategies 区域规划方案
48	Conserving and Projecting Socially Responsive Frameworks for China's Urbanization / Terry Fitzpatrick, MLA, Meg Howard, MUP 保护和展望 响应社会需求的中国城市化发展框架 / 特里·菲茨帕特里克,MLA、麦格·霍华德,MUP
58	City as Reservoir / Anne Clark Baker, MLA, Evy Zwiebach, MUP 水库城市/安妮·贝克,MLA、艾薇·茨维巴克,MUP
68	Moving Centers / Shared Lines / Savina Romanos, MAUD, Daia Stutz, MLAUD 移动的中心 / 共享的轴线 / 赛维娜·罗曼斯,MAUD、狄亚·施图茨,MLAUD
78	Urban/Rural Integrating New Urbanization with the Rural Fabric of Qinglonghu / Alexia Friend, MAUD, Victor Perez-Amado, MArch 城市/乡村 与乡村肌理相交织的青龙湖新城市化 / 亚历克西亚·弗伦德,MAUD、维克托·皮亚赛门德,MArch
88	Capacity and Passage Water-based Urbanism in the Foothills / Eduardo M. Llinás-Meseguer, MAUD, Amy Whitesides, MLA 水资源承载力与径流收集系统 以水系统为引导的浅山区城市化过程 / 爱德华多·莱纳斯,MAUD、艾米·怀特赛兹,MLA
98	Neo-Mining Reconstituting the Foothills of Beijing for Peri-Urban Growth / Emily Gordon, MLA, Carmen Martinez, MLA 新型采矿 重构北京浅山区城郊生长模式 / 艾米丽·戈登,MLA、卡门·马丁内斯,MLA
110	Collaboration and Site Visit 合作与调研





Foreword LANDSCAPE - URBANIZING CHINA MODELS FOR A HIGH DENSITY PASTORAL CITY

That modernization needs urbanization is not questioned in China today - it is understood as a given. Though the first wave of modernization focused on industrial productivity, Mao described cities with smoking chimneys as the industrial heartbeat of the nation. In the current wave, it has been the fact of cities: their agglomeration of globalized commerce and exchange that is the country's measure of its modernity. In a society which has already housed more than 1/3 of its population in 100 cities with over one million inhabitants, a figure that will double in the next generation, it is critical to ask what could be the generative methods and critical criteria for the ecological design of metropoles nationwide? Since the speed of development during the first 30 years did not leave much room for critical rethinking of urban planning models, with grave ecological consequences for the country, it is a welcome hypothesis that this studio poses: recognizing research in urban ecologies as the key to 'design for survival'.

Methods favored by landscape urbanism have made a strong case for considering rural strategies to establish ecological patterns for development. The Foothills Strategy, Professor Kongjian Yu's proposal for a new approach to urbanization in China, maps one such future for Qinglonghu, in the Fangshan District, southwest of Beijing. The brief proposes to preserve the remaining productive coastal plains for agriculture while occupying the foothills. This proposition that the foothills could be part of a pattern of high density mega cities, connected by high-speed rail transportation, makes this concept distinct from current European models of pastoral urban form and land use, with their limits on density. Here the strategy does not question the inevitable growth of large megalopolis, but suggests to further agglomerate satellite cities totaling 30 million more inhabitants for Beijing - with feasible models for their expansion into a necklace of mega cities with organizational ecologies that generate new high density pastoral urban formations.

Spatial planning is led by the performance analysis of topographic form, water resource management, existing biota, and typologies for urban infrastructures, such that patterns of the collection and distribution of essential urban resources, such as water, lead the development of urban form. While planning for 30 million more residents within the territory of the Beijing Municipality, a new rural urban form finds dynamic strategic coincidences in the studio projects. Generating new patterns for urban density students are invited to consider new urban typologies in their landscape ecologies, topographic landforms and other geographic particulars, and to imagine their new potential urban locality.

In one project the students imagined a new urban form well connected by high-speed transit to the rest of the mega city,

序言 中国的景观都市化 高密度的田园型城市发展模型

城市化是中国现代化发展中的必然经历。虽然第一波的现代 化过程强调的是工业生产力,如毛泽东所描述的,烟囱林立的城 市是一个国家跳动的脉搏,但是当今的潮流则以城市为主导,全 球化商业和贸易的聚集程度成为衡量一个国家现代化的标准。中 国目前有三分之一以上的人口集中在拥有百万以上人口的 100 多 个城市中,这一数据在下一个世纪预计将翻倍增长。在这种情况 下,我们应该思考的是,应该以什么样的评判准则作为在全国 范围内的生态化设计标准。中国现代化进程急速发展的前 30 年, 没有给予都市发展模式批判性的重新思考的空间,而在面临着全 国范围内生态环境恶化的今天,这一设计课程所提出的设计宣言 是如此珍贵,对"都市生态学"的认知将成为实现"设计是生存 的艺术"这一理念的关键。

