

目录

主编寄语

- 4 俞孔坚 / 警惕智能工具的陷阱

论文

- 8 龙瀛 / (新)城市科学: 利用新数据、新方法和新技术研究“新”城市
22 张昭希, 龙瀛 / 穿戴式相机在研究个体行为与建成环境关系中的应用
38 李复, 常贺星 / 无人机测量在景观设计科研与实践中的应用
55 韩依纹, 张舒, 殷利华 / 大都市区绿地碳储存能力及其空间分布特点探究: 以韩国首尔市为例

观点与评论

- 66 姜斌 / 九问: 浅论新科技对城市环境规划与设计的影响
76 何宛余 / 竞争、并存与共赢——智能设计工具与人类设计师的关系
84 埃米莉·施里克曼 / 走向远方: 新工具与新技术在景观设计领域的应用测试
92 罗亚丹 / 从交通基础设施到绿色基础设施——无人驾驶城市中的柔性未来道路

主题实践

- 100 蕾娜·约翰逊, 法比奥·杜阿尔特, 卡洛·拉蒂 / Roboat: 阿姆斯特丹自动船系统
112 王腾, 茅明睿, 崔博庶 / 规划设计智能化调研工具——“猫眼象限”调研分析系统的特点与应用
121 刘祎绯, 牟婷婷, 黄子薇, 哈日桂 / 北京什刹海金丝套滨水空间的视觉感知意象研究与眺望景观优化策略
132 程娇华, 沈振江 / 基于增强现实的规划支持工具: 以建筑形态合规性检验为例

探索与过程

- 144 陆小璇 / 科技的人性化演进
146 索尼娅·贝查尔特 / 坦桑尼亚农用无人机
153 皮娅·弗里克 / 推进沉浸式数据交互的虚拟现实技术

主编 俞孔坚 / **执行主编** 李迪华 / **执行副主编** 王志芳、李明翰、许立言 / **名誉编委** 程绪珂、崔愬、冯宗炜、何镜堂、蒋有绪、金鉴明、李文化、陆大道、马国馨、彭一刚、齐康、任南琪、吴良镛、张廷皓 / **国际编委** 杰克·埃亨、亨利·巴瓦、凯瑟琳·布尔、加雷斯·多尔蒂、戴佛·加兹瓦达、克里斯蒂娜·希尔、伊丽莎白·K·梅尔、帕特里克·A·米勒、玛丽·帕多瓦、玛姬·罗、马里奥·谢赫南、安妮·惠斯顿·斯本、弗雷德里克·斯坦纳、卡尔·斯坦尼兹、安琪·施托克曼、罗伯特·L·塞耶 / **编委** 鲍家声、包满珠、包志毅、蔡强、车生泉、车伍、陈军、陈其兵、陈同滨、成玉宁、杜春兰、段进、樊杰、高翅、顾朝林、郭旃、韩林飞、韩西丽、洪铁城、李津逵、李树华、李炜民、李雄、林珲、刘滨谊、刘晖、刘克成、卢济威、吕斌、吕勤智、孟宪民、欧阳志云、庞伟、邱建、邵健、宋文沛、谭徐明、汪芳、王浩、王建国、王澍、王向荣、王仰麟、吴文媛、吴志强、谢纯、许大为、杨保军、杨锐、叶强、余柏椿、于长江、张天新、赵辰、郑伟元、周志辉、朱育帆、宗跃光

出版社 / 责任编辑 张羽 / **地址** 北京市朝阳区惠新东街4号富盛大厦15层(100029) / **网址** journal.hep.com.cn / **电话** 0086-10-5855 6485 / **编辑部 / 本期学术召集人** 龙瀛 / **编辑部主任** 余依爽(兼本期内容编辑) / **责任编辑** 田乐 / **编辑** 汪默英、王颖、田晓虹、王胤瑜、萨拉·雅各布斯(兼)、张健(兼) / **探索与过程专栏编辑** 陆小璇 / **美术指导** 王江 / **美术编辑** 陈丽丽 / **海外编辑** 姜斌 / **地址** 北京市海淀区中关村北大街127-1号北大科技园303-3室(100080) / **电话** 0086-10-6274 7821 / **电子邮箱** lafrontiers@foxmail.com / **网站** www.lafontiers.com  @景观设计学LAFrontiers / **支持机构** 中国城市科学研究院景观学与美丽中国建设专业委员会 景观中国网站 www.landscape.cn  @景观中国网 / **运营** 余依爽、王秀丽 / **运营咨询** 0086-10-6274 5785 / **订阅咨询** 0086-10-6274 7841 / **广告经营许可证号** 京西工商广字第0430号 / **印刷** 北京雅昌艺术印刷有限公司 / **国内发行** 北京怡然置业装饰设计书店 / **国际发行** 中国国际图书贸易总公司 / **邮发代号** 80-985 / **定价** RMB 58.00 HKD 100.00 TWD 450.00 USD 40.00 EUR 35.00

