

Design Workshop
for Crowdshare Innovation

CO-OPOLIS

同构

群体智慧的创新设计坊

范悦 山代悟 乔安娜 编著

Fan Yue

Yamashiro Satoru

Joanne Jakovich

中国建筑工业出版社

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完成这本册子《同构》的时间比较长，很多朋友为此付出了辛苦。

首先是核心成员，也是我的合作伙伴山代老师和乔安娜老师。山代老师为本书的篇章结构以及排版都做了整体策划，乔安娜老师直到最后一刻还在做论文修改以及英文翻译。另外，年轻教师张宇、陈岩、邹雷也付出很多。全书从文字到排版、封面设计等，邹雷老师承担了很大一部分工作，并且坚持到了最后。

学生组的工作非常到位，他们要整理大量的图片，以及完成若干个调研专栏和方案成果的排版和文字修改。值得一提的是学生组的核心成员李汀蕾、李泽辉等。现在，他们中有的同学已经毕业离开，我为本书没有及时完成，没能在大家离开学校前都拿到一本感到内疚。

本书得到了大连市甘井子区规划局全方位的支持。面对快速城市化带来的新问题，规划局李斌局长等领导勇于思考和直面挑战的胆识给我们留下了深刻的印象。在他们的带动下，大连环嘉公司也派专人引导场地参观和参与设计评图和讨论，一并表示感谢。

谨以此书向社会各界专家、朋友的参与和支持表示感谢。

范悦

The completion of this book runs over long periods of time, which is the result of many people's hard work.

Firstly, the key members and our cooperative partners Professor Yamashiro and Dr. Joanne Jakovich have contributed a lot. The overall planning of the book's text structure and layout was conducted by Professor Yamashiro and Joanne has been working hard on essay modification and English translation until the last minute. In addition, our young teachers Zhang Yu, Chen Yan and Zou Lei also contributed a lot. Zou Lei undertook a large part of work until the completion of this book, whose work involves text, layout and cover design, etc.

The student team has done an excellent job. They helped in sorting out a large number of pictures and were responsible for the layout and text modifications of several research columns. Special thanks shall be given to the key members of the student team, which includes Li Tinglei and Li Zehui, etc. Now, some of them have already graduated and left our university. I feel regret that this book had not completed earlier and they wouldn't get a copy of the book before their graduation.

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This book is dedicated to the experts and friends from all walks of life who have participated and gave support for it.

Fan Yue

前言

Preface

群体智慧的创新设计坊

大连理工大学海天工作坊第三期的主题为“同构 (Co-opolis)”。本期一方面保持了工作坊方式的设计教学的连续性,又特别增加了与悉尼科技大学 (UTS) 联合互动的环节。

本期的选题有所改变。设计的冲动和线索从哪里来,应该如何展开,这是前两期的工作坊“环境建构”和“融构”着重训练的内容,从无形到有形。那么,针对具体实在的问题,尤其那些比较棘手和复杂的社会病和城市病问题,设计问题何在,解决途径何在,创意如何体现,便是本期选题的用意。

本期选题为城郊的采石矿废弃地的再生设计。随着城市的快速扩张,原来位于城郊的采石矿废弃地进入了市民生活的范围,成为无法回避的城市伤痛和疤痕。无论从其空间尺度之大、涉及面之广以及治理之复杂程度,皆非建筑学等单一学科能解决。本期工作坊发挥了多专业、多层次的国际化人员编队的特点和协同创新 (同构) 的精神,借助创新性设计思维的系统教学和训练,过程生动有趣,提案富有见地,令人耳目一新。

创新设计思维的讲授是本期的一个特色。悉尼科技大学的乔安娜老师认为,群体智慧 (Crowdshare) 是创新性设计的源泉。本书介绍了乔安娜老师率领的 u . lab 的研究成果,以及在本次工作坊的运用。本书主要部分均采用中英文对照。

大连理工大学海天工作坊三年为一个周期,“同构”为其完结篇。我以为,以“同构”来表达我们工作坊的精神和设计境界,非常恰当,也非常圆满!

范悦 教授

Design Workshop of Crowdshare for Innovation

The theme of our third Haitian Studio is 'Co-opolis'. This time we maintained the usage of studio based teaching method and added a specially designed interaction section with University of Technology Sydney (UTS).

The selected topic of this Haitian Studio was different from previous ones. The previous two studios 'Temporary Event Environments' and 'Eye-Mind-Hand Coordination Studio' focused on training contents, from intangible to tangible. The intention of the third studio was to focus on real problems, especially those relatively tough and complex social problems as well as city problems, and aimed to find the design questions, solutions and creative ideas.

The selected topic was the regeneration design of a quarry abandoned land locates in city suburb. The quarry abandoned land has become a part of the living area of local citizens along with the rapid expansion of the city, which now has become the city's wound and scar that can't be neglected. This problem cannot be solved with one single discipline of architecture in terms of special scale, influential factors and governance complexity. This studio utilized the specialties of multidiscipline and multilevel international team members as well as the spirit of cooperative innovation (Co-opolis). By using innovative design thinking teaching method and practice, the process was found to be interesting and the proposals were refreshing and thoughtful.

The introduction of design thinking is a key feature of this studio. Dr. Joanne of UTS considers 'crowd-share' as the source of creative design. This book introduces the research results of ULab leads by Joanne and the utilization of these research results in this studio. The main parts of this book are in both Chinese and English.

The Haitian Studio cycle is three years long and 'Co-opolis' is the final part. I think 'Co-opolis' is an appropriate and satisfactory representation of our studio's spirit and state of design.

