

Problem Based

Design Driven

Interdisciplinary Collaboration

Open Innovation Diverse Culture

问题导向 设计驱动 跨学科协作 开放创新多元文化

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VISION & MISSION

愿景及任务



VISION 愿景

SFC will grow to an important hub and engine of international design-driven and interdisciplinary innovation.

中芬中心将成为国际设计驱动和跨学科创新的枢纽及 引擎。



MISSION 任务

Support the mutual goal of Aalto and Tongji Universities to become world class universities and enhance their impact on society;

Actively contribute to the building of creative and sustainable societies of the 21st century through high quality researches, educations and innovations.

为同济大学和阿尔托大学成为世界级高校这一共同目标 提供支持,并提升其社会影响力;

通过高质量的教育、研究和创新活动,积极致力于缔造 二十一世纪创新、可持续社会环境。

EXECU SUA

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TIVE AMARY 主任寄语



Prof. Dr. LOU Yongqi 娄永琪 教授 博士

SFC Executive Vice Director 同济大学中芬中心副主任

Five-year Record of Sino-Finnish Centre

In the year of 2015, SFC will meet its fifth anniversary, normally a big celebration in any culture. As an international interdisciplinary innovative open platform, SFC has new looks and latest progresses to report every year since its establishment in 2010, from a platform to encourage interdisciplinary exchanges, to innovative education projects represented by Tongji on Tracks, to Tongji Venture Valley, to Tongji Innovation and Venture Minor Program, towards LivingLab Shanghai the innovative research platform last year.

There are three important things worth recording this year for SFC:

Firstly, the establishment of Shanghai International College of Design and Innovation, Tongji University. Based on the establishment of Sino-Finnish Centre together by Tongji University and Aalto University, in view of College of Design and Innovation in Tong-ji, and joint effort with Shanghai Municipality, this international college is an expansion and enhanced version of SFC, the innovative prototype of higher education reform.

Secondly, the birth of Co-creation Platform. By exporting the innovative mode of SFC to Longgang District, Shenzhen City, College of Design and Innovation and SFC worked together and created a brand new integration of innovative education, research, maker space and innovative incubator. The win-win cooperation between Yangtze River Delta Region and Pearl River Delta Region is redefining the pattern of innovation in China.

Thirdly, the official announcement of Livinglab Shanghai. Yesterday*, OpenLivingLab Days 2015 the annual summit of the worldwide LivingLab community held in Istanbul formally accepted the LivingLab Shanghai application by SFC. Living Lab supports the brand new research culture that emphasizes contribution and promotion to real world as well as co-creation and sharing. Thus, its research subject has expanded to all stakeholders from colleges, universities and researchers, with research objects varying from all kinds of challenges in life, including environment, energy, health, education, urbanization, economy, politics, social welfare, sustainable development, etc.

These real-world challenges are not only problems of single discipline. Dealing with these complicated. systemic and uncertain problems not only requires multi-disciplinary knowledge but also the coordination among knowledge of different disciplines. Once combined with other specialized knowledge and criterion, Design Thinking and methodology could help break the barriers among different disciplines, connect and integrate multi-disciplinary knowledge and skills in order to respond to and solve various problems under the changing situation in the world. Meanwhile, with the development of Internet, cloud computing, big data, artificial intelligence and other computer technologies, our ability to in-depth analyze, test, reflect and revise of complex issues and systems has been improving continuously. In this way, design as knowledge capital can assume greater social mission more proactively.

Real innovative work is often the result of play it by ear. The iterative circular mode of exploration, reflection, application and demonstration is the essence of innovation, which is also the most essential spirit of SFC. SFC has been expanding design thinking and ability from personalized and specialized group to broader social groups, making more people know innovation, use innovation, join innovation, and even leading innovation.

It's a brand new social innovation age ahead of us!

* 26th August, 2015

中芬五年记

2015 年,中芬中心五年了。五年,在任何一个文化中,都是一个大生日。2010 年开始,从一个激发跨学科交流的平台、到以移动课堂为标志的创新教育项目、到同济创业谷的建立开放、到创新创业辅修项目正式启动、到去年 Livinglab Shanghai 的创新科研平台建设,每年中芬中心这个国际化跨学科开放创新平台都在呈现新的气象和进展。

今年中芬中心有三件大事值得记录:

首先,是同济大学上海国际设计创新学院的成立。同济大学和阿尔托大学在中芬中心合作的基础上,基于同济

大学设计创意学院,和上海市共建的这个国际学院,是 中芬中心这个创新高教改革原型的扩展和加强版本。

其次,是中芬中心和设计创意学院合作,把中芬中心的 创新模式,输出到深圳龙岗区,落地建设了全新的集创 新教育、科研、创客空间、创新孵化为一体的众创平台。 长三角和珠三角联手,正在重新定义中国创新的格局。

第三,是 LivingLab Shanghai 的正式成立。昨天[·],在伊斯坦布尔召开的 LivingLab 2015 年会正式通过了中芬中心提出的 LivingLab Shanghai 的申请。Living Lab 支持的是一种全新的研究文化,看重对真实世界的贡献和推动和共创分享。因此,研究的主体,也从高校和科研人员,拓展到所有的利益相关者。研究的对象,则是我们生活所面临的各种挑战,包括环境、能源、健康、教育、城市化、经济、政治、社会福利、可持续发展等。

这些现实世界的挑战,都不是单一学科的问题。在应对这些复杂性、系统性和不确定性的问题的时候,我们不仅需要多学科的知识,更需要不同学科知识之间的协同。设计思维与方法,一旦与其它专业知识和准则相结合,可以帮助打破学科之间的壁垒,链接和整合多学科的知识和技能,应对和解决这个世界不断变化的情境下的各种难题。与此同时,随着互联网、云计算、大数据、人工智能等计算机技术的发展,我们对复杂问题和复杂系统的深度分析、测试、反馈和修正的能力也在不断提高。作为知识资本的设计,可以更加积极、主动地承担更大的社会使命。

真正创新的工作往往是边走边干,见招拆招的结果。这种探索,反思,应用及论证等不断迭代的循环模式,是创新的本质,也是中芬中心最重要的精神。中芬中心正在不断地把设计思维和能力,从之前个人的、专业化的群体拓展到更广泛的社会群体,让更多的人认识创新、运用创新、参与创新、甚至主导创新。

在我们面前的,是一个全新的社会创新的时代!

2015年8月26日

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Beyond Traditional Boundaries

In Spring 2015, Pei Gang the President of Tongii University, Tuula Teeri the President of Aalto University and Weng Tiehui the Vice Mayor of Shanghai municipality, signed a cooperative agreement to establish new collaborative effort for the fields of design and innovation. Only five years before Aalto and Tongji signed the Memorandum of Understanding about establishing the Sino-Finnish Center. When there is trust and will inspiring things starts to happen. By establishing SFC and Aalto-Tongji Design Factory, universities created the platform and the structure to gain trust through interaction and will through mutual inspiration. Great foundation has been built, thank you all that contributed, and very special appreciation goes to Professors Yrjö Sotamaa and Lou Yongqi as active founding fathers of this collaboration.

In 2011, Sino-Finnish Centre was established by the two sides to serve as an international interdisciplinary platform for open innovation, which is committed to promoting interdisciplinary teaching, research, industry cooperation and innovation entrepreneurship. Espoo and Shanghai, sites of the two universities, are sister cities. The cooperation in innovation and design between Aalto and Tongji serves an important part of the cooperation between Espoo and Shanghai.

These five years has been an uplifting journey from turning the emerging research initiatives to long-term research programs and communities. Focus of the collaboration has been on building a better world to live in. Focus has been on developing and utilizing most recent innovations and adjusting underlying strategies and frameworks accordingly.

More than ever before, companies and customers now continually co-operate in innovative and productive efforts. Adopting this collaborative approach necessitates a fundamental shift in design thinking on the part of the co-creating human cities. New Research will emerge from questions like: What are new places for value co-creation and how to develop them? What is the role of design when to create socially dense places for shared value creation? What are these new service platforms? There are various new skills and research questions when identifying the path towards more human cities. SFC organized Radical Design Week event in 2014 where focus was in new radical ways smart and sustainable environments could be developed in the near future.

Within past five years many amazing things have happened. Passion and pro-action has been essential part of the nature of working together, Design Factory has been the Body of the collaboration while the Heart has been the people, engaging ecosystem of innovative and open minded individuals who had come together in so many different projects. SFC has been a platform for social learning where everybody's participation has been recognized as competence, where people have become and experience mutual histories of becoming together. SFC has created perspectives that can sustain mutual engagement in action.

What Next?

SFC will take the next steps in the fields Design and Innovation, inviting the whole community and alumni to participate. All stakeholders are needed when the aim is going beyond known boundaries and disciplines, encouraging even the most unconventional efforts to achieve defined goals. Industry academia collaboration will be developed beyond traditional project based interaction towards interdisciplinary value co creation. Academic disciplines will be mixed and matched in new innovative ways. SFC will enable new collaborative models for industry by creating and supporting new interdisciplinary labs, e.g. ISeeLife! Lab established 2014.

Establishing Tongji lounge in Otaniemi will foster more symmetric collaboration. Analogically to ATDF in Shanghai this new platform has been established to enable more visible and permanent Tongji footprint in Finland. SFC will be also open to other universities in Finland to participate its activities and using its platforms. SFC will contribute with its partners to the new research and innovation agenda of new Aalto-Tongji collaborative effort in Shanghai.

SFC with its partners aims to establish an inspiring and high quality international design college with Chinese characteristics, which can cultivate the leading talents for Shanghai and even China to achieve economic and industrial transformation. SFC is committed to the building creative and sustainable societies of the 21st century through high quality researches, educations and innovations. This is an exiting moment to be involved. Societies are changing and our ways of working, learning and living will be in transition. There are enormous opportunities to achieve better human future together.

跨越传统界限

2015 年春,在上海市副市长翁铁慧的见证下,同济大学校长裴钢和阿尔托校长杜拉·泰里签署了就两校在设计创新领域开展新型合作的协议。五年前,同济与阿尔托两校签署了筹建同济大学中芬中心的合作备忘录。正是有了信任和愿景,一桩桩激励人心的事情才开始生发,而两校共建的中芬中心和同济-阿尔托设计工厂又成为双方通过交往合作、相互启发以增进信任和愿景的平台和机制。感谢为奠定这一伟大根基做出恭献的每个人,特别是索达曼教授和娄永琪教授,他们是这一合作的积极筹建者。

2011 年中芬中心由两校共同成立,旨在成为一个促进跨学科教学、研究、企业合作和创新创业的国际化跨学科开放创新平台。同济与阿尔托两校所在的上海及埃斯波市也是姐妹城市,两校在创新与设计方面的合作也是两市合作的重要一环。

在中芬中心令人振奋的五年发展历程中,初级的研究意向也发展为长期的研究项目和社群。两校合作通过开发和利用最新的创新成果并依根本战略及框架进行相应调整,旨在"创造一个更美好的世界"。

与此同时,企业及其客户正以前所未有的规模在创新和创造持续合作。借鉴这种合作方式,利用设计思维共建人性化城市的模式有必要产生根本性转变。新的研究将从这些问题中产生:有哪些共创价值的新领域,该如何开发它们?为共创价值而创建社会集聚场所时,设计的角色是什么?新的服务平台是什么?在我们探讨通往更加人性化的城市的路径时,将遇到无数新的技能和研究问题。中芬中心在2014年组织了革新设计周,即把问题聚焦在该如何通过革新方式在不久的将来建设智能可持续的环境。

在过去五年中发生了很多令人惊叹的事情。激情和积极是双方合作的天性,设计工厂成为合作的实体,而这一合作的灵魂则是从许多不同的项目中走到一起来的人,他们思想开放、积极投身到创新生态系统中来。中芬中心作为一个社会学习平台,人们在这里的参与被视为宝贵财富,而每个人也在投入其中的过程中塑造和感受着共同的经验。中芬中心在切实行动中创造了共同参与的视角。

接下来呢?

