

2 0 2 0 1 2

世界建筑

World Architecture

# 世界建筑

## 202012 | 366

世界建筑 (月刊) 1980 年10 月创刊  
World Architecture (Monthly) Founded in 1980

国内统一刊号/NATIONAL PUBLICATION NO.:  
CN 11-1847/TU  
国际标准刊号/INTERNATIONAL STANDARD PUBLICATION NO.:  
ISSN 1002-4832

主管: 中华人民共和国教育部  
主办: 清华大学  
协办: 北京清华同衡规划设计研究院有限公司, 北京市建筑设计研究院有限公司

社长: 尹稚  
副社长: 边兰春, 赵景昭

主编: 张利  
副主编: 周榕, 青锋  
主编助理: 范路

采编中心  
主任: 叶扬, 项琳斐  
编辑: 项琳斐, 叶扬, 王欣欣, 天妮, 庞凌波, 潘奕  
编辑部: 闫媛, 蒋萤雪  
本期责编: 王欣欣, 潘奕  
本期特约英文审校: 刘亦师

运营中心  
总监: 潘芳  
广告部主任: 冯丙璋  
策划运营: 汪硕, 牛雨菲  
行政部: 林文晶, 芦颖

ADMINISTRATOR: Ministry of Education of the PRC  
SPONSOR: Tsinghua University  
COOPERATION: Beijing Tsinghua Tongheng Urban Planning & Design Institute, Beijing Institute of Architectural Design Co., Ltd.

PRESIDENT: Yin Zhi  
DEPUTY PRESIDENT: Bian Lanchun, Zhao Jingzhao

EDITOR-IN-CHIEF: Zhang Li  
DEPUTY EDITOR-IN-CHIEF: Zhou Rong, Qing Feng  
ASSISTANT EDITOR-IN-CHIEF: Fan Lu

EDITOR OFFICE  
DIRECTOR: Ye Yang, Xiang Linfei  
EDITOR: Xiang Linfei, Ye Yang, Wang Xinxin, Tian Ni, Pang Lingbo, Pan Yi  
EDITORIAL ASSISTANT: Yan Yuan, Jiang Yingxue  
EXECUTIVE EDITOR: Wang Xinxin, Pan Yi  
ENGLISH PROOFREADER: Liu Yishi

OPERATION OFFICE  
DIRECTOR: Pan Fang  
DIRECTOR OF ADVERTISING DEPT.: Feng Bingzhang  
PLANNING & OPERATION: Wang Shuo, Niu Yufei  
ADMINISTRATIVE DEPT.: Lin Wenjing, Lu Ying

出版: 世界建筑杂志社  
出版日期: 2020年12月18日  
地址: 北京清华大学建筑学院建筑馆北208  
邮编: 100084  
电话: 010-62785799/62781318  
投稿邮箱: contribution@wamp.com.cn  
合作信箱: cooperation@wamp.com.cn

网站: <http://www.wamp.com.cn>  
微博: <http://weibo.com/wamp>  
豆瓣小站: <http://site.douban.com/wamp/>  
微信公众账号: 世界建筑 或 WA\_magazine

国内发行: 北京市报刊发行局  
订阅: 全国各地邮局  
邮发代号: 2-191  
发行部电话: 010-62788125

广告部电话: 010-62788125  
广告许可证: 京海工商广字第0081号  
广告代理: 北京国龙时代广告有限公司

定价: 40元 (中国大陆), 40美元 (海外空运)  
开户银行: 招商银行北京清华园支行  
户名: 北京清大卓筑文化传播有限公司  
账号: 110921762010902

PUBLISHER: World Architecture Magazine Publications  
PUBLISHING DATE: 2020.12.18  
ADDRESS: Editorial Office of World Architecture, N-208, School of Architecture, Tsinghua University, Beijing 100084, China  
TEL: +86 10 62785799/62781318  
EMAIL: contribution@wamp.com.cn  
cooperation@wamp.com.cn

WEBSITE: <http://www.wamp.com.cn>  
MICRO-BLOG: <http://weibo.com/wamp>  
DOUBAN SITE: <http://site.douban.com/wamp/>  
WEIXIN(WECHAT) PUBLIC ACCOUNT: WA\_magazine

SUBSCRIPTION  
TEL: +86 10 62788125  
NATIONAL CIRCULATION BUREAU: Beijing Periodical Distribution Bureau  
NATIONAL CIRCULATION CODE: 2-191  
RATES: ¥ 40 (CHINA), US\$ 40 (OVERSEA)

ADVERTISING  
TEL: +86 10 62788125

©2020, World Architecture Magazine Publications All rights reserved. No part of this publication may be reproduced or published without the permission in writing of the publisher.

编委会  
编委会主任: 庄惟敏  
编委会委员 (以姓氏笔画为序): 马岩松, 马清运, 王方戟, 王昀, 王建国, 王辉, 王路, 支文军, 孔宇航, 朱小地, 朱文一, 朱锴, 朱颖心, 伍江, 华黎, 庄葵, 刘克成, 刘晓都, 刘家琨, 齐欣, 孙一民, 李东, 李兴钢, 李虎, 李晓东, 吴耀东, 余加, 沈磊, 张永和, 张利, 张轲, 张桦, 张颀, 张雷, 邵韦平, 范雪, 周畅, 周恺, 周榕, 单军, 孟建民, 孟岩, 胡越, 查金荣, 倪阳, 徐全胜, 常青, 黄居正, 黄艳, 梅洪元, 龚恺, 崔彤, 崔愷, 梁井宇, 葛家琪, 董卫, 董丹申, 董功, 曾坚, 赖德霖, Bruce Abbey, Jürgen Rosemann, Peter Rowe, Luca Molinari