Professor Fan Yue

本书记录了大连理工大学建筑与艺术学院2012年的海天工作坊教学全貌。本次工作坊着眼于散布在大连郊外的大型露天采矿业工业废基地，通过再生利用的研究和设计，使之成为丰富城市生活的场所。工作坊的内容不仅仅包含了提案的内容，还涉及再生设计的方法论，以及设计教学的尝试。

一句话概括就是，近几年国际上开始出现了一种新的设计教学方法，即将“设计思考”与传统的设计教育相结合，进而形成具有创新意识的崭新的设计教学体系。

现在各行各业都在寻求创新，这比起以往对于新技术和发明的需求有过之而无不及，同时需要建立新的“目标”。因此，要学会比以往更有弹性地思考，与阅历和生活背景丰富的人士一起交流想法，通过不断的讨论有效推进设计。

然后，要不断让这种思路融入现实社会，使其魅力广泛传播，达成共识。一般来说具有创新性的构想，往往是以往不曾有过，所以需要花工夫进行推广。

类似的创新性的设计过程，不仅在教育界，在设计实践领域也不多。因此，我认为这次在大连理工大学所作的尝试，不仅对于中国，对于世界来说也具有很大的价值。

This article summarizes the works of 2012 'Haitian Studio' by Dalian University of Technology/School of Architecture and Fine Arts. This year's workshop focused on an abandoned open quarry located at the fringe of Dalian city and aimed to make it become a place of rich urban life through regeneration research and design. The contents of the workshop did not only include project proposal, but also include an investigation on the methodologies of creative design as well as an experiment on design education.

In summary, a combination of 'design thinking' with traditional design educational methods emerged in recent years around the world, which resulted in a brand new design education method for innovation.

Nowadays, innovation is sought after in all walks of life. Such needs for innovation is not less than the needs for innovation required by new technologies and inventions before, and at the same time there is also a need to build new 'target'. Because of this, people need to think flexibly and share ideas with people who have rich experience and life background. Design process can be promoted through continuing discussion.

Then, it is necessary to realize the creative idea in the real world, let it show its charm and engender common feelings. Normally, it takes works to communicate the innovative ideas because such ideas did not exist before.

This kind of creative design program is not only an advanced example in the educational field, but also in the field of actual design practice. Thus, I think such new educational experiment by DUT is of significant value not only in China, but also around the world.

城市迅速转型仍然是目前的主导范式。在中国，城市在成倍地快速增长，同时经济也在爆发式地增长。在日本，区域城市正处于萎缩和从巨大灾难恢复的过程中。在澳大利亚，城市中心密度在增加，城市边缘持续扩张。有时候城市转变的后果是灾难性的，例如袭击福岛的海啸事件；有时候转变是隐蔽的，但其同样随着时间的转移而具有威胁性，例如悉尼的城市密度危机。

在这种状况下人的因素发生了什么变化？当城市在我们脚下改变或是当我们被放置在一个新的社会经济环境中时，我们该如何在当地和更广泛的地区建立相似的互动方式？改变这种状况的创新方法有哪些？

同构项目致力于为城市社区设计出创新解决方案，以便适应变化。更加让我们感兴趣的是如何以一种全新的方式利用人类合作的能力去建立一个更加以人为本的城市。在新技术的协助下，人际互动如何能帮助建立新型城市是我们探索的一个方面。在新环境下，人类社会居住模式或适应或倒退。我们如何能够以人为本适应变化是创新设计的挑战。

我们的项目需要激进的跨领域思考和在复杂地方环境中的融入合作。在大连我们考察了在快速变化城市环境中的社区状况。在这个城市的多个地方，我们使用设计流程去倾听和观察影响人际交流的各种复杂因素。

我们采用混合团队的工作模式，提出的设计创新和商业模式解决方案涉及建筑学、工业设计、城市规划、社交媒体、商业、工程学、信息技术和艺术等多个学科。当来自不同学科的人聚集在一起时就会产生意料之外的解决方案。我们的创新是混合学科和混合文化互动的成果。

乔安娜 博士

Rapid urban transformation continues to be the dominant paradigm today. In China cities are multiplying fast, and the economy is exploding. In Japan, regional cities are shrinking and recovering from massive disaster. In Australia, city cores densify and city fringes continue to sprawl. Sometimes urban change can be disastrous, as seen in the tsunami that hit Fukushima; sometimes change can be hidden yet equally as threatening over time, as seen in the urban density crisis in Sydney.

What happens to the human element within these forces? When the city moves from beneath us, or we are placed into a new socio-economic paradigm, how do we establish familiar ways of interacting locally and beyond? What are the innovations that transform these conditions?

The CO-OPOLIS project focuses on designing entrepreneurial solutions for urban communities adapting to change. In particular, we are interested in how the human capacity for cooperation can be leveraged in new ways to make a more people-centred city. How constructed human interactions enhanced with new technologies form new kinds of urban realities is one example of this approach. Under new conditions, human social habitation patterns adapt or regress. How we might enliven and celebrate the processes of change in a human light is the challenge for entrepreneurial design.

The projects we are tackling require radical cross-boundary thinking and embedded cooperation within complex local conditions. In Dalian we examine community conditions within rapidly changing urban conditions. We use design processes to listen and observe the complex forces that affect human interactions in diverse sites across the city.

Working in mixed teams, we propose design innovations and business model solutions that span architecture, industrial design, urban planning, social media, business, engineering, information technology and art. When they come together unexpected solutions can arise. How we innovate is the product of mixed-discipline and mixed-culture interactions.

Dr. Joanne Jakovich