中芬中心将邀请社群的集体成员参与其在设计创新领域的新举措。当设立的目标超越已知的界限和学科时,我们需要所有利益相关者众志成城,鼓励哪怕是以最标新立异的方法实现既定目标。学界与业界的合作将超越基于协作的传统项目,转向共同创造跨学科价值。学术将以新型创新方式融入这一合作。通过创建和支持新型跨



Prof. Jarmo Suominen 苏雅默 教授

SFC Executive Vice Director 同落大学中茶中心副主任

学科实验室(如 2014 年建立的 ISeeLife! Lab),中芬中心将与企业共践新型合作模式。

在阿尔托大学奥塔涅米校区建立的同济轩将促进两校更为协调的合作。与在上海的同济 - 阿尔托设计工厂相对应,这一实体平台的建立旨在提高同济在芬兰的可见度。中芬中心的活动及平台也向芬兰的其他高校开放。中芬中心将与其合作伙伴一齐为同济大学上海设计创意学院的新型研究及创新议程作出贡献。

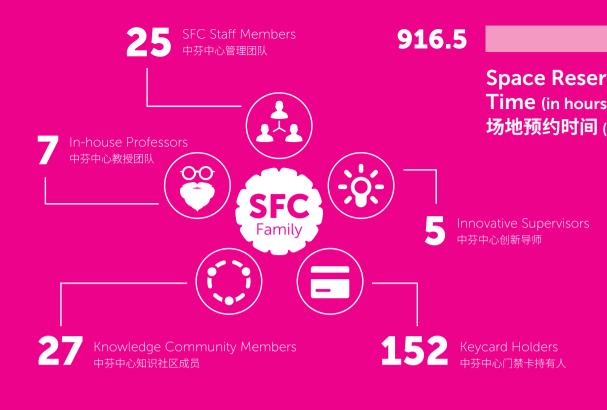
中芬中心及其合作者旨在建立一个具有中国特色的高质量国际设计学院,为上海乃至中国的经济及产业转型培养顶尖人才。中芬中心将通过高质量的研究、教育及创新塑造 21 世纪的创新型可持续社会。参与到这一激动人心的时刻中吧! 社会正在经历巨变,我们的工作、学习和生活方式也将随之而变。为共同创造更美好的人类未来,我们有着无穷的机遇和可能!

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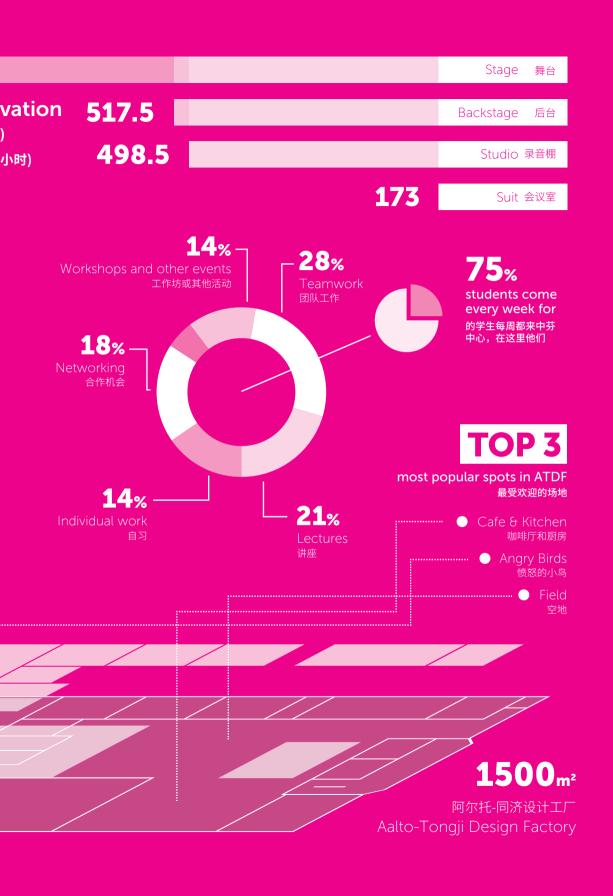
SFC COMMUNITY

中芬社群

04



































































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GUO Cheng SFC Research Facilitator 郭城 中芬中心研究推进人



WANG Danni SFC Project Manager **王丹妮** 中芬中心项目经理

When did you get to know SFC? 是什么时候开始认识中芬中心的?

I got to know ATDF quite early. Actually I did my thesis defense at Stage. At that time, the design factory was a wonderland for us: space and Wii!! However I just went there several times since it was far from my accommodation.

认识中芬这块场地很早,我本科毕业的毕设答辩就是在现在 stage 的场地进行的。当时感觉这个地方就是一个神奇的存在(还有 Wii 可以玩 ~~),可惜太远了就来过

I attended a lecture at SFC in 2011. I have graduated from Tongji University at that time.

2011年第一次在中芬听讲座,那时候我已经从同济大学毕业了。

What do you do at SFC? 你在中芬做什么样的事?

I'm hosting the CASP Lab (critical art-science practice), which is based on SFC the interdisciplinary platform and mainly facing the realm between art and science. CASP had organized a series of events including forum, lecture, bio-art workshop and biocarnival, inviting teachers and students with various background to join and explore possibilities of art and science. Apart from the cooperation within Tongji University, CASP had been invited by Shih-Chien University (Taiwan) and hosted a bio-art workshop named Bio-fiction of Electrophysiology there with Taiwan Bio-art Community. CASP is also doing some relevant research/ creation projects.

我在中芬主持 CASP Lab,它是一个基于中芬中心这个 跨学科平台的艺术与科学跨学科的实验室。我们组织了 一系列的跨学科活动,邀请不同专业方向的老师和同学 参与其中,体验跨学科合作,并探索艺术与科学的可能。 除校内合作外,CASP 还曾经和台湾生物艺术社群合作, 在台湾实践大学举办了为期一周的"电生理的科学想象" 工作坊。同时实验室还在做一些相关主题的研究与创作 项目。 I've tried many things at SFC. Generally speaking, I have been communicating with all kinds of people and attract them to come here. I also managed to accomplish some collaboration projects.

我感觉在中芬尝试了很多事情,总的来说是与各种各样的人打交道,吸引不同的人来中芬中心,促成项目合作并负责完成一些项目。

22 SFC Annual Stories 2014-2015

The thing you have achieved or done at SFC that made you most proud of. 在中芬中心做过的最有成就感的事情是什么?

The thing that makes me feel proud is my work at CASP gaining positive recognition and support from people. I still remember the scene of the initial event hosted by CASP - bio-art forum "possible futures of evolution", when I invited associate Professor Ye Kai (School of Humanities) and associate Professor Guo Guangpu (College of Life Science and Technology), they responded with strong interest. During the discussion session, participants were very active and enthusiastic. We had in-depth discussions on various topics, and came up with a rich variety of perspectives. It was the first event I organized which made me very excited, also made me more determined to promote and keep going with the interdisciplinary practice.

还是 CASP 的工作得到了多方的支持与肯定。特别是在初次组织生物艺术论坛邀请人文学院的叶凯副教授和生命科学院的郭光普副教授时,与二位老师一拍即合。而在活动讨论过程中,参与的老师同学都非常积极踊跃,大家分组就不同的话题展开了深入的讨论,并得出了丰富多样的观点。这让初次组织活动的我感到十分激动,同时也更坚定了推进这种跨学科实践活动的信念。

For me it should be organizing "SFC LED 6 Hours Workshop". It was a creative idea and attempt, combining existing methodology with real needs in order to explore a new way of university-enterprise collaboration. It took 2 weeks from the idea generation to implement. All the feedback from participants was very good, which made me very happy.

最有成就感的可能算是策划和组织完成了"中芬中心光环境设计六小时工作坊"。这个项目算是我的一次创新和尝试吧,将现有的方法论与现实需求相结合,探索一种全新的校企合作模式。从想法到项目实施,一共用了两周的时间,让我非常满足的是,工作坊得到了企业和参与者很好的反馈。

Imagine the craziest/coolest thing you wanna do or organize at SFC in the future. 设想你将来想在中芬中心做的最酷炫的事情。

Doing more cooperation with other organizations and institutions, more research and creation to push CASP forward to be the best of QiPa~

那就是更多的对外合作,更多的研究创造,使 CASP 成为奇葩中的战斗机~

Anything is ok? I want to do the renovation of kitchen and have a restaurant at SFC. I think most of people have thought about that.

可以随便想么?我很想把厨房改造一下,在这里开个餐厅,这个想法很多人都有吧?

Describe SFC with 3 words. 用三个词描述中芬中心。

Active. Compatible. Interdisciplinary.

Sense of belonging. Relaxing. Unknown.

活力。包容。跨学科。

归属感。轻松的。未知的。

What differentiates SFC from other educational organizations? 是什么让中芬中心如此不同?

Us. It must be the people here, my colleagues and all 我们。 the people who have been here.

一定是这里的人,我的同事们和在这里停留过的人们。

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Network 网络



DFGN

设计工厂全球网络 dfgn.org

Design Factory Global Network (DFGN) currently operates in universities across the globe. The shared understanding and common ways of working enable the universities in the network to collaborate efficiently across cultures and create radical innovations. The goal is to be the leader in international university collaboration beyond academic boundaries. SFC joined DFGN in 2011.

设计工厂全球网络是一个遍布全球各大高校的网络。共享的理念及一致的工作方式使网络内的高校能够在不同文化下高效合作并创造革新式创新。其宗旨是不限于学术而在更广的层面实现领先的国际高校合作。中芬中心于 2011 年加入设计工厂全球网络。



SUGAR Network

斯坦福大学全球设计创新课程联盟

sugar-network.org

Sugar is a global network that brings together multidisciplinary students from different universities and challenges them to solve real world product development challenges. Among this network, universities can share design thinking methodology and the teaching materials. SFC joined SUGAR Network in 2013.

SUGAR 是一个汇集了来自各个大学设计创新课程学生的全球性网络平台,参与其中的成员需要解决真实世界中产品开发带来的诸多挑战。通过这一平台,各个大学可以共享设计思维方法及教学内容。中芬中心于 2013 年加入斯坦福大学全球设计创新课程联盟。



European Network of Living Labs

ENoLL

www.openlivinglabs.eu

生活实验室欧洲联盟

The European Network of Living Labs (ENoLL) is the international federation of benchmarked Living Labs in Europe and worldwide. LivingLab Shanghai is an educational and innovation platform based on Sino-Finnish Centre, promoting the open innovation for generating social construction of knowledge and bridging top-down and bottom-up social innovation process in real world context. LivingLab Shanghai joined EnoLL in 2015.

生活实验室欧洲联盟是欧洲乃至世界范围内生活实验室的国际联盟。基于中芬中心建立的上海生活实验室是一个教育创新平台,致力于为社会知识的生发推广开放创新,并在真实世界的情境下将自上而下及自下而上的社会创新相连结。上海生活实验室于 2015 年加入生活实验室欧洲联盟。

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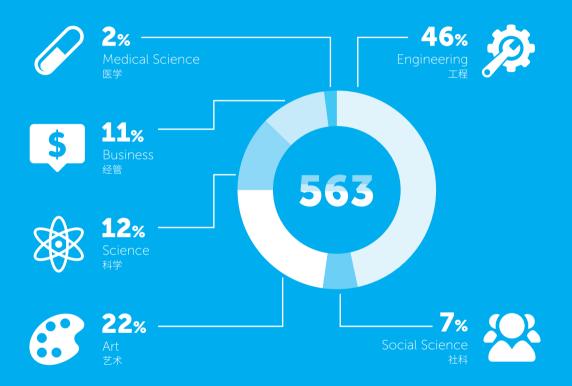


LEARNING

学习

05







17 Courses 课程



34 Lectures 讲座



Tongji Innovation and Venture (TJIV) Minor Program aims to cultivate the innovation and venture thinking and competence in interdisciplinary fields of global high-tech, design, etc. TJIV Minor Program (Pilot) has been through 3 semesters, starting from spring in 2014 to June in 2015.

Starting from fall semester 2015, the minor program will shorten its teaching into 1 academic year, and students can apply for minor certificate according to Credit Accumulation Mechanism.

同济创新创业辅修项目旨在培养学生在全球高科技和设计等跨学科领域的创新创业思维与能力。同济大学创新创业辅修项目自2014年春季学期启动,经3学期教学,于2015年6月完成试运行阶段。自2015年秋季学期始,辅修项目将以1学年、学分累积制与学生们见面。

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Key Words 项目关键词

Interdisciplinary

Cross-cultural

Multi-stakeholders

Learning by doing: Lecture + Project

PBL: Passion/project/problem/

person/play...

Inclusive mindset

Dance with ambiguity/uncertainty

Experimental: fail early, fail often

Empathy

Abductive thinking

跨学科

跨文化

多利益主体

从做中学: 讲座+项目

PBL:基于热情、项目、问题、个人、

玩耍的学习

包容性思维

鼓励模糊和不确定性

试验性的: 早失败、常失败

感同身受

引导性思维





Integrated Project 实践项目

Knowledge & Skill 知识与技能

Sustainability Thinking 可持续思维

Bottom up Enterprise- Building Business with Open Innovation 创业项目一:
在开放创新时代的创业方式

Management of a High-tech and Design Venture 高科技与设计创业管理

Introduction to Design Thinking 设计思维导论

I&V Talks 创新创业系列讲座

Introduction & Inspiration 启发与导论

Towards a Human City 以用户为中心的设计与创新 - 至人文城市 nission D 整合创新实践

Growth and Internationalization of Technology SMEs 技术创业発展及国际化

Tongji on Tracks
同济大学创新移动课堂

DIAN Racing 大学生电动方程式车辆制造及运营

Exploitation of Intellectual Property Rights (IPR) 知识产权开发

Modern Project Managemen Techniques 现代项目管理技巧 Game Design 创新产品开发 - 游戏设计

Orientation to International Design Business Management 国际设计商业管理 As an Industrial Design student from Germany I was very excited to see the University and the Faculty where I will spend my Semester. I heard already many things about the Sino-Finish Centre but I really did not expect how it really was. The first time you enter the Sino-Finish Centre you feel like being in another world. Beginning with the craziest elevator I have ever seen, bringing you upstairs to the area where design is really lived. When I was standing there on the 4th floor looking at the environment I felt like arriving at a real Design Office like Google also has- breathtaking! Very colorful workplaces and space to relax and enjoy to be really creative! I actually wanted to move in there!