协办机构  
清华大学建筑设计研究院  
浙江大学建筑设计研究院  
CCDI悉地国际  
上海日清建筑设计有限公司  
启迪设计集团股份有限公司  
大象建筑设计有限公司  
垣建筑设计工作室

版权声明: 本刊所有文章和图片均有版权, 未经书面许可不得以任何形式转载。本刊有权编汇作品内容、授权所刊内容收入国内外文献索引、文摘、全文数据库和出版网站, 具有信息网络传播权、数字出版权。如有异议, 请来稿时声明。本刊所使用方正字体经北京北大方正电子有限公司授权许可。

EDITORIAL COMMITTEE  
DIRECTOR: Zhuang Weimin  
MEMBERS (In alphabetical order): Bruce Abbey, Chang Qing, Cui Kai, Cui Tong, Dong Danshen, Dong Gong, Dong Wei, Fan Xue, Fang Zhenning, Ge Jiaqi, Gong Kai, Hu Yue, Hua Li, Huang Juzheng, Huang Yan, Kong Yuhang, Lai Delin, Li Dong, Li Hu, Li Xiaodong, Li Xinggang, Liang Jingyu, Liu Jiakun, Liu Kecheng, Liu Xiaodu, Ma Qingyun, Ma Yansong, Mei Hongyuan, Meng Jianmin, Meng Yan, Luca Molinari, Ni Yang, Qi Xin, Jürgen Rosemann, Peter Rowe, Shan Jun, Shao Weiping, Shen Lei, Sun Yimin, Wang Fangji, Wang Hui, Wang Jianguo, Wang Lu, Wang Yun, Wu Yaodong, Wu Jiang, Xu Quansheng, Yu Jia, Zeng Jian, Zha Jinrong, Zhang Hua, Zhang Ke, Zhang Lei, Zhang Li, Zhang Qi, Zhang Yonghe, Zhi Wenjun, Zhou Chang, Zhou Kai, Zhou Rong, Zhu Pei, Zhu Wenyi, Zhu Xiaodi, Zhu Yingxin, Zhuang Kui

COORDINATORS  
Architectural Design and Research Institute of Tsinghua University  
Architectural Design and Research Institute of Zhejiang University  
CCDI Group  
La Cime International Pte. Ltd.  
Tus-Design Group Co., Ltd.  
GOA  
Wall Architects

简讯	6	
资料集：亚洲以外的新冠疫情空间应对	8	<a href="#">BDP</a> 英国国家卫生署南丁格尔医院，英国
	16	<a href="#">柯尔-拉图雷勒-黑德建筑事务所</a> 临时校园，英国
	20	<a href="#">瓦斯科尼建筑事务所</a> 模块医院，土耳其
	24	<a href="#">Nurus集团</a> 新冠肺炎移动采样装置，安卡拉，土耳其
	28	<a href="#">阿尔珀·德林博阿兹沙龙建筑事务所</a> 生态交错带，伊斯坦布尔，土耳其
	32	<a href="#">卡洛·拉蒂及合伙人建筑事务所</a> 呼吸系统疾病整合病房，都灵，意大利
	38	<a href="#">医疗技术科学网络</a> 面向未来的医院，意大利
	40	<a href="#">安杰洛·伦纳建筑事务所</a> 圣西罗2.0：生命的丰碑，米兰，意大利
	44	<a href="#">Shift建筑及城市主义事务所</a> 封城中的超本地化微型市场，荷兰
	47	<a href="#">科西莫·斯科图奇建筑事务所</a> 动态物理距离装置，鹿特丹，荷兰
	50	<a href="#">奥普赛事务所</a> 柏林勃兰登堡机场新冠肺炎医院，柏林，德国
	54	<a href="#">Pinearq建筑设计集团</a> 应对新冠疫情的德尔马医院改造，巴塞罗那，西班牙
	58	<a href="#">罗赫金德建筑事务所</a> 哀悼宣言纪念碑，纽约，美国
	62	<a href="#">克莱姆森大学建筑学院</a> 可移动检测站建设指南，南卡罗来纳，美国
	67	<a href="#">美国SmithGroup建筑设计公司</a> 洛杉矶会展中心过载管理案例，加利福尼亚，美国
	70	<a href="#">戴维斯及合伙人建筑事务所</a> 科罗拉多会议中心——补充医疗设施，科罗拉多，美国
	74	<a href="#">斯坦泰克建筑设计有限公司</a> 彼得·洛希德中心医院新冠疫情临时应对设施，阿尔伯塔，加拿大
	76	<a href="#">阿纳莉亚·阿莫林</a> ， <a href="#">奇罗·皮隆迪</a> ， <a href="#">鲁本·奥特罗</a> 公共活动馆，圣保罗，巴西
	82	<a href="#">MCC集团</a> 用于治疗新冠肺炎的带隔离室移动门诊医院，利马，秘鲁
	86	<a href="#">医疗技术科学网络</a> ， <a href="#">霍尔格鲁彭公司</a> 新冠肺炎临时治疗中心，阿克拉，加纳
	89	<a href="#">医疗技术科学网络</a> 营地与类营地环境的新冠肺炎自我隔离设施，尼日利亚
	92	<a href="#">医疗技术科学网络</a> 全风险防范新冠肺炎治疗中心，布基纳法索
	94	<a href="#">米歇尔·迪马尔科</a> ， <a href="#">瓦莱丽娅·费德里吉</a> ， <a href="#">卢卡·丰塔纳</a> Téchne：面向新冠肺炎的多学科应答——来自非洲和欧洲的案例
记忆与再生	100	<a href="#">阿尔伯托·博洛尼亚</a> 基于“空间规划”的适应性再利用：荷兰蒂尔堡的“机车棚”图书馆
特别报道	104	<a href="#">谢少明</a> ， <a href="#">陈雄</a> 岭南建筑精髓的再诠释——珠海横琴保利中心设计解读
	107	<a href="#">王欣欣</a> 陈雄、谢少明访谈
	110	<a href="#">清华大学建筑设计研究院有限公司</a> ， <a href="#">gmp·冯·格康</a> ， <a href="#">玛格及合伙人建筑师事务所</a> 亚洲金融大厦暨亚洲基础设施投资银行总部永久办公场所，北京，中国
	117	访谈：亚洲金融大厦暨亚洲基础设施投资银行总部永久办公场所设计历程
工程实录	122	<a href="#">朱雄毅</a> 制造“阴影”——三亚海上艺术中心
	126	<a href="#">杨宝林</a> ， <a href="#">董轶聪</a> ， <a href="#">何俊乔</a> 匠心营造新时代园林景观建筑——北京温榆河公园朝阳示范区实践
	130	<a href="#">李晟</a> ， <a href="#">于明明</a> 基于西安地域文化的现代化表达实践——以西安绿地能源艺术中心为例
改进建筑60秒	134	<a href="#">张颂民</a> ， <a href="#">田莉</a>
读书	135	<a href="#">段威</a> ， <a href="#">洪人杰</a>
本期作者	136	
		封面图片： <a href="#">BDP</a> 封底摄影：一勺景观摄影