目标与范围

《景观设计学》定位于景观设计的学术研究与设计实践的交叉领域，探讨如何通过景观设计学途径，探索解决中国和世界生态与环境问题的新观念、新理论和新方法；通过介绍和推广前沿景观设计实践，倡导有助于实现美丽中国与美丽地球的新美学和新文化；架设研究与社会需求之间的桥梁、科学与艺术之间的桥梁，引领当代景观设计学科的发展。读者群为相关领域的科研人员和专业实践群体、院校师生、决策者和广大城乡环境的建设者。

Aims and Scope

Landscape Architecture Frontiers puts its focus on the intersecting spheres of academic research and design practice in landscape architecture, discussing new opinions, theories, and approaches to address environmental and ecological issues through landscape architecture; advocating new aesthetics and new culture which benefit the beauty of China and the world by introducing and promoting most recent practice of landscape architecture. It acts as a bridge connecting research and social needs, science and art, leading the development of the discipline. Our audience includes researchers and professional architects, faculties and students, policy makers in related fields, and people who work on the environmental constructions in both urban and rural areas.

本刊保留所有刊载文章及图片的文字、电子、网络版的专有出版权，未经许可，任何人不得以营利为目的复制、转载、摘编、改编、翻译、注释、整理、编辑等，本刊保留对侵权者采取法律行动的权利。

All rights reserved. The contents should not be reproduced in any form, either in whole or in part, without written permission from the editorial department. The publisher has attempted to trace and acknowledge all sources for images used in this magazine, and we apologize for any errors and omissions.

CONTENTS

EDITORIAL

- 4 YU Kongjian / To Be Alarmed by the Trap of Intelligence Tools

PAPERS

- 8 LONG Ying / (New) Urban Science: Studying “New” Cities with New Data, Methods, and Technologies
22 ZHANG Zhaoxi, LONG Ying / Application of Wearable Cameras in Studying Individual Behaviors in Built Environments
38 LI Fu, CHANG Hexing / UAV Measurement in Landscape Architecture Research and Practice
55 HAN Yiwen, ZHANG Shu, YIN Lihua / Quantifying the Carbon Storage Capacity and Its Spatial Distribution Patterns of Green Spaces in A Metropolitan Area: A Case Study of Seoul, South Korea

VIEWS & CRITICISMS

- 66 JIANG Bin / Nine Questions toward Influences of Emerging Science and Technology on Urban Environment Planning and Design
76 HE Wanyu / From Competition, Coexistence to Win-Win — Relationship between Intelligent Design Tools and Human Designers
84 Emily SCHLICKMAN / Going Afield: Experimenting with Novel Tools and Technologies at the Periphery of Landscape Architecture
92 LUO Yadan / From Transportation Infrastructure to Green Infrastructure — Adaptable Future Roads in Autonomous Urbanism

THEMATIC PRACTICES

- 100 Lenna JOHNSEN, Fábio DUARTE, Carlo RATTI / Roboat: A Fleet of Autonomous Boats for Amsterdam
112 WANG Teng, MAO Mingrui, CUI Boshu / Cat’s Eye — An Intelligent Investigation Tool for Urban Planning and Design
121 LIU Yifei, MOU Tingting, HUANG Ziwei, HA Rigui / Research on Visually Perceived Image and Strategies for Vista View System Improvement of the Jinsitao Waterfront of Shichahai in Beijing
132 CHENG Jiaohua, SHEN Zhenjiang / Planning Support Tool for Checking Building Form Legality with Augmented Reality