While the lecture was held you could sit on big sitting bags (Do not sit there when you are tired!), there is also the opportunity to build up mockups in the workshop, go to the Sauna and heat yourself up for more crazy ideas or you can just cook in the big kitchen that has all the equipment that you will need.

The courses are very rich in variety. From DIAN Racing, where you design Posters, make Movies and organize events, to Game Design where you create your own game. You can take part at lectures from very good Professors that have a lot of experience and are very passionate about their works. If you have any problems you can go to the SFC Office, very kind and helpful people that will help you any time! The whole environment with its people make the SFC a wonderful place and I am very happy that I had the chance to be a part of it.



Daniel Durlik 迪克

Industrial Design
The University of Design Schwaebisch Gmuenc
工业设计
德国施瓦本格明德设计高等专业学院

我是来自德国的 Daniel,在同济学习工业设计。来之前,我就对这所学校充满期待,特别是中芬中心。对这里,我早有听闻,但当我置身于此时,还是被惊艳到了。一踏进这里,我以为来到了另一个世界。搭乘我所见过的最疯狂的电梯,一路上升,抵达 4楼这一充斥着鲜活设计感的空间。环顾四周,我感觉如同置身谷歌设计部,内心激动不已。这里有色彩缤纷的办公室,放松惬意的空间,极为富有创意!说实在的,我想要住在这里!

上课时,你可以坐在懒人沙发上(当然,累的时候最好不要坐);工作坊中,你还有机会建模;下课后,你也可以享受桑拿,让全身的每个细胞都燃烧起来,进发出更加疯狂的创意;或者,你也可以走进宽敞的厨房,给自己做顿饭,那里几乎有你需要的所有烹饪设备。

中芬的课程也非常多样。参与电车队,你可以制做海报、编辑视频、组织活动,而游戏设计这门课则希望你设计出属于自己的游戏。当然,你也可以走进讲座教室,听听那些优秀的讲座嘉宾讲述他们丰富的人生阅历和工作经历。在这里,如果遇到任何问题,"动物园"会是你的救星,亲切的工作人员会给你提供帮助!正是环境与人的相互作用,使得中芬魅力无限,我也非常庆幸能成为这里的一部分。

My major is Geology, which sounds very different from Wealth Management, but I'm glad that I got the chance to be involved in mission D project, and I learnt a lot. After one-year study in SFC, the project was exactly the opportunity for me to use what I have learnt to solve real problems. It was not easy for us at first, since our target customers are those rich individuals and half our team members were in Switzerland. As a multi-disciplinary international team, we need to deal with the physical distance as well as the culture differences. Sometimes our group discussion ended up with confusion and sometimes we could only agree on one thing and make the progress very slowly.

What made us to keep on is the willing to provide a better solution for our customer. And by overcoming those problems, I knew better of how to do user research, analyze user behavior, make tangible prototypes, and most of all make lots of great friends. Thanks to SFC for offering this innovative program. Thanks also to our sponsor UBS. This is really an awesome experience, and hope it will be better and better, and benefit more and more students.

整合实践创新课程是我选的最棒的一门课,整个过程贯穿了设计思维的理念与实践。我们的团队是由同济和瑞士圣加伦大学的学生组成的跨学科团队,整个项目中,不仅仅是不同学科之间思想的碰撞合,更是不同文化之间的互相交流,可以说是一次学生与学生的小型跨国合作。虽然自己并非设计之业,但是在项目中我也大胆地提出自己的想法,和队友们一起尽情地头脑风暴,制作可供用户则也困难重,则试每一个想法时,都会有些紧张,年知过两个想法时,都会有些紧张,再则过两种工,又要重头来过,经历了测试,改进,再则试和两次进的循环,才形成最终的解决方案。项目过和,以要重头来过,经的解决方案。项目过和,以要重头来过,经的解决方案。项目过知,对于成最终的解决方案。项目过知,对于成为工程,但是收获很多。由于目标客户群是亚洲的富裕人群,为了让我们更好地了解客户,赞助商UBS邀请我们到他们新加坡和香港的网点进行指导和当地调研。

经过近一年的努力,最后团队在斯坦福汇合做了项目的终期汇报和产品展示,与世界各地的学生交流,学习他们针对不同企业不同领域的创新解决方案,开拓了视野,更重要的是结交了一群好朋友。希望中芬中心项目越办越好,提供更多类似机会,让越来越多的同学能够参加到这样的项目中去锻炼。



Tony Huang 黄富钧

Structural Geology, Postgraduate
Tongji Innovation and Venture Program

结构地质学,研二 同济大学创新创业辅修项目

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Tongji on Tracks 2011-2015

同济大学创新移动课堂 2011-2015



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Travel Experiences 次出行经历

Countries 个国家

Cooperative Companies 家合作企业

26 Innovative Projects 个创新课题

76996

Kilometers

208









WANG Yuxuan 王宇轩

Tongji on Tracks 2014 student College of Civil Engineering

2014年同济大学创新移动课堂学员 土木工程学院

I have been involved in the big family of Tongii on Tracks as a family member since the initial meeting & the first workshop. During the period of domestic workshop and preparation, I was strongly impressed by the fully lively atmosphere in Sino-Finnish Centre. they got the opportunity to have face-to-face communication with a group of entrepreneurs or by the kind and enthusiastic teachers. I indeed go through a quite different method of study and research towards the ones I have known, I get to know the way my classmates who are from different majors go along while solving problems. In addition, it is a good chance to apply my professional knowledge into practical use joining the movable house workshop. While I worked with guys from department of architecture, a mix of diverse ideas made my horizon wider.

从移动课堂揭幕的工作坊开始,我便成为移动课堂大家庭中的一员。在境内工作坊的一段时间里,中芬中心活泼自由的氛围令我印象深刻。同学们之间畅所欲言的讨论、与企业人士面对面的交流、老师们的亲切和热情,我在这里经历了一种与之前不同的学习或者说是研究问题的方式,了解许多不同专业同学在看待和解决问题的角度和想法。而移动房屋工作坊则是一次很好的能够将我的专业知识进行实际应用的机会,在工作坊与建筑系的同学一同工作的时候,不同思维的碰撞开拓了我的眼界和想法。

The carefully designed classes redefined traditional classes by sharing information and interconnections in an open, pragmatic, and cooperation-focused way. Joining hands with Huawei HONOR and oversea colleges, Tongji On Tracks inspired its students and the public with its active and comprehensive attitude, and the achievements during these years also prove its trial to be far-sighted and successful. Under this circumstance, the creativity of the students becomes the most powerful weapon, and will safely pass through any sensors and airport security check, bringing and sharing our honor of China to the world.

通过开放、务实及以合作为中心的信息互联共享,中芬中心精心设置的课程重新定义了传统的课堂。 通过牵手华为荣耀及海外高校,同济大学创新移动课堂用积极的态度影响着参与到其中的学生和更多 关心这个项目的社会公众。同济大学创新移动课堂 这些年取得的成就也证明了项目伊始的远见及成功。 在此基础上,相信学生的创造力将是最有力的武器, 并能够通过任何传感器和机场安检,把中国荣耀带 往全世界并与之分享。





GAI Jingyao 盖晶瑶

Marketing Manager of Honor Tongji on Tracks 2015 Partner

2015年同济大学创新移动课堂合作企业 华为荣耀营销经理

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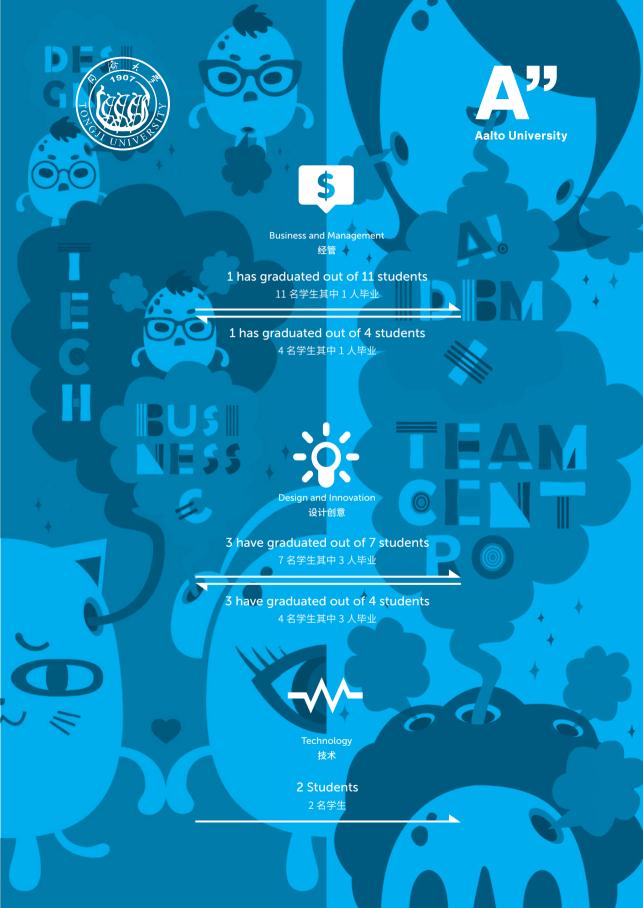
IDBM Double Degree Master's Program

Initiated in 2011, IDBM Double Degree Master's Program by Aalto University and Tongji University is the first double degree program concerning on the areas of design, technology and business between Chinese and Finnish universities, and is also Aalto University's first IDBM double degree master's joint program outside Europe. The purpose of this program is to cultivate global experts in design business management through interdisciplinary research and learning on knowledge of business. design and technology areas. IDBM is an innovative master's program initiated by Aalto University integrating teaching and research resources of its School of Economics, School of Art and Design and another four Engineering Schools, in order to meet the needs of design-driven innovation, internationalized and interdisciplinary leader talents in the new period. IDBM Double Degree Master's Program is a milestone for the two universities and for the Finnish-Chinese educational cooperation in general.

国际设计商业管理硕士 双学位项目

2011 年起由阿尔托大学及同济大学共同设立的国际设计商业管理双学位项目是中芬高校之间首个跨设计、技术、管理三个领域的硕士双学位项目,也是阿尔托大学在欧洲外的第一个 IDBM 联合双硕士学位项目。该项目旨在通过商业、设计与技术领域里的跨界跨学科科研和学习,培养全球范围内的设计商业管理专家。国际设计商业管理项目是芬兰阿尔托大学整合其经济学院、艺术设计学院及另四个理工学院的教学和研究资源,面对新时代设计驱动创新、国际化和跨学科领导人才的需求而推出的创新硕士教学项目。IDBM硕士双学位项目对于两所大学、中芬教育合作来说都是一个里程碑。















GU Chao

顾超

Civil Engineering, Undergraduate
Tongji Innovation and Venture Minor Program

土木工程,大四



June the 27th 2015, today is the miniEXPO for SFC. Our group from game design course will have an exhibition and a presentation about our board game – Triads. Speaking of the course, the most interesting point is that Prof. Joey Lee encouraged us to solve a big problem through designing a game. While the process of designing a game actually is nothing special but deciding the theme, brain storming, making models, testing and adjusting, and then testing again. The process was iterated over and over towards the satisfying result. And this is what I think the most important thing I learnt in SFC --learning by trying. As a civil engineering major student, design for me was just to play with numbers according to the standard while the product design I learnt in SFC is another way of thinking. You design for people, so you do the design not according to the fixed standard but the users, which means that design is unlimited and there is no right answer. The only way to find the answer is to keep trying and thinking from the users' perspective.

This semester is my last semester in SFC, so the miniEXPO seems to be the graduation ceremony for me. Oh, someone is calling; let's start our final show in Stage.

今天是 2015 年 6 月 27 日,中芬中心芬享会正在进 行中。我来自游戏设计课程"三合会"组,"三合会" 是一款桌游,是我们设计的游戏产品,今天我们将 进行汇报与展示。说起游戏设计这门课,最有趣的是, 李老师一直鼓励我们着眼社会问题,设计一款可以 解决该问题的游戏。其实游戏设计的过程其实并没 有什么特别,不外乎确定主题、头脑风暴、原型制造、 测试及改进、然后再测试。不断重复这一过程,直 到得到满意结果为止。但这也我在中芬中心学到的 最重要的一点——从不断尝试中学习。作为一名土 木工程专业的学生,设计于我而言不过是根据标准 玩数字游戏,但中芬教给我的产品设计却是另一种 形式。以人为本,所以设计遵循的是用户需求而非 既定标准,这也表明设计不设限,且没有绝对正确 的答案。只有不断的尝试,从用户的角度出发想问题, 才能找到答案。

这是我在中芬的最后一学期,芬享会就像是我的毕业典礼。哦,有人在叫我了,快来听听我们在舞台的展示汇报吧。

Famille (PSA)



We want to design an alterable backseat, which can meet different needs. It has three modes for business, children and travelling. These three modes could alternate by the deformation of seat shape.