	6	WA Briefs
BDP NHS Nightingale Hospitals, UK	8	Potpourri: Spatial Solutions Under COVID-19 in Other Continents
Curl la Tourelle Head Architecture Pop-up Schools, UK	16	
VASCONI ARCHITECTES Modular Hospital, Turkey	20	
Nurus Group Mobile Sampling Unit for the Diagnosis of COVID-19, Ankara, Turkey	24	
Salon Alper Derinboğaz Ecotone, Istanbul, Turkey	28	
CRA-Carlo Ratti Associati CURA, Turin, Italy	32	
Téchné The Hospital of the Future, Italy	38	
Angelo Renna San Siro 2.0: Monumento per La Vita, Milan, Italy	40	
Shift architecture urbanism Hyperlocal Micro Markets in Shutdown Realities, the Netherlands	44	
Cosimo Scotucci Physx, Rotterdam, the Netherlands	47	
Opposite Offices COVID-19 Super Hospital BER, Berlin, Germany	50	
Pinearq Hospital Del Mar Conversion Due to the COVID-19 Pandemic, Barcelona, Spain	54	
Rojkind Arquitectos Mourning Claim, New York, USA	58	
School of Architecture, Clemson University Guidelines for the Establishment of Portable Points of Dispensing (PPOD), South Carolina, USA	62	
SmithGroup Los Angeles Convention Centre Overflow Management Study, California, USA	67	
Davis Partnership Architects Colorado Convention Centre: Alternative Care Facility, Colorado, USA	70	
Stantec Architecture Ltd. Peter Lougheed Centre Temporary COVID-19 Pandemic Response Unit, Alberta, Canada	74	
Anália Amorim, Ciro Pironi, Ruben Otero Social Pavilion, São Paulo, Brazil	76	
MCC Group Mobile Ambulatory Hospital With Isolation Rooms for COVID-19 Treatment, Lima, Peru	82	
Téchné, Hallgruppen Temporary COVID-19 Treatment Centre, Accra, Ghana	86	
Téchné COVID-19 Self-Quarantine Facility for Camps and Camp-Like Settings, Nigeria	89	
Téchné COVID-19 Treatment Centre Resilient to All-Hazard, Burkina Faso	92	
Michele Di Marco, Valeria Federighi, Luca Fontana Téchné: A Multidisciplinary Answer to the COVID-19 Response – Some Cases from Africa and Europe	94	
Alberto Bologna Adaptive Reuse Through "Raumplan": LocHal in Tilburg, the Netherlands	100	Memory and Regeneration
XIE Shaoming, CHEN Xiong Reinterpretation of the Essence of Lingnan Architecture: A Case Study on the Design of Zhuhai Hengqin Poly Centre	104	Special Reports
WANG Xinxin Interview with CHEN Xiong and XIE Shaoming	107	
Architectural Design and Research Institute of Tsinghua University Co., Ltd.; gmp Architects von Gerkan, Marg and Partners Asia Financial Centre and AIIB Headquarters, Beijing, China	110	
Interviews: Designing the Asia Financial Centre and AIIB Headquarters	117	
ZHU Xiongyi The Making of "Shadows": Sanya Maritime Art Centre	122	Projects in Reality
YANG Baolin, DONG Yicong, HE Junqiao Ingenuity to Create New Era Landscape Architecture: The Practice of Chaoyang Demonstration Area of Beijing Wenyu River Park	126	
LI Sheng, YU Mingming Modern Expression Practice Based on Xi'an Regional Culture: Take Xi'an Greenland Energy Art Centre as an Example	130	
ZHANG Songmin, TIAN Li	134	Sixty Second Idea to Improve Architecture
DUAN Wei, HUNG Jenchieh	135	Books
	136	Contributors
Cover Drawing: BDP Back Cover Photo: INSAW Image		