景观都市主义的一系列理念为本设计课所提出的"通过郊区发展策略进而建立生态安全格局"的想法提供了强有力的支持。 "浅山战略"是俞孔坚教授提出的中国都市化设计的一个新途径。 以该战略为前提,本设计课程为位于北京西南部房山区的青龙湖镇提出了未来发展的蓝图。设计提纲中提出通过发展浅山区以达到保护中国东部平原地区宝贵农业用地的设想。通过高速铁路连接,浅山地区可以成为高密度的大都市发展格局的有效组成部分。这一基于中国国情的发展战略,与田园式的低密度欧洲城市格局及土地利用模式有本质上的区别。这项战略在顺应不可避免的大都市规模扩张的基础上,建立了全新的高密度田园型城市格局的可行性模型。拥有良好生态体系的一个个浅山卫星城,能够为 3000 万城市新移民提供家园,并将成为大都市发展的新的组成部分。

空间规划设计以对场地的地形地势、水资源管理模式、既存生态体系,以及都市公共基础设施建设类型的分析调研为依据,进而使得都市资源的收集和分配模式,如水资源的收集和分配,成为引导都市发展格局的基准和原则。在思考如何进行规划设计,从而为北京市潜在的 3000 万新城市移民提供家园的同时,我们可以看到同学们所提出的一系列设计方案,在展现动态的多种多样的模式的同时,也在某种程度上以探索新的郊区化都市模型为共同基础。在探索高密度的城市发展新格局的同时,设计课的设置鼓励同学们基于景观生态学、地形地貌特征等来思考新的都市发展模式以及它们可能的基于都市发展背景的新时代潜力。

一位学生的方案提出,在利用高速轨道使浅山城市与大都市 带相连的前提下,应有效地利用工业矿区遗址,以进行土地修复



and proposed to maintain its industrial mining sites, for some time, slowly remediating these sites for orchards and recreational uses, to create a syncopated temporal dynamics in a hybrid of industry and agriculture. Another projected new forms grey—water purification wetlands combined with public spaces, in relation to a sequence of public waterways that organized its urban form. These special projects succeeded in going beyond familiar models of urban design and used performative conditions of resource management to organize and shape hybrid urban spaces, revealing a new dynamic pastoral city formation.

This studio has brought together the inspirational input of a richly diverse group of students and professors. The mix of students from departments of landscape architecture, urban planning and design as well as architecture formed collaborative groups. Faculty with focused interest around problematics of urban planning and urban landscape lead the studio. Professor Kongjian Yu, Dean of the Graduate School of Landscape Architecture, Peking University, shared his knowledge of traditional and emerging issues in Chinese urbanization. Adrian Blackwell, a visiting critic in landscape architecture and urban planning from the University of Toronto, artist and urban designer, offered his deep professional knowledge of China's development and design culture, Stephen Ervin, lecturer in the department of Landscape Architecture at the GSD and Director of GSD's Computer Resources department, brought special interest in the applications of computing and information technology in design and planning to the studio.

This publication collects the creative effort of the students and their instructors in addressing very timely issues in the design of new cities in China. However it also registers a more general current concern with topics of interest in landscape urbanism's design strategies and methodologies for ecological urbanism of what I understand to be a paradigmatic high density pastoral city.

The privilege of such diverse and focused instruction must remain valuable for the students who participated in the studio, and a treat for those of us who witnessed their dynamic creative minds at work.

Homa Fardjadi

Principal Fardjadi Architects Professor in Practice of Architecture University of Pennsylvania 过程,同时要发展果园经济及其他休闲设施,创造一个工业与农业相互交织的动态发展过程。在另一个方案中我们可以看到,该学生设计了一种结合中水净化湿地与公共休憩空间的都市新景观,同时提出了以公共水系统为空间布局基础的城市发展新格局。这些与众不同的设计方案,或通过提出超越了我们所熟悉的传统都市设计模式,或通过利用资源管理的功能性进行动态城市空间的组织,从而拥有宝贵的创新价值,展现了一幅"田园型城市化"的新图景。

本次设计课程成功地将拥有不同专业背景学生和教授的富有启发性的思想集结到一起:来自景观建筑专业、城市规划专业以及建筑设计专业的同学们组成了这次的联合设计小组;从不同角度来探讨、关注当代城市规划与都市景观的专业人士和教授们组成了本次设计课的指导团队。北京大学建筑与景观设计学院院长俞孔坚教授与大家分享了他对于中国传统以及正在发生的一系列中国城市化问题的思考与研究。来自多伦多大学的景观与都市规划评论家阿德里安·布莱克韦尔(Adrian Blackwell)在设计课的全过程中与大家分享了他对于中国城市化、设计文化的独到而专业的见解。哈佛大学设计学院景观建筑专业讲师、计算机中心负责人斯蒂芬·欧文(Stephen Ervin)则在如何将计算机和信息技术应用在设计与规划方面给予了同学们很多指导。

这本书集结了学生和老师们的创造性和心血,适时地提出了对中国新城市发展过程中的一系列问题的独到见解。更重要的是,本书中展现的"高密度田园型都市模型"是对当前"景观都市学"中对于"生态都市主义"这一议题的设计方式与方法的一次热烈探讨。

本次设计课程所具有的多元而又专注的讨论与专业指导,必 将成为所有参与此课程的学生们的宝贵财富。同时,作为见证这 次课程的旁观者,我们必将从这些富有活力和创造性思维的成果 中受到感染和启迪。

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