我们组要做的是一种可自定义的汽车后排座椅,它是模块化的,因此可以满足不同用 车人群的需要。我们设计了三种模式,分别适用于商务人群,儿童和旅行。三种模式 的切换可以通过座椅形状的变化来实现。

SOLAR WINGS (PSA)

We SOLAR WINGS PROJECT have developed a foldable solar panel system, which has multiple benefits. It is economical, fascinating, and sustainable. It is created for families that love to do one-day trips. The Solar Wings car can provide safe and comfort experience.

SOLAR WINGS PROJECT-

SOLAR WINGS 项目开发了一个提供多功能的可折叠太阳能板系统。它省钱,个性并 可循环利用。它专为爱好周边一日游的家庭而设计。太阳翼(Solar Wings)车将为 他们提供安全及舒适的体验。

The Last Kilometer (PSA)

How can we address the problem of millions of people who need to reach their destination, while avoiding eminent traffic congestion in 2025? Here we propose a solution: The Last Kilometer Autonomous Personal Vehicle. It serves as a car seat, which can be converted into a Segway-type vehicle at the user's convenience.

Last kilometer Autonomous Personal Vehicle

在 2025 年如何在缓解交通压力的同时解决上百万人的出行问题? 我们提出了以下设 想: The Last Kilometer 自动个人体感车。它是一个汽车座椅,也可以在需要时转换 为一辆体感车。

Audi Tongji Light Challenge (Audi)



How should a well-designed car lighting system be, combining new technologies, safety and personal preference? Our project aims to integrate those elements, focusing on Chinese personal interest and aesthetical taste. Audi Tongji Light Challenge is a project that wants to understand the reactions of the Chinese market on the new Audi light prototypes and provide improvements and ideas based on their insights.

理想中一个设计精巧,结合新技术、安全性和个人喜好的灯饰照明系统应该是什么样 子?着眼于中国市场的兴趣和审美品位,我们致力于将这些元素结合起来。奥迪同济 照明挑战项目希望了解中国市场对于奥迪全新照明设计的反馈,并基于调研结果提供 改进和更多的想法。



Team Volvo (Volvo) The purpose of this project is mainly to make a small study on examples of adaptation of "English/none local" language into Chinese culture, and to develop a cultural adapted User Interface of Volvo trucks for Chinese market.

> 这一项目旨在了解全球性产品在交互界面上是如何适应中国的,并设计出一款适应中 国本土文化的卡车用户交互界面。

Our project is to design a revolutionary ship control experience, not only the controller, but also the controlling system. Our whole team includes the American students from Pace University and Finnish students from Aalto University.

由芬美中三地学生共同研发的全新的船体操控体验,为 ABB 公司设计出更为合理的 三维操控杆及智能触控的全新界面。

Team ABB (ABB)



Dynasty integrates wealth management into the lives of first Generation Chinese HNWI, and we build an empowering online platform that brings together the most important aspects of the customer's life: wealth, health and value.

Dynasty 将财富管理融入到中国第一代高净值人群的生活中,研发出一个结合了财富、 健康及价值观这些消费者生活中的重要方面的线上管理平台。

Dynasty (UBS)



Our team works for Electric Mobility (EMN) to find a solution to meet both the COMBO STATION BEV and the FCEV users' needs, and we come up with the amazing COMBO-STATION, a new BEV charging station and an on-site hydrogen-producing filling station for electric cars.

我们的团队致力为 Electric Mobility 电动汽车公司(EMN)提供满足纯电动车及燃料 电池电动车用户需求的解决方案,研究出一种新型 BEV 充电站 COMBO-STATION, 并为电动汽车开发出现场制氢填充站。

(EMN)



We focus on bringing fun and different experience to children. ROVIO TRUCK, born from concept of circus. We hope to bring wonderful experience to everywhere and everyone.

我们致力于把快乐和不同的体验带给孩子们。ROVIO TRUCK 灵感来自于马戏团的概 念。我们希望将精彩的体验带到所有地方,带给所有人。

Rovio Trucke Shanghai (Rovio)



Swappo is a service that helps people to move expensive consumer loans to a new bank with lower interests. All the legal proceedings, paper work and coordination will be done by Swappo in the back. Automatism of the whole process and a digital/mobile first approach enables us to disrupt the business model of established banks.

Swappo 是一项为用户提供更低利息的服务。Swappo 将帮助用户处理所有法律事项、 书面工作及项目协调。其全自动的流程及移动终端的工作方式将对现有银行的商业模 式产生挑战。

Swappo



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Hive Five



Hive Five is a local food delivery and waste collect system. We deliver fresh local food to citizens through an online ordering platform and a series of small and diffuse pick-up points and reuse the packaging of food, meanwhile collect the organic waste and turn it into compost for the use of the growth of crops.

Hive Five 是一个集本地蔬果配送、包装循环使用和厨余垃圾回收再利用为一体的可循环系统。在为市民提供便利的同时,尽可能减少包装垃圾的产生,并充分利用厨余垃圾,将之转化为有机肥料为农作物所用。

Phonix



The problem we aiming to solve is about the e-wastes, which are the abandoned phones, computers, TVs, etc. actually. We connect the e-product consumers, governments, material buying companies, e-waste collectors together and make efforts on such issue.

我们的项目旨在当前日益严重的电子垃圾问题,包括废弃的手机、电脑、电视等电子产品。Phonix 将电子产品使用者、政府、材料回收商以及电子垃圾收集者等集合起来,共同为解决电子垃圾问题努力。

Triads



Triads is a four players board game that aims to spread awareness about experiencing criminal organization in everyday life. The game will show players the difficulty to quit the criminal chain and how honesty worth efforts.

Triads 是一款旨在在生活中培养人们对于犯罪组织警觉意识的四人卡牌游戏。这个游戏使玩家切身体会到深陷泥沼的痛苦与付诸善意的值得。

Seasight



Seasight is a board game that teaches children about blind and visually impaired travelers. It tells the story of four friends who love to travel. With the help of visual aid canes, guide dogs, and locals they race toward their final destination: THE BEACH!

Seasight 是一款桌面游戏,教育小朋友关心失明和视力障碍人士。游戏以 4 个热爱旅行的好朋友为主人翁,在拐杖、导盲犬及当地人的帮助下,他们一路向沙滩进发!

Bananas and Peaches



Bananas and Peaches is a guessing game. Our goal was to create a game about gender stereotypes. We let people talk and discover that discussion about gender questions can be both - fun and educational.

香蕉与桃子是一款试图打破性别刻板印象的猜谜游戏。在游戏过程中,玩家会发现, 与性别相关的问题可以既有趣又具有教育意义。

Gyro



Gyro is a Service System to collect and prevent plastic waste from critical areas. Gyro aims to collect all the plastic waste from the planet Earth and giving it a new value.

Gyro 是一个收集塑料垃圾并防止其在各地区污染的服务系统。Gyro 致力于让地球上不再有散乱的塑料垃圾。同时我们还要赋予那些垃圾新的价值。

DIAN Racing is composed of students with various majors from different countries. DIAN Racing Tongji University is part of the Innovation Base of School of Automotive Studies, Tongji University. DIAN Racing will focus on design and manufacturing of racing car and effective project management.

同济电车队是一支年轻且跨学科、跨国界的团队。同济电车队隶属于同济大学汽车学院创新基地和同济大学新能源汽车工程中心。未来,同济电车队将着眼于高规格赛车的设计制造以及高效的项目管理。

DIAN Racing





During collaboration with Sino-Finnish Centre, we deeply felt its qualification of an innovative, interdisciplinary, and international platform. We really look forward that our future cooperation can go deeper upon current innovative results into more fields, with better quality outcomes, bringing in innovative spirit from Tongji while providing students with research opportunities for VOLVO.

中芬中心是个很有创新精神的跨学科国际平台,在 合作中我们也深切体会到了这一点。希望将来能在 继续现有的创新合作基础之上,探索更广领域里更 加深入的合作,有更高质量的产出,在让同济的同 学接触到企业里的研究的同时,把学校的创新精神 带到企业中来。



ZHANG Ting 张婷

Technology Strategy and Innovation

Manager of Volvo Group

沃尔泽集团技术战略及创新经理

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Joey Lee 李崇德

Assistant Professor Columbia University 助理教授 美国哥伦比亚大学

At the Sino-Finnish Centre, I teach a course entitled Game Design Fundamentals and Principles. I am passionate about creating experiences that are fun and playful, but more importantly, that can address real world problems like improving education or addressing climate change. Games and game-like experiences can be extremely powerful — they can get us to view the world in new ways, can motivate new behavior, or get us to think creatively to solve difficult problems.

I love the SFC community. It's vibrant, collegial, and like a family. The diversity of perspectives is a wonderful strength. You can see the talent and creativity in the students' projects. In my class, students created wonderful game projects that addressed topics such as criminal organizations, classism, gender stereotypes, improving education, improving relationships, and disabilities. They were all unique and well crafted, despite having limited time to conceptualize and create the project.

I'm so thankful to be part of the SFC community!

我在中芬中心教授《游戏设计》这门课。我热衷于为大家创造有趣并好玩的体验,但更重要的是,我希望这些体验能够解决真实世界存在的种种问题,如教育改进、气候变化等。游戏以及游戏式体验的能量可以非常强大——带领人们用新的角度审视世界,激励人们养成新行为,或者促使人们用创造性思维来解决各种问题。

我喜欢中芬中心这个大家庭。她生气勃勃,既像学院, 又像家。这里的学生来自不同专业和文化,他们有天赋、 有创造力,具备多元化视角,这些都是项目强有力的支 撑。课程中,学生们以小组为单位,设计了多款游戏, 主题涉及犯罪组织、阶级歧视、性别刻板印象、教育改进、 关系改善、残疾人士等各个领域。尽管课程时间有限, 大家还是从概念形成、项目主题确定,最终抵达了独一 无二、制作精良游戏原型。

而我,能够成为中芬中心的一份子,无比感激!

Sanne Cools 桑妮

Industrial Design Ghent University 工业设计 比利时根特公立大学



In the Sino-Finnish Centre I got the opportunity to learn in a whole different way. I worked together with students from all over the world to create amazing products. A business plan for a crowd detecting application, a User Interface for truck company Volvo, a board game about blind travelers and a product for beer company Budweiser. Together with my Chinese and international classmates, I made really some great things in Tongji University.

The most memorable moment for me will be the lecture of Tiki Wang. He is the CEO of Microduino, a Chinese company that makes small stackable electronics. At the time of Tiki Wang's talk, I was organizing my master's thesis' subject for next semester. I planned to develop a tool kit for children to build new IOT (Internet-Of-Things) prototypes. When I heard about Microduino, I was really impressed by its products. It made me excited to work together with this company. I found the courage to contact them and we started a cooperation. This summer, I'm doing a short-term internship at Microduino in Beijing.

After this semester, I realize learning isn't just

listening to lectures. It's being eager to do research, having the courage to ask questions and making ideas reality. It's sharing experiences and working together. It's showing willpower and interest in the things that matter to you. There is a whole world of opportunities out there waiting for me and my classmates. Coming to Shanghai, was the first opportunity I grabbed and it was the best choice I made this year. I'm ready for more!

是中芬中心,给了我体验完全不一样的学习的机会。在这里,我与不同国别的学生合作,我们做了很多项目,成果也令人惊叹,包括批量检测应用的商业计划,沃尔沃卡车的用户界面,关于盲人旅游的桌游,以及百威啤酒的产品。我得说在同济,我跟中国及外国小伙伴们一起,做了很多真正了不起的事情。

其中,最难忘的是邂逅了中芬中心的一场讲座,讲座嘉宾是中国小型可堆叠电子产品制造企业——美科科技执行总裁王振山先生。那段时间,我恰好在准备下学期硕士论文的主题,想要开发一套供儿童搭建新型物联网原型的工具。当我一听说美科科技,就被它的产品所吸引,我也非常希望能在那里实习一段时间。所以讲座过后,我鼓起勇气,与他联系,并获得了珍贵的合作机会。这个暑假,我就在北京美科科技进行了短期实习。

经过一学期,我意识到学习不仅仅是听课那么简单,学习还需要有对研究的渴望,问问题的勇气,实现想法的动力,它是经历分享,是携手合作,是展现你对重要事情的意志力和兴趣。我知道,世界之大,无数机遇在等着我和我的小伙伴;来到上海,就是我抓住的第一个机遇,也是我一年中做的最棒的决定。所以来吧,我已经准备好了!



Daniel Graff 丹尼尔

Lecturer Aalto University 讲师 芬兰阿尔托大学

As a lecturer from Aalto University International Design Business Management (IDBM) program, I had the great pleasure and fun to teach last October the IDBM Orientation course at SFC. The course introduces the processes and theories of IDBM through a project-based learning exercise. Last year's project was about improving the products and services offered by ATDF. As with the previous years, the students of SFC have been exceptional motivated and hard working to find suitable solutions. Although the project was only two weeks long, I believe that they developed very practical, useful and creative solutions for ATDF that I hope to see being implemented in the future. Part of the pleasure teaching at SFC is the flawless organization by administration. Thank you Michelle and Dan and all the others involved! I always enjoy being around SFC, sitting on the sofa and drinking my Happy Lemon and discussing with Alex our future pig-leg business in Europe. Because of the great experience at SFC, I have agreed to teach a full six-week course starting in November of this year. I am looking forward meeting new students and familiar faces.