# 基于“空间规划”的适应性再利用：荷兰蒂尔堡的“机车棚”图书馆 Adaptive Reuse Through "Raumplan": LocHal in Tilburg, the Netherlands

阿尔伯托·博洛尼亚/Alberto Bologna

朱琳 译/Translated by ZHU Lin

记忆与再生

栏目主持：阿尔伯托·博洛尼亚，米凯利·博尼诺，皮埃尔-阿兰·克罗塞特

*Memory and Regeneration*

Column Editors: Alberto Bologna, Michele Bonino, Pierre-Alain Croset

新的“机车棚”文化中心位于荷兰蒂尔堡工业城的中心位置，毗邻最近刚经过现代化改造的主火车站。建在半空的铁轨从东到西将城市切成了两半，像一个不自然的人工地标一样融入城市形态，在南北之间形成了真正的物理分界。火车站南边的地区密集分布着三、四层的楼房，北边的地区正在进行大规模改造，各种类型的建筑分布在更广阔的城市空间中，一条供行人和自行车通行的地下通道系统将它们连接起来。

在车站旁边，铁轨之外，有一个刚刚翻新的大型开放区域为其提供服务，容纳有公共空间以及自行车和汽车的大型停车区。该地块主要是前荷兰铁路维修公司的车棚，建于1932年，用于组装、维修和储存机车，现已被改造成一个新的图书馆和公共聚会场所，用于举办活动和展览。它于2019年1月落成，由于在世界建筑节上获得了著名的“2019年度世界建筑奖”，而吸引了全世界媒体的高度关注。

由蒂尔堡市政府推动的该建筑的适应性再利用项目是各个建筑工作室之间有效合作的结果，每个工作室都对方案的复杂性和需要解决的设计问题都贡献了自己的具体专长。专门从事公共建筑的思维可建筑事务所承担了首席建筑师和总体协调的角色；以工业遗产项目而闻名荷兰的布拉克斯马及鲁斯建筑事务所负责整个项目的现有建筑的改造和修

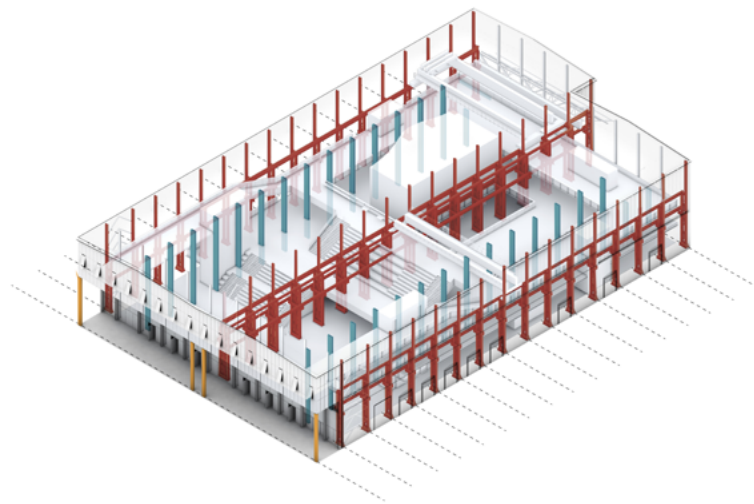
复。内外 / 佩特拉·布莱斯事务所是室内和景观设计方面的专家，并在装置方面有丰富的经验，他们负责室内的整体设计以及由独特的悬挂式织物隔断所限定的空间布置；梅卡努建筑事务所负责图书馆、各种车间空间、咖啡店和办公室的陈设；最后，奥雅纳公司提供了有关能源可持续性、材料再利用和声学设计等方面的技术和工程建议。

混合的功能将旧铁道工棚变成了一个供人们聚集的真正的城市空间。事实上，它战略性的选址——靠近车站且位于低密度地区，使它成为一个高识别度的社区中心，其任务是弥合架空铁路线造成的城市结构的物理分割。

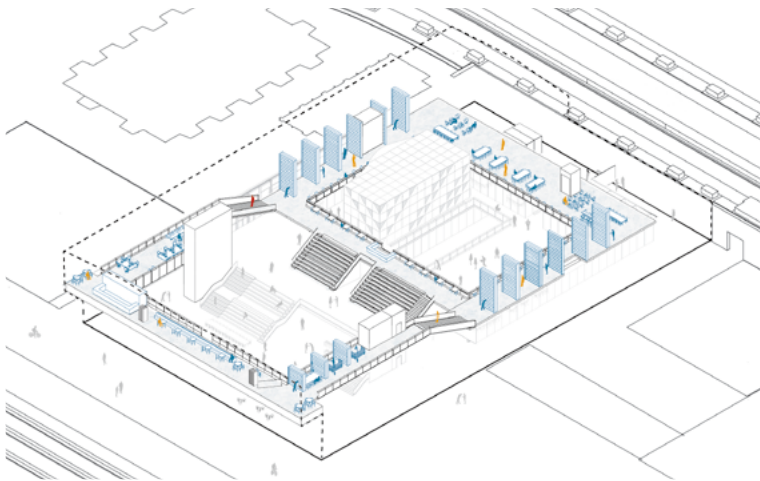
为实现这一目标，设计师们采用了哪些设计工具？主要的设计主题是分散的，因此，一个占地约5400m<sup>2</sup>（90m×60m）、高15m、分为两个中庭的大