EXPERIMENTS & PROCESSES

- 144 LU Xiaoxuan / The Humanization of Technology
146 Sonja BETSCHART / Drones for Agriculture in Tanzania
153 Pia FRICKER / Virtual Reality for Immersive Data Interaction

CHIEF EDITOR | YU Kongjian **EXECUTIVE CHIEF EDITOR |** LI Dihua **ASSOCIATE DIRECTORS |** WANG Zhifang, LI Ming-Han, XU Liyan **HONORARY EDITORIAL BOARD |** CHENG Xuke, CUI Kai, FENG Zongwei, HE Jingtang, JIANG Youxu, JIN Jianming, LI Wenhua, LU Dadao, MA Guoxin, PENG Yigang, QI Kang, REN Nanqi, WU Liangyong, ZHANG Tinghao **INTERNATIONAL EDITORIAL BOARD |** Jack AHERN, Henri BAVA, Catherine BULL, Gareth DOHERTY, Davor GAZVODA, Kristina HILL, Elizabeth K. MEYER, Patrick A. MILLER, Mary PADUA, Maggie ROE, Mario SCHJETNAN, Anne Whiston SPIRN, Frederick STEINER, Carl STEINITZ, Antje STOKMAN, Robert L. THAYER **EDITORIAL ADVISORY BOARD |** BAO Jiasheng, BAO Manzhu, BAO Zhiyi, CAI Qiang, CHE Shengquan, CHE Wu, CHEN Jun, CHEN Qibing, CHEN Tongbin, CHENG Yunling, DU Chunlan, DUAN Jin, FAN Jie, GAO Chi, GU Zhaolin, GUO Zhan, HAN Linfei, HAN Xili, HONG Tiecheng, LI Jinkui, LI Shuhua, LI Weimin, LI Xiong, LIN Hui, LIU Binyi, LIU Hui, LIU Kecheng, LU Jiwei, LV Bin, LV Qinzhi, MENG Xianmin, OUYANG Zhiyun, PANG Wei, QIU Jian, SHAO Jian, SONG Wenpei, TAN Xuming, WANG Fang, WANG Hao, WANG Jianguo, WANG Xiangrong, WANG Yanglin, WU Wenyuan, WU Zhiqiang, XIE Chun, XU Dawei, YANG Baojun, YANG Rui, YE Qiang, YU Baichun, YU Changjiang, ZHANG Tianxin, ZHAO Chen, ZHENG Weiyuan, ZHOU Zhihui, ZHU Yufan, ZONG Yaoguang

PUBLISHER | EXECUTIVE EDITOR ZHANG Yu ADD 4 Huixin Dongjie, Beijing 100029, China **WEBSITE** journal.hep.com.cn **TEL** 0086-10-5855 6485 **EDITORIAL OFFICE |** ACADEMIC CONTRIBUTOR TO THIS ISSUE LONG Ying **EDITORIAL DIRECTOR** SHE Yishuang (Editor-in-charge of this issue) **EXECUTIVE EDITOR** Tina TIAN **EDITORS** WANG Moying, WANG Ying, TIAN Xiaoqie, WANG Yinyu, Sara JACOBS, Angus ZHANG **COLUMN HOST OF EXPERIMENTS AND PROCESSES** LU Xiaoxuan **ART DIRECTOR** WANG Jiang **GRAPHIC DESIGNER** Lily CHEN **OVERSEAS EDITOR** JIANG Bin ADD Rm. 303-3, Peking University Science Park, 127-1 Zhongguancun North Street, Haidian District, Beijing (100080) **TEL** 0086-10-6274 7821 **EMAIL** lafrontiers@foxmail.com **WEBSITE** www.lafrontiers.com **SUPPORTING ORGANIZATIONS |** The Committee of Landscape Architecture, Chinese Society for Urban Studies (CLA) www.landscape.cn **OPERATION TEAM |** SHE Yishuang, WANG Xiuli **BUSINESS INQUIRIES |** 0086-10-6274 5785 **SUBSCRIPTION INQUIRIES |** 0086-10-6274 7841 **PRINTED BY** Beijing Artron Colour Printing Co., Ltd. **GENERAL AGENCY IN CHINA |** Beijing Yiran Bookshop **GENERAL AGENCY ABROAD |** China International Book Trading Corporation **PRICE |** RMB 58.00 HKD 100.00 TWD 450.00 USD 40.00 EUR 35.00