我是阿尔托大学的一名讲师,主要教授国际设计商业管理项目课程。去年10月,我在中芬中心开设了《国际设计商业管理导论》,通过基于项目的学习方法,给学生介绍了国际设计商业管理的过程和理论知识。项目主要围绕提升中芬中心的产品和服务开展。如往年一样,学生们非常主动、认真地寻找最佳解决方案。虽然只有短短两周时间,但他们提出了切实可行且富有创意的概定让,我期待他们的成果可以在未来得以实施。在这里上课,我觉得非常开心。此外,中芬完美的行政管理也让我心情愉悦。感谢这里所有的工作人员!我待在中芬的时光总是惬意的,坐在沙发上,喝着快乐柠檬,跟元琦讨论猪蹄进军欧洲市场的宏图伟业。正因为此,今年11月我还将在这里开课,不过这次会有足足6周的时间,很期待能见到老朋友和新面孔。

The Journey of Water Quality Index Water Quality Index 之旅

Written by DONY Jiarong

文 / 董家容

Water Quality Index traveled with us from Sino-Finish Centre across the ocean, all the way to Singularity University at NASA Ames Research Center.

Here is how is it born

One year ago I went to a photography exhibition of famous photographer Lu Guang, who has been dedicated to track the pollution sites along main rivers in China. The facts he showed us shocked me with no words.

Do you ever wonder how the quality of our drinking water is?

Up to 40% of China's rivers were seriously polluted last year after 75 billion tons of sewage and wastewater was discharged into them. About 20% of rivers were so polluted their water quality was rated too toxic even to come into contact with. And it leads to 59.6% groundwater does not meet national purity standard for drinking. Inadequate management of urban, industrial and agricultural wastewater means the drinking water is dangerously contaminated. According to WHO, contaminated water can transmit diseases such as diarrhea, cholera, dysentery, typhoid and polio. So a significant amount of disease could be prevented in developing countries with safer water: 1 400 000 child deaths from diarrhea: 500 000 deaths from malaria; 5 000 000 people can be protected from lymphatic filariasis or trachoma.

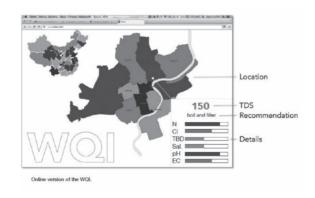
We want to save people's health from dangerous drinking water!

With this eager, Anni Laurila, an architect from Aalto University, and I, Dong Jiarong, a Chemical Engineer developed Water Quality Index in Sustainability Thinking class in SFC, under guidance of our innovation supervisor Godert van Hardenbroek. By testing and monitoring tap water quality and making Water Quality Index Map, we enable people to real-time check the water quality of their own neighborhood. We relate the water quality to people's daily life to raise their awareness.

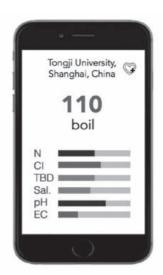
And the transparency will create demands for safe water and change to water treatment. Of course we also provide simple solutions for families to some pollutants and customized filter for more difficult contaminants

Water Quality Index won not only the First Prize at the final but also in Global Impact Competition by Singularity University!

The Global Impact Challenge acts as a platform to identify outstanding entrepreneurs, leaders, scientists and engineers with the most innovative ideas for positively impacting millions of lives locally and globally within the next 3-5 years. The winner of each competition is invited to attend the Graduate Studies Program (GSP) free of charge. Participants spend 10 weeks, first learning about exponential technologies, future trends and the global grand challenges, and then apply this knowledge to projects aiming to positively impact a billion lives within 10 years.







Water Quality Index 跟着我们从中芬中心漂洋过海,一直到了美国国家航空航天局艾姆斯研究中心的奇点大学。 这就是它的故事。

一年前我看了卢广的一个摄影展,他花了很大功夫来跟 踪中国主要河流流域的污染问题。他的照片让我震惊得 说不出话来。

你是否曾经想过我们饮用水的质量到底什么样?去年中国有40%的河流严重污染,有750亿吨的废弃物和污水被排放进河流。将近20%的河水因为污染过于严重以至不适于人类直接接触,这也导致了59.6%的地下水不能达到国家可饮用水的指标。城市管理不当、工业及农业废水意味着我们的饮用水被严重污染了。据世界卫生组织,被污染的水会导致传染性疾病的蔓延,如腹泻、霍乱、痢疾、伤寒和小儿麻痹症。如果能够在发展中国家提供更安全的饮用水,这些问题就可以得到更好的预防:140万儿童免于腹泻致死,50万病人免于疟疾致死,500万人免受淋巴丝虫病和沙眼。

我们想通过解决危险的饮用水这一问题来保障人们的健康!

怀抱着这样的想法,来自阿尔托大学建筑系的 Anni Laurila 和来自同济大学化学系的我在中芬中心的可持续思维这门课上开发了 Water Quality Index。通过测试并检测自来水质量并制作水质量地图,人们能够实时检查自己社区的水质。通过把水质与人们的日常生活联系起来,我们期望能够提升大家对水质的关注,同时促进对安全用水的需求。除此之外,我们也会为家庭提供一些针对污染物的简单解决方案和定制化的过滤器,以处理

更复杂的污染物。

我们的 Water Quality Index 不仅在课程结束的时候赢得了第一名,并且在奇点大学的奇点创新大赛中也获得了一等奖!

奇点创新大赛意在鼓励出众的创业者、领导者、科学家和工程师为接下来三至五年间提升当地及全球人类福祉的最创新的想法。获奖者将被邀请加入奇点大学的研究项目,在十周之内学习相关技术、未来趋势及全球挑战,并将这些知识应用到在十年内能够对上亿人福祉产生积极影响的项目里。

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If you are interested in our project or know someone who would be, please do connect with us!

E-mail: waterqualityindex@gmail.com

如果你对我们的项目或者觉得有人会对我们的项目感兴趣,请一定联系我们!

邮件: waterqualityindex@gmail.com



During the program I had the chance to learn integral information about possible technologies for Water Quality Index, got to connect with exceptional people working in the field and experience what it is to found and run a startup. I learned that Water Quality Index could have a lot of potential both in China and elsewhere, especially because smart phones are spreading in locations that still lack secure drinking water, and the price and capacity of water quality sensor technology is becoming more attainable year by year.

I would love to bring people the Water Quality Index, which could help so many to both care for the fragile environment and ensure the safety of their drinking water for themselves and their family.

在这个项目里我学习到跟 Water Quality Index 相关的技术,接触了在相关领域的专家们,还体验了如何创立并运行自己的创业项目。随着水质传感器技术的价格和可用性越来越亲民,Water Quality Index 不仅在中国有巨大的潜力,在别的地方也一样,尤其是在那些智能手机已非常普遍但缺乏安全饮用水的地方。

我希望能够让更多人用到 Water Quality Index,它不仅能够保护脆弱的环境,并且确保他们及家人的饮用水安全。

Anni Laurila 安妮

Exchange Student
Aalto University



Aalto University 阿尔托大学 交换生

DONG Jiarong

董家容

Chemistry Department, Undergraduate Tongji University

同济大学 化学系 三年级

After exchange program in Japan I joined project development in NASA in Mid August, and spent half a month working on prototype for water quality testing model there. It was such a great chance to learn exponentially developing technology. And it's also very surprising to me that there are so many people focusing on solving water related issues. Water is an emerging problem globally. Now I'm even firmer on keep working on Water Quality Index. I believe people deserve the right to have access to safe and healthy water. I'm glad to be the one putting effort to change the world.

在日本的交流项目结束之后我在八月中参加了在美国国家航空航天局艾姆斯研究中心的项目开发,并在那里花了一个半月制作水质量测试模型的产品原型。能够在那里学习开发技术对我来说真是个难得的机会!我也很惊讶地发现在那里有很多人在致力于解决跟水相关的问题。水问题是一个全球性的问题。现在我比之前更想把Water Quality Index 这个项目推进下去。我认为人们都有权利获得安全和健康的水资源。我很开心能够成为改变这一世界的一份子。



RESEARCH

研究

Labs 实验室

The Reunion Plague Research Project

重构瘟疫

CASP Lab 艺术科学实践实验室

Director GUO Cheng 负责人 郭城

casp Lab



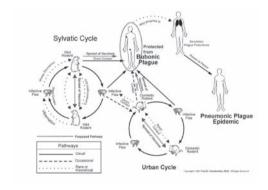
The SFC CASP Lab (Lab of Critical Art-Science Practice) is a center of art δ science research and innovation. The Lab is based on the interdisciplinary platform of Sino-Finnish Centre and the nation's leading multi-disciplinary educational background of Tongji University. It integrates hardware and software resources internal and external the University and tries to create an interdisciplinary experimental art δ science practice center for artists, designers and scientists.

中芬中心艺科实践实验室是一个艺术与科学的 研究、创作及交流基地。它基于中芬中心的跨 学科交流平台,并以同济大学全国领先的多学 科教育背景为依托,整合利用校内院系间以及 校外的研究机构和的软硬件资源,在艺术家,设计师和科研工作者之间创造一个交叉学科和实验功能的交流、合作、创意中心。实验室将 作为艺术领域内其他学科和创意产业创新的催 化剂。

郭城 GUO Cheng CASP Lab 林沛瑩 LIN Peiying 台湾生物艺术社群 Taiwan Bio-art Community

The Reunion Plague is a project that envisions future possibilities that transforms animal reservoirs into agents of vaccinations. We propose to look at pandemic and disease control with a bigger picture where animals are also the beneficiaries - a new way of disease control that combines the methodologies of rabies vaccination and the legendary cowpox-smallpox vaccination where human develops close relationship with pet dogs and farm cows. Through which the design will attempt to invert the interaction between human and the animal reservoirs.

"重构瘟疫"是一个设想未来关于将动物感染源转化成接种剂可能性的项目。我们尝试以一个更大的视角审视流行病和疾病控制,其中的动物也都将成为受益者——用疾病控制的新方法,即通过借鉴人与宠物狗、奶牛等发展密切关系的历史与发明狂犬疫苗注射和著名的牛痘-天花疫苗的之间的关系进行新的创造,试图反转人类和动物宿主之间的相互作用。





Electrophysiology investigates the innate electrical characteristic of cells. Electrical measurements of stimulated organism as common electrophysiological techniques have been used in observing biological corresponding muscle and movement reaction. The workshop starts from exploring the micro and macro aspects of electrophysiology to debate the value and significance of electricity in their lives. By using a bio-fiction way of thinking to explore broader imagination that it brings to us, and explore different possibilities within various context and the changing of human being and animals in aspects like ideology, lifestyle, communication method, etc.

电生理学领域研究的是生物体细胞所具有的电学特性。 在常见的电生理技术中多以电测量、刺激生物体,观察 生物相对应的肌肉与动作反应。本次工作坊从电生理出 发,从微观和宏观层面上重新审视体会电在生命中的价 值与意义,通过 bio -fiction 的方式探索它能带给我们何 种更广阔的想像力,以及我们如何更深入探讨电生理这 个可以赋予有机体生命与动力的领域,并探索不同情境 下通过电生理影响、介入生命体活动或生命体之间行为 的不同可能性,以及它们是否会导致人或动物观念、生 活形态、沟通方式等方面的转变。

Bio-fiction of Electrophysiology - Bio-Art Workshop 2014.11 电生理学的科幻想像 - 生物艺术 工作坊 2014 年 11 月

CASP Lab X Shih Chien University X Taiwanese BioArt Community
CASP LAB X 台湾实践大学 X 台湾生物艺术社群



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ISeeLife! Lab

Director Prof. Dr. Matti Aarne Hämäläinen 负责人 马蒂教授 博士



To solve the aging problem, promote new innovative multidisciplinary and participatory approaches and to involve the variety of stakeholders in active cocreation for tackling the challenges and opportunities in ageing societies, the International Joint ISeeLife! Lab was established at Sino-Finnish Centre, Tongji University.