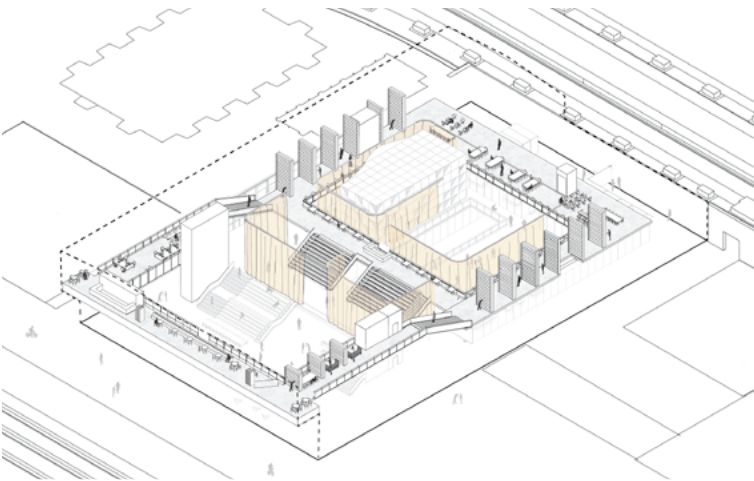
1



2



3



4

1 鸟瞰/Aerial View (摄影/Photo: Civic Architects)

2 旧的 (图中红色) 与新的 (图中蓝色) 承重结构/The old (in red) and new (in blue) load-bearing structure of the building

3 新楼板系统/The new system of floors

4 悬挂式移动织物屏风系统/The system of suspended, mobile textile screens

(2-4 绘制/Drawings: Civic Architects)

The new LocHal cultural centre is located centrally in the industrial town of Tilburg in the Netherlands, close to its main railway station, which has recently been modernised. The railway track, which runs from east to west axis, cuts the town right in half. Built overhead, it fits into the urban morphology like an unnatural, artificial landmark, creating a real physical division between north and south. A system of pedestrian and bicycle underpasses connects the area around the railway station to the south, densely characterised by three-four-storey buildings, with the area to the north, which is undergoing extensive transformation and where buildings of various types are distributed in a more widespread urban space.

Next to the station and serving it, but positioned beyond the tracks, there is now a large open area which has been recently renovated and houses public spaces and large parking areas for bicycles and cars. The site is dominated by the former Nedtrain shed which was built in 1932 for the assembly, repair and storage of locomotives and has been converted into a new library and public meeting place, designed to host events and exhibitions. It was inaugurated in January 2019 and has attracted considerable media attention from all over the world, thanks to the prestigious World Building of the Year 2019 award received at the World Architecture Festival.

The project promoted by the Municipality of Tilburg for the adaptive reuse of the building is the result of effective collaboration between various architectural studios, each contributing its own specific expertise to the complexity of the programme and the design issues to be addressed. A studio specialising in public architecture, Civic Architects, took on the role of lead architect and general coordination; Braaksma & Roos Architectenbureau, already known in the Netherlands for other industrial heritage project, was responsible for the overall project to transform and restore the existing parts of the building; Inside Outside/Petra Blaisse, experts in interior and landscape design with extensive experience in installations, managed the overall design of the interiors as well as the spatial configuration generated by the characteristic hanging textile partitions; Mecanoo is responsible for the furnishings of the library, the various workshop



5



6

spaces, the coffee shop and the offices; lastly, Arup provided technical and engineering advice on aspects relating to energy sustainability, the reuse of materials and acoustic design.

The functional mix transforms the old railway shed into a real urban space where people can gather. The fact that it is strategically located close to the station and in a low-density area makes it an easily recognisable place central to the neighbourhood, with the task of overcoming the physical division of the urban fabric caused by the overhead railway line.

What design tools have been put in place to achieve this aim? The main design theme is the distributive and, consequently, spatial resolution of a variegated series of functions to be housed inside a large existing volume of about 5400 square metres (90 m × 60 m), 15 metres high which is divided into two naves.

The effectiveness of the project can be summed up, according to the authors, in three actions: the exaltation and pragmatic reuse of the existing load-bearing structure, the "parasitic" inclusion of new volumes inside it, creating separate spaces for different uses and, above all, on different levels, so that they are visually and spatially connected and, lastly, a refined flexibility of the environments obtained thanks to the precise insertion of mobile textile partitions that can be used to create different planimetric and spatial configurations, if necessary.

The spatial quality of the new project is based on the recognition of the aesthetic potential of the existing structural system: a large steel frame

consisting basically of three series of vertical trusses – two along the long sides of the building and one in the middle of the floor plan – which originally supported not only the lattice girders of the roof trusses but also very strong beams for cranes and gantries capable of lifting entire locomotives. Olivier Graeven, architect at Braaksma & Roos Architectenbureau reveals how: "research, historical research and technical research, showed that the structure of the hall was good and could last many more years" and, consequently, "we wanted the skeleton of the building to be the starting point for the spatial experience". The original structures therefore act as support both for the hanging vegetation placed on the beams of the gantries and for new structural elements serving the fixed furnishings and new floors that define the environments created to house the building's internal functions.

This structural configuration permits an adaptive reuse project capable of preserving the majesty of the shed's original space thanks to the decision not to use any fixed vertical partitions, but to distinguish and circumscribe the different areas intended for the functions planned by interpreting, adapting and amplifying the Loosian paradigm of the *Raumplan*, or "the spatial plan". This is a founding theoretical principle of twentieth-century culture and design practice, based on the ideal interlocking and spatial interaction of environments of different sizes and with different functions, obtained using floors placed at different heights. This principle is used instrumentally at

5 内景：朝南的中庭，木质平台安装在原有铁轨留下的痕迹上/Interior view: south-facing atrium, wooden platform mounted on a railway trolley (摄影/Photo: Ossip Architectuurfotografie)

6 图书馆内景/Interior view of the library (摄影/Photo: Stijn Bollaert)





7

体积内,将容纳一系列不同的功能,从而解决空间问题。

在笔者看来,项目的效果可以归纳为3个方面:以务实的方式在其内部“寄生”新的体量,实现了对现有承重结构的增强型再利用;其次,为不同的用途,尤其是在不同的楼层上,创造了独立的空间,使得它们可以在视觉和空间上相互连接;最后,由于精确地插入了可移动的织物隔断,在必要时可用于创造不同的平面和空间配置,从而使环境更加灵活。