在积极寻求老龄化问题创新解决方案的同时,为了促进跨学科创新、参与式方法的应用及多元利益相关者的融入,建议以多年活跃的研究及国际合作为基础,在同济大学中芬中心创建 ISeeLife! Lab。

China- Finland Business Forum and Workshops "Co-creating the Future -Innovative Solutions for Wellbeing and Learning"

中芬商务论坛工作坊"共建未来——福 利和学习的创新解决方案"

ICT Workshop for Finnish ICT Business

Delegation

芬兰信息通讯商业代表团工作坊

Microduino Open HW Intensive Development Course Pilot for Smart Things and Smart Spaces

Workshop on Sustainable Urban Development: Green building, energy and material efficiency; Smart City and Smart Campus

Workshop on Solutions for "Smart Life": health, wellbeing and senior services; smart home - smart things and smart spaces

美科开源硬件开发工作坊

中国 - 芬兰智慧城市科技战略联盟国际 会议周城市可持续发展,绿色建筑、能 源和材料效率;智能城市及智能校园工 作坊

"智能生活"的解决方案——健康、福利和老年服务;智能家居,物联网和智能空间工作坊

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econoVation Lab 生态创新研究室

Director Prof. Dr. Cheng Yiheng 负责人 程一恒教授 博士



Three purposes of this lab

development driven by ecological system planning,

innovation driven by resource productivity

and incubating social entrepreneurship and corporate social responsibility driven by blue economy business model.

建立该实验室的三个目的:

生态规划驱动的开发,

资源生产力和仿生驱动的创新,

以及蓝色经济商业模式驱动的创业孵化及企业 社会责任培养。

Research & Thesis Inspired at SFC 2014-2015

研究项目及论文 @ 中芬中心 2014-2015

Creating Collaboration – Human Hubs and Go-betweeners in Sino-foreign University Collaboration

创造合作——论中外高校合作中的中枢人及中间人

Martin Bech

MSc in internationalization of higher education

Coordinator of the ThinkChina Secretariat at University of Copenhagen

马田 高等教育国际化硕士 哥本哈根大学思考中国秘书处协调人



The thesis deals with Sino-foreign university collaborations engaged in joint postgraduate education, research and third mission activities. Drawing on inspiration from strategic management, new institutional theory, the thesis focuses on the role of individual actors (human hubs and go-betweeners) in accessing resources (e.g. laboratories, data material, students) and negotiating institutional differences (e.g. local rules and regulations as well as institutionalised practices).

该论文探讨与联合研究生培养、研究及第三职能活动相关的中外高校合作。受战略管理、新制度主义理论启发,本论文聚焦于独立个体(中枢人及中间人)在获取资源(如实验室、数据资料、学生)及制度差异协商(如当地法律法规及制度化实践)中的作用。

SFC has received me with open arms during my three visits in 2012 and 2014. I was allowed to take up desk-space at the long-table in the 'main engine room' and even though everybody was extremely busy they always took their time to answer my questions and explain their operations. Not to mention their support in organizing interviews around Tongji and with partners outside campus. It was a great help and a great inspiration that not only informed my thesis but that I carry with me in my new job.

我在 2012 年和 2014 年内三次到访中芬中心,都在这里受到了热情的欢迎。我得以在办公室有一席之地,尽管工作人员都很忙,但他们总是尽量回答我的问题,介绍他们的工作。除此之外,他们还协助我安排在同济内外的采访。他们的帮助和启迪不仅为我的论文提供了灵感,对我现在的工作也大有裨益。

Placemaking within Collaborative and Innovative Learning Environments

协作创新式学习环境中的场所营造



Alicen Coddington
PhD Candidate
Swinburne University of Technology
Research Field:
Spatial design of collaborative and innovative learning environments.

爱丽森·哥汀顿 博士候选人

澳大利亚斯威本科技大学

研究领域: 协作创新式学习环境中的空间设计

Placemaking within collaborative and innovative learning environment investigates placemaking as a process whereby humans turn space into place. The Design Factory Global Network is an integral part of this research and has been utilised as a case study. In particular Swinburne Design Factory, Aalto Design Factory, Aalto-Tongji Design Factory and IdeaSquare have been used as primary sites for this study into placemaking within collaborative and innovative learning environments.

协作创新式学习环境中的场所营造研究人类将场地变成场所的这一营造过程。设计工厂全球网络是本研究的一个组成部分,亦是研究案例之一。特别是斯威本设计工厂、阿尔托设计工厂、同济 - 阿尔托设计工厂及点子广场都是协作创新式学习环境场所营造研究的首要场所。

During December 2014 research at Aalto-Tongji Design Factory (ATDF) was conducted. For one working week the kitchen and field space at ATDF was observed through time-lapse still photography. Staff members of ATDF were also interviewed in relation to the usage of the space and how the ATDF space can be a facilitator for collaboration, community connection and learning.

2014 年 12 月我在同济 - 阿尔托设计工厂做了相关调研。我 花了一周时间用延时摄影的方式来观察同济 - 阿尔托设计工 厂的厨房和空地。我也就场所使用和场所对于合作、社群联 系、学习的辅助作用等问题采访了工作人员。



May I Have This Dance? -- Sino-Finnish Centre as Collaboration Platform in Aalto-Tongji Partnership

我能跳这只舞吗? ——论阿尔托 - 同济合作平台中芬中心

Meri Vainio

MSc in Information Network

Aalto University
Research Field: Information Networks. Human and Interaction

美里 信息网络硕士 芬兰阿尔托大学

研究领域: 信息网络, 人与交互



Aalto-Tongji Design Factory (ATDF) in Shanghai, China is the first Design Factory built outside Aalto University, and works as the physical and spiritual platform for Tongji University Sino-Finnish Centre (SFC). How everything started between Aalto and Tongji, what are ATDF and SFC, what are the models for cooperation, and how the collaboration could be improved?

This thesis is a result of two years studying and working at ATDF. The thesis suggests a general model for international collaboration transferring the DF principles and practices. We shall meet on the dance floor!

中国上海的同济 - 阿尔托设计工厂是在阿尔托大学之外的第一个设计工厂,也是同济大学中芬中心的物理空间实体。阿尔托与同济之间的合作是如何开始的?同济 - 阿尔托设计工厂和中芬中心是什么?有什么合作的标杆可以借鉴?如何进一步促进双方间的合作?

本论文的完成基于作者在同济 - 阿尔托设计工厂两年的学习和工作经历。本论文根据设计工厂的原则及实践提出了针对国际合作的一般模式。让我们一同起舞!

Creating a Better Learning Space: The Case of Sino-Finnish Centre

优化学习空间——以中芬中心为例

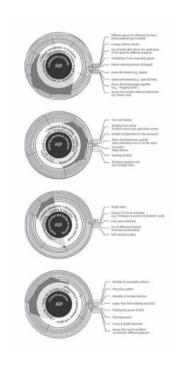


LU Zhou IDBM Double Degree Student Tongji University

陆洲 国际设计商业管理硕士双学位学生 同济大学

Learning spaces are expected to facilitate creative work, to host a rich network of knowledge exchange, and to assist in enhancing deeper and richer inter-disciplinary collaborations with domestic and foreign institutions. In such a context, Aalto Design Factory was established in Finland; its first sister Design Factory was brought to China, under the responsibility of Sino-Finnish Centre. My study investigates how Sino-Finnish Centre, modeled on Aalto Design Factory, was utilized and experienced by its local users. In addition, a comprehensive literature review incorporates with empirical findings to offer recommendations to improve the design of Sino-Finnish Centre space, better serving the local demands and trends.

学习空间被认为有助于辅助创新型的学习和工作,建立多元的知识交流网络,以及加强与本土及国际企业之间的跨学科合作等。在这样的背景趋势中,阿尔托设计工厂在芬兰应运而生,随后这一概念被带到了中国上海,并作为中芬中心的物理空间在同济大学展开新生。我的论文主要研究的正是中芬中心的学习空间本身,这个空间虽然沿用了不少芬兰的成功经验和特色,却由于使用者,教学体系,管理机构和社会文化背景的不同,在发展和使用的过程中浮现出不同的问题和挑战。我希望能够通过实证研究,为中芬能够更好地服务本土提供值得参考的建议。



Thanks for this annual report giving me a chance to think about all my friends and colleagues from SFC who have supported me during this thesis work. Here is the place, in the past two years, where I have been studying, working and living. I owe sincere and earnest thankfulness to all the creative, hardworking, and supportive staff from SFC, thinking of me and having my back throughout my journey, especially in those toughest days. Thank you for staying with me as colleagues, friends and life mentors - and sharing sweet moment in your lives with me and celebrating the progress of my work, no matter how tiny it was.

借中芬年报之机来回想一下中芬小伙伴们和同事们在过去的 两年里给予我的支持。中芬对我来说,不仅仅是工作学习的 地方,几乎是我生活的大部分,因为这里有最最最鸡血,善 良,勤奋的我的同事们。在我着手写论文的这段"艰难岁月", 是对于中芬的回忆和大家的鼓励让我坚持到了最后。这里的 每一个人,也是工作伙伴,更是良师益友,每一个一起度过 的生日,节日,加班日都是我最珍惜的回忆。

06 Research 65

How Does Learning Space Impact upon Student Learning in Higher Education?

An Exploration Through a Comparative Case Study in China

高校学习空间如何影响学生学习?

── 一项基于国内对比案例的探索性研究

YU Ji PhD Candidate in Psychology & Education Faculty of Education, University of Cambridge



余继 心理与教育组博士候选人 英国剑桥大学教育学院

In order to investigate how learning space impacts upon student learning in higher education through empirical research, I conduct a comparative case study in two distinct but representative learning spaces in Tongji University, China. One is a traditional learning space (North and South Buildings), the other is an innovative interdisciplinary learning space (Sino-Finnish Centre). 320 students from the university complete a questionnaire investigation of their learning patterns in the two spaces (the Inventory of Learning Styles, Vermunt, 1994), with 28 of them participate in the following in-depth focus group interviews.

The results will be analysed and contrasted to get a deep understanding of how learning space could impact upon student learning in higher education. These empirical evidence will also enable us to strongly discuss specific features of a learning space that can be considered to be more desirable and effective for student learning in higher education.

本研究通过实证对比,探索高校学习空间对学生学习的影响机制。本研究选取了国内同济大学两个具有代表性、物理形态呈显著差异的学习空间为研究案例——1)同济大学南北楼,建于50年代初,为学院派建筑的代表,典型的传统学习空间;2)同济大学中芬中心,建于2010年,强调开放、创新及跨学科学习交流的新型空间。2014年12月至2015年4月,来自该校的320名学生在两个空间内完成了关于学习模式的问卷调研,其中28名学生参与了后续关于学习空间与学生学习的深度小组访谈。

两组案例的数据将进行对比分析,以获得学习空间对学生学习影响机制的深入理解。这些实证数据,也将帮助研究者更有力地探讨高校中理想学习空间的具体形态。

Quantifying Human Behavior in an Early Stage Design Context

早期设计场域下的人类行为量化



Leif Erik Bjoerkli MSc Candidate in Engineering and ICT Norwegian University of Science and Technology

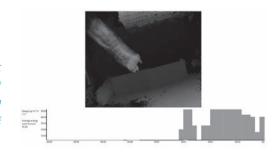
博里 信息通信技术工程硕士研究生 挪威科学技术大学

I've been investigating the possibilities for using Kinect sensors to track and analyze people's behavior in design contexts. The result so far is a thorough analysis of the Kinect sensor and a developed body tracking software. This is used to calculate heat maps of the movements as well as the amount of energy used by each person. The future plans of the work is to use the heat maps and energy calculations to analyze how people are responding to early-stage design methods, for example brainstorming methods and early-stage prototyping with different tools and materials.

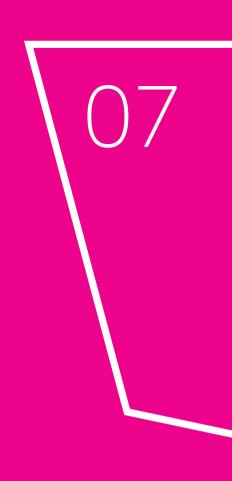
SFC has been a good platform to perform my thesis. I have been given much freedom in my exploration of how to integrate the sensor into different rooms at SFC. They have also been providing me with the sensors and equipment for experimenting with sensing setups. Thanks to the ones that has been helping me during my stay at the SFC. The staff for participating in my egg-drop-challenge, and especially Matti Hämäläinen Jr for being a great facilitator at the beginning of my stay here.

对我的论文来说,中芬中心是一个极好的实验平台。我在这里可以自由地研究如何整合不同房间里的传感器,在安装传感器阶段也得到了不少设备支持。感谢所有在中芬中心帮助过我的人。参与我的鸡蛋挑战的工作人员,特别是在我初来乍到时尽心尽力提供帮助的韩马。

我在中芬中心研究如何使用 Kinect 传感器跟踪并分析设计场域下的人类行为。目前我利用 Kinect 传感器及一个相应的身体跟踪软件得出的数据来计算运动热图及每个人所使用的热量。未来我计划利用热图及热量计算来分析人们如何对早期的设计方法(如头脑风暴方法及在早期的产品原型制作)作出反应。



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IMPACT

国际影响

2400+ visitors from more than 20 countries including Australia, South Korea, Germany, Finland, France, United States...