新项目的空间质量建立在对现有结构系统的美学潜力的认可之上:一个大型钢架基本上由两个系列的垂直桁架组成——两个沿着建筑的长边,一个在中间——它最初不仅支撑着屋顶桁架的结构梁,而且还支撑着那些非常坚固的、用于起重机和能够提起整个机车的龙门架的梁。布拉克斯马及鲁斯建筑事务所的建筑师奥利维尔·格雷文透露了其中的方法:“历史研究和技术研究表明,大厅的结构是好的,可以使用很多年”,所以,“我们希望建筑的骨架成为空间体验的起点”。因此,原有的结构既支撑了龙门架梁上悬挂的植物,也支撑了服务于固定家具和新楼板的新结构元素——这些新的结构元素定义了为容纳建筑内部功能而创造的环境。

为了使这个适应性再利用项目能够保留工棚原有空间的雄伟,设计团队决定不使用任何固定的垂直隔断,而是通过诠释、调整和放大卢斯的“Raumplan”范式,或称为“空间规划”范式,来区分和界定不同的区域。该范式是20世纪文化和设计实践的一个基本理论原则,其基础是不同大小和不同功能的环境之间理想的连结和空间互动,通过在不同高度上布置楼层得以实现。这个原则在“机车棚”项目中得到了有效的运用,以达到一个明确的、实用的设计意图:将图书馆设想成一个公共场所,一个多功能的、合用的、便利的、可渗透的建筑物。这不是全部:由于艺术组织、工作室和协同工作空间的存在,这里不仅是一个“消费”知识的

7 图书馆内景/Interior view of the library

8 内景:“相聚而坐”区域/Interior view: the Seats2Meet area



8

地方,也是一个“生产”知识的地方。

空间和功能的组合以及它们在不同楼层的位置,并没有为建筑内部确定一条优先的路线,尽管其意图显然是优先考虑沿着从面向火车站和轨道的入口开始的南北轴线步行的可能性。朝南的中庭充满从玻璃幕墙中透出的自然光,看起来就像室内的城市广场,里面有一个小卖部和一个多功能区域,可以很容易地适应从社交场所到展览或娱乐区的各种用途。原有铁轨留下的痕迹上安装有一个大型的木质平台,它嵌在工棚的地板上,可以根据需要用作桌子或舞台。广场的表面折叠成大型台阶——即“相聚而坐”区域,可容纳1000名观众参加公共活动。高效的楼层系统由阶梯和楼梯连接,在不同楼层上容纳了图书馆的各种功能:包括摆放供阅读或者购买的书籍的书架区,大型阅读区,供小型活动或休闲娱乐活动的房间等。连接不同楼层的楼梯系统总是清晰可见,并强调楼层的存在。这些不同的楼层使得持续的空间和视觉渗透性成为可能,并容纳各种功能,使图书馆成为一个始终充满活力和活跃的地方。除了各种会议和公共活动的区域,还有一系列的实验室,人们可以在这里享受新的体验:每个实验室的特点不同,因此在建筑的复杂空间系统中都是独一无

二的、可识别的,比如有食品实验室、世界实验室、数字实验室和遗产实验室。顶层有一个大型的全景阳台,可以将城市的全貌尽收眼底。

在某些情况下,需要将“空间规划”所产生的巨大空间,包括楼层、台阶和楼梯的序列,缩小为较小的空间,这就需要总面积为4125m<sup>2</sup>的6个悬挂式移动织物屏风来满足。这些隔断对整个建筑的声学舒适度做出了巨大贡献。例如,它们可以移动到“相聚而坐”区域,将其与图书馆的上层隔开,从而形成一个小型的半私人礼堂。最大的屏风宽50m、高15m,位于南入口大厅。在展览、音乐会或会议期间,它们可以用来隐藏咖啡亭,当它们被安置在建筑南面的窗户前时,这些屏风可以塑造和漫射室内广场高大的玻璃幕墙上的光线。当阳光照射到窗帘的半透明表面时,它们会变成真实的光瀑,从而提高室内的亮度和空间质量。

通过重新定义公共图书馆的概念,并将其转变为一个聚会的场所、一个有顶的城市通道、一个工作、休闲和学习的场所,对前荷兰铁路维修公司工棚的适应性再利用重新定义了蒂尔堡车站的平庸区域,使其成为新的文化中心。即将建成的“思想实验室”,位于与“机车棚”相邻的另一座建筑中的新闻学校,将使这一中心得到进一步的加强。□



9

9 内景:朝南的中庭/Interior view: south-facing atrium  
(7-9 摄影/Photos: Ossip Architectuurfotografie)



10

10 内景:“相聚而坐”区域/Interior view of the Seats2Meet area (摄影/Photo: Stijn Bollaert)



the LocHal for the distributive resolution of a clear, pragmatic design intention: to conceive a library as a public place, and as an extremely versatile, usable, accessible and permeable building. And that is not all: a place where knowledge is not only "consumed" but also "produced" thanks to the presence of artistic organisations, workshops and coworking spaces.

The combination of spaces and functions, and their location on different floors, does not identify a preferential route inside the building, although it is clear that the intention is to prioritise the possibility of walking along the south-north axis, starting from the entrance facing the railway station and the tracks. The south-facing atrium, flooded with natural light from the glass façade, looks like an indoor town square and houses a kiosk and an area that can be easily adapted to various uses: from a place for socialising to an exhibition or entertainment area. There is a large wooden platform mounted on a railway trolley positioned on the traces left by the original tracks – embedded in the floor of the shed – which can be used as a table or stage, as required. The surface of the square folds into large steps – the Seats2Meet area – which can accommodate up to a thousand spectators for public events. Steps and flights of stairs connect the effective system of floors which house the various functions of the library on different levels: from the spaces occupied by the shelves with books for reference or to buy, to the large reading areas and rooms intended for small events or leisure and recreational activities. The different levels, which are connected by a system of stairs that are always clearly visible and emphasise the presence of these levels allow constant spatial and visual permeability and host the various functions that make the library a place that is always alive and active. In addition to various areas for conferences and public events, there are a series of labs where visitors can enjoy new experiences: each one has different characteristics, making them all unique and recognisable within the complex spatial system of the building. Examples are the Food Lab, the World Lab, the DigiLab and the Heritage Lab. The top floor houses a large panoramic balcony offering a complete view of the city.

The need to reduce the vast spaces generated by the *Raumplan*, represented by the sequence of floors, steps and flights of stairs, to smaller spaces on certain occasions is met by a system of six suspended, mobile textile screens, with a total surface area of 4125 square metres. These partitions make a substantial contribution to the acoustic comfort of the building as a whole. They can, for example, be moved to separate the Seats2Meet area from the upper floors of the library, thereby creating a small semi-private auditorium. The largest screens, which are 50 metres wide by 15 metres high, are positioned at the southern entrance hall. They can

be used to hide the coffee kiosk during exhibitions, concerts or conferences and, when positioned in front of the windows on the building's southern façade, these screens mould and diffuse the light that floods the tall glass façades in the interior plaza. When the sun hits the translucent surfaces of the curtains, they turn into real cascades of light that contribute to the brightness and the resulting spatial quality of the interiors.

With the redefinition of the concept of the public library and its transformation into a meeting place, a covered urban passage, a place for work, leisure and study, the adaptive reuse of the former Nedtrain shed redefines the anonymous area of Tilburg station, making it a new cultural hub, which will be further enhanced by the forthcoming completion of MindLab, the school of journalism located in another adjacent building communicating with LocHal. □



11 内景：从“相聚而坐”区域看向图书馆/Interior view: the library seen from the Seats2Meet area (摄影/Photo: Stijn Bollaert)





安·H·亚当斯  
Ann H. Adams

丹佛, 美国  
蒙大拿州立大学硕士  
戴维斯及合伙人建筑事务所主持建筑师

Denver, USA  
MArch., Montana State University  
Principal, Davis Partnership Architects



阿尔伯特·德皮内达  
Albert de Pineda

B.1953, 巴塞罗那, 西班牙  
加泰罗尼亚理工大学硕士  
Pinearq建筑设计集团创始人、总裁

B.1953, Barcelona, Spain  
MArch., Universitat Politècnica de Catalunya  
Founder and President, Pinearq



勒南·格克亚伊  
Renan Gökyay

B.1964, 安卡拉, 土耳其  
毕业于中东科技大学  
Nurus设计实验室首席设计师  
Nurus集团董事会副主席

B.1964, Ankara, Turkey  
Graduated from Middle East Technical University  
Chief Designer, Nurus Design Lab  
Deputy Chairman of the Board of Directors, Nurus Group

**BDP.**

BDP  
BDP

创立于1961年

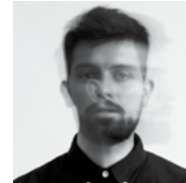
Founded in 1961



阿尔珀·德林博阿兹  
Alper Derinboğaz

B.1982, 安卡拉, 土耳其  
加利福尼亚大学洛杉矶分校硕士  
阿尔珀·德林博阿兹沙龙建筑事务所创始人

B.1982, Ankara, Turkey  
Ms.Arch., University of California, Los Angeles  
Founder, Salon Alper Derinboğaz



贝内迪克特·哈特利  
Benedikt Hartl

B.1986, 特劳恩施泰因, 德国  
慕尼黑工业大学硕士  
奥普赛事务所主持建筑师

B.1986, Traunstein, Germany  
Dipl.Arch., Technical University of Munich  
Principal, Opposite Office



阿尔伯托·博洛尼亚  
Alberto Bologna

B.1982, 都灵, 意大利  
都灵理工大学博士  
都灵理工大学助理教授

B.1982, Turin, Italy  
PHD., Politecnico di Torino  
Assistant Professor, Politecnico di Torino



米歇尔·迪马尔科  
Michele Di Marco

世界卫生组织Téchné主任及建筑师  
应急建筑及人权组织执行总裁

Architect, Coordinator, Téchné, WHO  
CEO, Emergency Architecture & Human Rights (EAHR)



托德·哈特利  
Todd Hartley

B.1973, 蒙特利尔, 加拿大  
爱达荷大学学士  
斯坦泰克建筑设计有限公司高级主持建筑师、阿尔伯塔业务主管

B.1973, Montreal, Canada  
BArch., University of Idaho  
Senior Principal, Operations Leader  
Alberta, Stantec Architecture Ltd.



陈雄  
CHEN Xiong

B.1962, 广州, 中国  
华南理工大学硕士  
全国工程勘察设计师  
广东省建筑设计研究院副院长、总建筑师

B.1962, Guangzhou, China  
MArch., South China University of Technology  
National Engineering Survey and Design Master  
Vice President, Chief Architect, Architectural Design & Research Institute of Guangdong Province



瓦莱丽娅·费德里吉  
Valeria Federighi

都灵理工大学博士  
都灵理工大学助理教授及建筑师

PHD., Politecnico di Torino  
Architect, Assistant Professor, Politecnico di Torino



韦恩·黑德  
Wayne Head

B.1971, 坎特伯雷, 英国  
毕业于伦敦大学学院  
柯尔-拉图雷勒-黑德建筑事务所董事

B.1971, Canterbury, UK  
Dipl.Arch., University College London  
Director, Curl la Tourelle Head Architecture



谢少明  
XIE Shaoming

B.1963, 长春, 中国  
鹿儿岛大学博士  
株式会社佐藤综合计画华南区总代表

B.1963, Changchun, China  
DEng., Kagoshima University  
South China Chief Representative, AXS SATOW INC.