来自包括澳大利亚、韩国、德国、芬兰、法国、美国等 20 多个国家的 2400 余名参观者来访。



Exhibitions

展览

Eco-China Day Exhibition

@ Swinburne University of Teconology, Melbourne, Australia

Young on Tracks Exhibiton

@ Tongji Library, Shanghai, China

SFC miniEXPO 2015

@ Sino-Finnish Centre, Shanghai, China

环保中国日展览

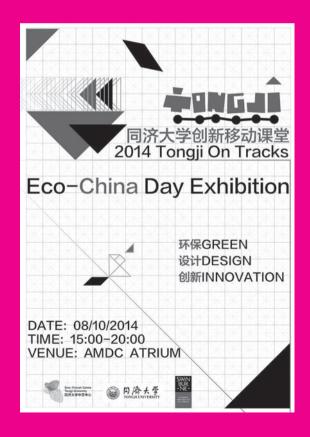
@ 斯威本科技大学 澳大利亚墨尔本

青春不停站影像展

@ 同济大学图书馆 中国上海

中芬中心 2015 年芬享日

@ 同济大学中芬中心 中国上海



Reported by media including People.cn, Xinmin Evening News, Shanghai Morning Post and ifeng. com for innovative entrepreneurial education.

包括人民网、《新民晚报》、《新闻晨报》、凤凰网在内的多家媒体就中芬中心的创新创业教育进行报道。



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🧀 微信:@ 同济大学中芬中心

facebook: @Aalto-Tongji Design Factory















In 2014, Prof. Yrjö Sotamaa, Guest Professor of Tongji University, Former Executive Vice Director of Sino-Finnish Centre was awarded the Chinese Government Friendship Awards.

同济大学客座教授、中芬中心前芬方副主任索达曼 荣膺 2014 年度中国政府友谊奖。

In 2015, Prof. Yrjö Sotamaa attended Foreign Experts Seminar hosted by Premiere Li Keqiang. 2015 年春,索达曼教授参加李克强总理新春座谈会。



In October 2014, President Pei Gang received Finnish Medal of Honor titled Commander of the Order of the Lion of Finland; Prof. Lou Yongqi received Finnish Medal of Honor titled Knight, First Class, of the Order of the Lion of Finland.

2014年10月,裴钢校长荣膺芬兰狮子骑士军团指挥官勋章;娄永琪教授荣膺芬兰狮子骑士军团一级骑士勋章。





07 Impact 73



The concept aims to:

Echo the existing Aalto presence on Tongji's campus: the Sino-Finnish Centre and Aalto-Tongji Design Factory;

Contribute to further collaboration between Tongji and Aalto;

Be the window to Shanghai in its sister city of Espoo.

同济轩旨在:

与在同济大学的中芬中心及同济 - 阿尔托设计工厂遥相呼应;

进一步促进同济与阿尔托两校的合作; 成为上海在其姐妹城市埃斯波市的国际化窗口。



A workshop was held to plan and design a concept for Tongji Lounge in Aalto. 关于设计同济轩概念工作坊在阿尔托举行。

President Pei Gang and President Tuula Teeri inaugurated for Tongji Lounge.

裴钢校长与 Tuula Teeri 校长为同济 轩开幕剪彩。

60 students and staff member celebrated The Chinese New Year of the Sheep 2015 at Tongji Lounge.

60 余名芬兰阿尔托大学的师生在同济轩喜迎中国新年。







SFC Annual Stories 2014-2015

Photo by Mikko Raskinen

Happy Moments 欢笑时刻



77 07 Impact







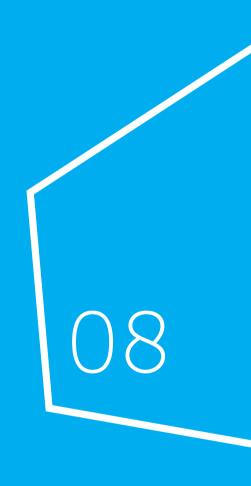
78 SFC Annual Stories 2014-2015







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FIVE YEARS FOOTPRINTS

五年足迹

Pioneer Visit 初次结缘

Since May 28th, 2007, Prof. Yrjö Sotamaa, former President of University of Art and Design Helsinki, invited to visit Tongji and to be Guest Professor in Tongji University in 2008 and Advisory Dean of the College of Design and Innovation, Tongji University in October 2009, he has always been an active advocate of Aalto-Tongji cooperation.

2007年5月28日,前赫尔辛基艺术与设计大学校长索达曼教授应邀访问同济。 访问之后,2008年,他受邀成为同济大学客座教授。2009年10月起,他担任 同济大学设计创意学院顾问院长。索达曼教授一直以来都是同济-阿尔托大学两校合作的有力倡导者。

2010	
January 8th	Opening Ceremony of Aalto University was held 阿尔托大学举行开幕仪式
January 9th	首份备忘录签署 Initial MOU Vice President Wu Jiang signed the Memorandum of Understanding with President Tuula Teeri of Aalto University about establishing SFC. (近記較长与阿尔托大学校长图拉·泰里签署有关筹建同济大学中芬中心的备忘录。
April	Two universities have started negotiating on establishing SFC 两校开始协商成立中芬中心
Way	ATDF Space Design and Construction started with strong commitment from both sides 同济-阿尔托设计工厂空间开始设计与施工 Special thanks to Shi Yin, teacher of interior design in Tongji University, Esa Santamäki, Chief of Spatial Design in Aalto Design Factory and Viljami Lyytikäinen, Project Leader from Aalto Design Factory to finalize the renovation and design plans!
May 25th	ATDF Opening 同済-阿尔托设计工厂开幕 President of Aalto University Tuula Teeri and President of Tongji University Pei Gang signed the agreement to realize the Sino-Finnish Centre, a dynamic platform for Sino-Finnish cooperation. In realize the Sino-Finnish Centre, a dynamic platform for Sino-Finnish cooperation. In realize the Sino-Finnish Centre, a dynamic platform for Sino-Finnish cooperation.
October 20th	中芬中心正式成立 Establishment of SFC
December 2nd	First SFC Advisory Board Meeting in Shanghai 中芬中心首届理事会召开 Emphasizing open international interdisciplinary learning and innovation hub is the nature of SFC. 会议强调中芬中心的实质是一个开放的跨学科创新平台。
February 11th	First Presidential Delegation to Aalto
May 4th- 20th	Tongji on Tracks lunched for the first time 同济大学创新移动课堂首次起航
May 11th	中芬中心第二届理事会召开 SFC 2nd Advisory Board Meeting in Espoo

The meeting discussed long-term educational cooperation between Aalto and Tongji and the building of the SFC learning and research community.
会议讨论了中芬中心的目标是成为一个强大的学习和研究社区。

President Dialogue in Shanghai and then 3rd Sino-Finnish Centre Advisory Board Meeting (AB) in Qingdao

校长对话与中芬中心第三届理事会先后在上海和青岛召开

February 7th-8th

2012

Key theme of the cooperation between two universities will be "Sustainable Future". 会议讨论合作的重点主题为"可持续未来"。

Their Stories 他们的故事

You Can Have Fun While Learning! Five Exciting Years

学习也可以很快乐! - 精彩的五年

The happy atmosphere of that start of SFC in May 2010 shines bright in my mind. One hundred Aalto students had arranged an amazing trip by train through Siberia to Shanghai. They wanted to greet welcome the newborn baby. Nothing could be a better start to the rare and ambitious partnership of Aalto and Tongji Universities.

The students made the local people around Tongii Campus smile by dancing around and giving them colourful T-shirts with a text "Aalto in Shanghai". This set the spirit and energy, which has been the driving engine of all SFC's activities. Professor Kalevi Ekman had taught to them "you can have fun while learning". It is a good "virus" to spread around.

This story emphasizes our "students first" philosophy. The ideas and interests of students have become important drivers of SFC's activities. SFC is built for them, to provide them unique opportunities for learning, a platform for their ambitions to flourish and their dreams to come

The team of passionate people involved in building and managing SFC and the continuous support of the Aalto and Tongji leaders have created a solid foundation for the future development. The spirit of success is based on the ambitions, commitment and open mindedness of the great SFC team headed by Professor Lou Yonggi.

The real challenge of SFC is to live up to the promise of Presidents Teeri and Pei to have an impact on surrounding world by "building a better world to live in". SFC is on the right track to fulfil this mission.



Prof. Emeritus Yrjö Sotamaa 索达曼教授

2010年5月,中芬中心刚刚诞生时的欢乐气氛依然在我 脑海中鲜活地闪耀着。一百名阿尔托大学的学生组织了 一次穿越西伯利亚从芬兰到上海的火车之旅,他们是为 庆祝这个新生儿的诞生而来。对于同济和阿尔托这一极 为特殊又宏大的合作来说,没有比这更好的开始了。

这些学生在同济大学周边跳舞并分发带有"阿尔托在上 海 (Aalto in Shanghai)"字样的彩色 T 恤,给当地的居 民带来欢笑。它奠定了驱动中芬中心之后所有活动的精 神与活力。正如卡列唯•艾克曼教授曾教给他们的,"学 习也可以很快乐"。这样的良性"病毒"值得传播到更 多的地方。

这个故事也体现了我们"学生第一"的理念。学生们的 想法和兴趣也成为中芬中心各项活动的重要驱动力。中 芬中心为学生而建,旨在为其提供独一无二的学习机会, 以及助其激发雄心、实现梦想的平台。

中芬中心激情洋溢的筹建及管理团队、同济与阿尔托校 方领导的持续支持,为中芬中心的未来发展奠定了坚实 的基础。在娄永琪教授的带领下,中芬团队有抱负、敢 承诺、观念开放,成就了它的成功精神。

中芬中心真正的挑战在于实现裴钢校长和泰里校长的共 同承诺: "创造一个更美好的世界", 使之对周围世界 产生切实影响。中芬中心正在实现这一愿景的正确轨道 上努力着。

It has been five years since the establishment of Sino-Finnish Centre. Scenes of the past kept coming back to my mind. Aalto team and Tongii team have been working together since the project kick-off. From brief introduction, field exploration, and team establishment on the first day, space design since the second day, and construction begun two weeks after, to the opening ceremony one and half month later, all of which had demonstrated that SFC, as a project, was a great combination of innovation. hands-on, cooperation and passion from the very beginning, Esmi, Viltsu from Aalto and me from Tongji were managers for this project. Regarding ourselves as fathers of the new-born baby, we had been filled with excitement and expectations since the first day we met. The birth of this amazing SFC space within only two months surprised everyone, which in fact, showed the power of innovation and creation.

After one year and a half, the second phase of SFC was built and finished with the same speed and passion. Since then, a brand new platform for open innovation, interaction and collaboration has been established within Tongji campus. The enjoyable collaboration between Tongii and Aalto teams had also provided this project with interesting experience. On the eve of the opening ceremony, we enjoyed the happiness of creation by setting a furniture assembling competition! It was also nice to work with Esmi, and we even shared similar taste when it came to the laying of a floor lamp. Of course, we went through unforgettable hardships during the construction as well. Meeting with six or seven suppliers at one time and answering more than 80 calls during one day were kind of challenges brought by this project.

We were just lucky to have the opportunity to give birth to the baby SFC five years ago, however, everyone and every team that had studied and worked here, everything and every outcome that had happened here during these years had brought it energy and color. As a member of SFC construction team, the top 3 enjoyable things could be listed as: screams of surprises by our elevator, smiling faces inside SFC, and always changing layout and new possibilities in SFC. While as a user of SFC, I have been sharing the most open-minded environment and continuous accumulating energy with others everyday. Looking into the future, I might have the similar feeling with then when SFC was just established, that I'm still full of expectations, since SFC is always the place for something new!



SHI Yin 施胤

Vice General Manger of Tiandi 上海同济天地创意设计有限公司副总经理

中芬中心自诞生到成长至今转眼已五年了,脑中跳出了五年多前项目开始的画面。项目启动会上,来自芬兰阿尔托大学的团队与同济大学设计创意学院的老师坐到了一起。简要介绍、踏勘现场、项目组成立、第二天开始空间设计、两周后开工建设、一个半月后一期空间落成使用,中芬项目从开始就是创新、实干、合作与激情的极致体现。来自阿尔托的 Esmi 和 Viltsu 同我作为三个项目负责人,把自己当做中芬这个新生宝宝的三个爸爸,从聚到一起的第一天起就充满了兴奋与期待,而两个月便迎来的绚丽诞生更是让大家都觉得不可思议。其实,这应该就是创新与创造的力量。

一年半后,以同样的速度与激情完成了中芬中心二期的建设,同济校园便拥有了一个充满活力、创新开放、互动合作的全新平台。同济与阿尔托双方团队的愉快协作也使这个项目成为充满探索与趣味的建设体验,在最后冲刺的开幕前夜,我们用组装家具比赛来尽情享受创造的快乐!与 Esmi 的合作也是设计师之间美好的记忆,我们甚至在软装布置时对一个落地灯摆放的位置和角度都有令人意外的默契!当然,建设过程也有让人难忘的艰辛,收尾阶段 6、7 支供应商队伍挤在现场的场面和一天接打 80 来个电话的经历也算是小小挑战吧。

五年前,我们只是给了中芬宝宝一个新生,而五年来在这儿学习、工作、活动的每一个人、每一个团队,在这儿发生的每一个事件、每一件成果给了他充满活力的能量和色彩。作为建设团队的一员,最为享受的可能是三件事:听到来者第一次踏进中芬电梯时的惊讶声;看到空间里的每一张笑脸;随时发生着的变化和新的可能。当然,作为平台的使用者,同时享用的是最为开放的气息与不断积聚的能量。展望未来,心情也许与五年前建成时略有相同,充满期待,因为中芬永远未完成,永远在发生……!