卢卡·丰塔纳  
Luca Fontana

环境毒理学家和流行病学专家  
世界卫生组织净水卫生/传染病预防控制专家

Environmental Toxicologist and Epidemiologist  
WASH/IPC Specialist, WHO



MCC集团  
MCC Group

成立于2007年, 英国

Founded in 2007, UK



**鲁本·奥特罗**  
Ruben Otero

B.1956, 蒙得维的亚, 乌拉圭  
加泰罗尼亚理工大学博士  
保利斯塔大学教授  
德鲁克建筑事务所合伙人

B.1956, Montevideo, Uruguay  
PHD., Universidad Politécnica de Catalunya  
Professor, Escola da Cidade and Universidade Paulista  
Partner, Drucker Architects



**弗朗西斯科·欧文斯**  
Francisco Owens

B.1971, 马德里, 西班牙  
肯特州立大学学士  
美国SmithGroup建筑设计公司主持建筑师

B.1971, Madrid, Spain  
BArch., Kent State University  
Principal, SmithGroup



**戴维·帕斯特**  
David Pastre

克莱姆森大学建筑学院高级讲师、  
建筑+社区营造项目主任

Senior Lecturer, Coordinator, A+cB  
Graduate Certificate Program,  
Clemson Architecture Centre,  
Clemson University



**卡洛·拉蒂**  
Carlo Ratti

B.1971, 都灵, 意大利  
剑桥大学博士  
卡洛·拉蒂及合伙人建筑事务所  
(CRA) 创始合伙人

B.1971, Turin, Italy  
PHD., University of Cambridge  
Founding Partner, CRA-Carlo Ratti Associati



**安杰洛·伦纳**  
Angelo Renna

B.1985, 佛罗伦萨, 意大利  
佛罗伦萨大学硕士  
安杰洛·伦纳建筑事务所主持建筑师

B.1985, Florence, Italy  
MArch., Università degli Studi di Firenze  
Principal, Angelo Renna



**施特凡·瑞沃勒**  
Stephan Rewolle

硕士  
gmp·冯·格康, 玛格及合伙人建  
筑师事务所项目合伙人、北京分公  
司负责人

Dipl.-Ing.  
Architect, Associate Partner,  
architects von Gerkan, Marg and  
Partners (gmp)  
Head, gmp Beijing Office



**祁斌**  
QI Bin

B.1971, 兰州, 中国  
清华大学硕士  
清华大学建筑设计研究院副总建  
筑师

B.1971, Lanzhou, China  
MArch., Tsinghua University  
Deputy Chief Architect, Architectural  
Design & Research Institute of  
Tsinghua University



**林波荣**  
LIN Borong

B.1976, 桂林, 中国  
清华大学博士  
清华大学建筑学院教授、副院长  
清华大学生态规划与绿色建筑教育  
部重点实验室主任

B.1976, Guilin, China  
PHD., Tsinghua University  
Professor, Vice Dean,  
School of Architecture, Tsinghua  
University  
Director, Key Laboratory of Eco-  
planning & Green Building (Tsinghua  
University) Ministry of Education



**米歇尔·罗赫金德**  
Michel Rojkind

B.1969, 墨西哥城, 墨西哥  
毕业于伊比利亚美洲大学  
罗赫金德建筑事务所创始人、主持  
建筑师

B.1969, Mexico City, Mexico  
Graduated from Universidad  
Iberoamericana  
Founder and Principal, Rojkind  
Arquitectos



**托马斯·申科**  
Thomas Schinko

B.1970, 施特拉斯堡, 德国  
巴黎美丽城国立高等建筑学院研究生  
瓦斯科尼建筑事务所所有者、主持  
建筑师

B.1970, Strasbourg, Germany  
Post-graduate, École Nationale  
Supérieure d'Architecture de Paris-  
Belleville  
Principle Architect, Owner, VASCONI  
ARCHITECTS



**科西莫·斯科图奇**  
Cosimo Scotucci

B.1988, 费尔莫, 意大利  
罗马大学硕士  
科西莫·斯科图奇建筑事务所主持  
建筑师

B.1988, Fermo, Italy  
MArch., La Sapienza University of  
Rome  
Principal, Cosimo Scotucci



**Shift建筑及城市主义事务所**  
Shift architecture urbanism

成立于2005年, 鹿特丹, 荷兰

Founded in 2005, Rotterdam, the  
Netherlands





## 202101 International Urban Project Award 2020

### 2020 世界未来城市计划

主办：清华大学  
出版：世界建筑杂志社  
地址：北京清华大学建筑馆  
邮编：100084  
电话：8610-62785799/62781318

广告：8610-62788125  
代理：北京国龙时代广告有限公司  
网址：<http://www.wamp.com.cn>  
投稿：[contribution@wamp.com.cn](mailto:contribution@wamp.com.cn)  
合作：[cooperation@wamp.com.cn](mailto:cooperation@wamp.com.cn)

国内统一刊号：CN 11-1847/TU  
国际刊号：ISSN 1002-4832  
邮发代号：2-191  
定价：每册 ¥40  
海外空运：US\$40



ISSN 1002-4832



9 771002 483207