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My 5-Year Romance With SFC 我与中芬中心的五年情话

AndiA Wang 王娇楠

SFC Project Manager 同济大学中芬中心项目经理

I suppose my university life all connected with SFC. And here I would like to share my love story with this amazing place.

Meet

That year was 2011, and I had a dream, to tour around with 440rmb monthly payment, and I applied to be a student assistant here. Before the first brave step of my travelling, I encountered Tongji On Tracks 2011, and headed to Finland with 80 students from different universities. That was the first time for me to stay close with international friends, and was the first time to do a project. During that trip, I learned how to pretend to be serious and call the roll, how to budget with Excel, how to make a plan and how to make it into reality. I managed to balance my leisure time and work time, to communicate with different people, and finally as a student representative, to sign contract with the travel agency. Well, that year I was 19.

Looking back into those years, the reason for being always confident and full of energy was not because of youth or lack of experience, but because of SFC, because it provided a stage for me to dance freely. SFC is a place to realize unlimited dreams without caring about grade, major, gender or nationality.

Love

I returned to SFC after I got enrolled into master program at Tongji in 2014. That's when I finally fell in love with SFC. It is home for me in Shanghai.

In Tongji On Tracks 2014, I met Danny, who became my best friend and mentor in life. We took charge of Tongji On Tracks 2014 together, chose Australia as our destination, and set "Traveling light" as the theme, which was just the spirit of Australia. However, the biggest challenge was to find sponsorship. We had to learn how to write a business plan, figure out how to attract more people, and how to sell our ideas. We managed to invite famous designers to our class. We both believed that a real innovative course should be connected with real world. That's also what makes SFC so unique. As you may know, we made it. We even built a house along the Gold Coast with our own materials brought from Shanghai. Well, that year I was 23.

I still remembered that before we set forth, an explosion happened in Sydney, Australia. I called Danny from my hometown, Inner Mongolia, and asked if we were still going. Guess what, she asked back "why not?" As is the same spirit of SFC: never ever give up.

Together

This year, I became the project manager for Tongji On Tracks 2015. With 32 students, we are heading to Italy. Collaborating with Honor, we are planning to have a romantic tour and share the Chinese Honor in Italy. Thanks to the previous years' experience and all the best wishes from you, we believe that we are able to explore more possibilities in the future.

相爱

2014年,大学毕业后我重新考入同济大学成为研究生,回到中芬中心继续我的学生助管生涯。正是这一次的正式回归,我对中芬中心开始暗生情愫,一定终生。这里仿佛是我在上海的第一个家,是家。

2014年的创新移动课堂,让我认识了丹妮,我之后引以为豪的人生导师,我的知己。那个时候的丹妮还梳着短发,负责创新移动课堂。我是她的搭档,我们选择了澳大利亚。活动主题"轻装前行",恰恰就是澳大利亚的精神。项目最大的挑战就是找到合作企业。于是相差 10 岁的两个人开始彻夜通宵,去学习商业计划书,去寻找合适的合作伙伴,甚至整个课程的老师,都是我们一个个登门拜访请来。于我们而言,一门真正创新的课程,必须要与真实世界建立联系。这也是中芬中心与同济大学其他任何一个学院所不同的地方。后来,一切就顺理成章了,我们甚至在澳大利亚的黄金海岸搭了一座房子。哦,那一年我 23 岁。

记得走之前,恰逢悉尼爆炸案。还在内蒙古老家的我打 电话问丹妮,我们还走不走。丹妮说,去。正如中芬中心, 无论遇到什么,前行是唯一的目标。

我想我大学生活的故事,都发生在这里。我想我的校园 爱情故事,就是一封与中芬中心的情书。

相识

2011年,为了怀揣 440元人民币游遍大江南北的梦想,我应聘成为中芬中心的学生助管。游遍大江南北的梦想还没有走出第一步,却意外撞见了同济大学创新移动课堂,跟着 80 个来自各个学校的人浩浩荡荡去了芬兰。那是我第一次,跟外国人朝夕相处,也是我第一次,真正开始做项目。我开始学着做预算表,我开始学着煞有介事地点名,我开始学着做一套方案,乃至去实施我的设想。我也开始学着去平衡时间,学着与不同的人打交道,直到我成为学生代表,游刃有余地与旅行社签合同。哦,那一年我 19 岁。

后来回忆起我为什么总是自信满满放手拼搏,不是因为 我的初生牛犊或年少轻狂,而是因为中芬中心为我搭建 了一个肆意表演的舞台。在这里,没有年级、专业、性别、 民族,这里关心的只有不设限的梦想。

相守

2015年,5年轮回,我接替丹妮带领创新移动课堂,与我可爱的32名学生,前往意大利。今年,我们采用全新的形式与华为荣耀合作。我们设计了一场关于"芬享中国荣耀"的浪漫之行,犹如我对中芬中心的告白,来一次说走就走的勇敢意大利之旅。也正是由于前几年的积淀,我们将与荣耀牵手而行,带着大家的祝福,踏上全新的开柘之旅。

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Tiffany Fang 方笑枝

SFC Translation Officer (2012-2013) 中芬中心翻译官 (2012-2013)

"Hi, is that Tiffany? Congratulations! Welcome on board of Tongji on Tracks, and please come..." A call reached me on someday in May 2012, what perhaps was the very starting point of all my sweet memories in Tongji.

Sino-Finnish Centre taught me, during my stay in some 730 days, that no matter how enormous the world is, as long as I want, I am able to figure out a way to go and explore it; that major is not my permanent tag, and what I might achieve can always be far beyond my imagination; that everything will be possible as long as I dare to think! SFC is now approaching its fifth birthday, and though still young, she has already helped lots of people to realize their dreams or find a way towards their success. I love SFC, where my dream begins; I love everything of you! Happy Birthday, and wish you all the best!

"你好,请问是方笑枝同学吗?恭喜你通过了同济创新移动课堂的申请,请于……" 这是 2012 年 5 月某一天我接到的一通电话,现在想想这应该是我在同济求学一切美好回忆的起点。

在中芬的两年里,她让我体会到世界那么大,只要你想,不论以什么方式都能去看看;她让我认识到,专业不是你的标签,你能做的远远超过你的想象;她让我坚定地相信,只要你敢想一切就都能实现。转眼间她已经五岁了,虽然还年轻,却已经让很多人实现了梦想或找到了方向,我爱这里的一切,爱这个我梦开始的地方。亲爱的中芬,生日快乐,明天更美好!

Journey

In the blink on an eye, three years passed after I physically left Sino-Finnish Centre. Personally, being working at Sino-Finnish Centre is one of the turning points of my life, both professional and private.

Hereupon, I only hope to express my deepest gratitude (Xiexie/Kiitos) to all the people I met here and all the opportunities SFC had provided me with, since I cannot find an endless piece of paper to describe how awesome this place and staff here are.

The whole year here was a short-term life journey rather than working experience on my CV; therefore, I hope that Sino-Finnish Centre can keep saving people's life from boredom and bring about an unforgettable life journey to all of their family members.

And for those still wandering outside the door, I just want to say "just get in and see what you can do and create together with SFC".

旅途

一眨眼的时间,距我离开中芬中心已有三载。对我 个人而言,在中芬中心工作的那段日子可谓我人生 中一个重要的拐点,无论是职业生涯亦或是个人生 活。

在此,鉴于没有可供我尽情描绘中芬中心以及其工作人员如何出色的足够版面,我仅愿能表达我对在 此相遇的每一个人以及中芬给予我的每一个机会的 深深谢意。

在这里的一整年,与其说是我简历里的一段工作经历,更像是一段短暂的人生之旅;因此,我希望中芬中心能继续帮助人们免受无聊之苦,并为这个大家庭的所有成员们带去一段难以忘怀的人生之旅。

而对于那些仍徘徊在中芬门外的人们,我只想说"进来看看吧,看看你能和中芬中心一起做些什么,创造些什么"。

"We are the people that rule the world"

- Empire of the Sun

Before my class starts I always like to play music and this song by Empire of the Sun is one that always makes it to the playlist. For me the most cherished part of teaching here at SFC is giving students a sense of empowerment. In the classroom we talk a lot about the environmental challenges China and the world are facing, but then the goal is to move towards positive action. I am always impressed by the motivation of the students to do something about these challenges! They are willing to apply their energy to come up with very creative solutions.

Sustainability thinking students get super enthusiastic presenting their sustainable lifestyle concepts and get a glimpse of what they are capable of if they "think big". DIAN Racing students give everything they have for the success of their team. They are not only building a kick-ass quick electric race car, but they are in fact building a movement. Many of them refer to DIAN Racing as "family" which I think is very touching.

It is fantastic we have the SFC here in Tongji University to facilitate this new kind of learning. Because I like to think that these students will be the ones that rule the world and have a lot of confidence that the future they build will be great.



Liisa YU & SFC Typhon 郁姣(携中芬中心台风)

SFC Educational Coordinator (2011-2012) 中芬中心教务专员(2011-2012)



Godert van Hardenbroek 霍达男爵

SFC Innovative Supervisor 中芬中心创新导师

"我们是主宰这个世界的人"

——太阳帝国

每次课前准备,我都喜欢放点音乐,太阳帝国的这首歌则一直是我的保留歌曲。于我而言,在中芬授课最珍贵的是教会学生们自主意识。课堂上,我们花大量的时间讨论中国乃至世界面临的环境问题,而这些都是为了最终大家能给出积极的解决方案。学生们愿意为这些挑战付出努力,用自己的能量提出创新解决方案,而我总是被这种干劲深深打动!

我在中芬中心开设了两门课程:《可持续思维》和《大学生方程式电动赛车制造及运营》。《可持续思维》的学生非常热衷于展示自己可持续生活方式的概念,他们想知道如果大胆去想,自己究竟可以具备怎样的能力。《大学生方程式电动赛车制造及运营》的学生则愿意为车队付出一切,他们绝不仅仅是在制造一辆超快速电动赛车,实际上,他们是在发起一场运动。很多学生都把电车队当做一个大家庭,这让我尤为感动。

我深深感到,在同济大学,有中芬中心这样一个致力于 推进新型教学方法的地方,实在太了不起了。我个人觉得, 今天的这些学生们将会是未来世界的主宰者,他们会对 自己建立的美好未来充满信心!

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COMING SOON

即将发生

09

With the establishment of Shanghai International College of Design and Innovation, Tongji University, Sino-Finnish Centre will put more energy on degree education and cutting-edge research, and create a new master program of Innovation and Entrepreneurship. Meanwhile, based on the spirit of DesignX statement, a design-driven and problem-based research platform "DesignX PLANT" will be established.

伴随同济大学上海国际设计创意学院的建设,中芬中心的工作重点将更关注与学历教育和前沿研究。中芬将推出"创新与创业"方向硕士学位项目。同时,一个全新的"设计驱动"和"问题导向"的 DesignX Plant 跨学科研究平台将在近期诞生。

DesignX: A Future Path for Design*

DesignX is a new, evidence-based approach for addressing many of the complex and serious problems facing the world today. It adds to and augments today's design methods, reformulating the role that design can play. Modern design has grown from a focus on products and services to a robust set of methods that is applicable to a wide range of societal issues. When combined with the knowledge and expertise of specialized disciplines, these design methods provide powerful ways to develop practical approaches to large, complex issues.

The major problems facing humanity today involve complex systems of stakeholders and issues. These challenges often involve large numbers of people and institutions intermingled with technologies, especially those of communication, computation, and transportation. Health, education, urbanization, and environmental issues have these characteristics, as do the issues of sustainability, energy, economics, politics, and overall well-being.

To understand how design can assist with these issues it is useful to do a quick review of the history of the design profession. The modern practice of design had its roots in the industrial revolution. Design and its predecessor professions offered a systematic way to help industry create products and information for the emerging middle class in Europe and America. The primary focus of the designer was improving the intrinsic value and profitability for industry in the context of developments in mass manufacturing and assembly.

Design changed its focus after World War II to an emphasis upon appearance, often unrelated to how products performed or how they were used. As the development of electronic circuits and computer chips allowed devices to have increased functions, the emphasis on appearance resulted in complicated and confusing interactions. The next

stage in design, which is where we are today, is correcting these problems by developing methods of designing for the needs and capabilities of people. The result is more understandable and pleasurable interactions between people and technology.

The emphasis on meeting human needs and abilities also led to the development of tools for discovering the deep, fundamental (root) issues underlying these needs. Today, there is growing recognition that these new methods can be applied to a wide variety of issues, including management, organizational structure, and, most importantly, the large, ambiguous, complex, and fast changing problems facing society. However, although the current tools of design begin to address these issues, more comprehensive methods are required.

DesignX aims to enhance the tools required to assist people, organizations, and societies in developing systems and procedures that address major human and societal needs. DesignX builds upon the design profession's emphasis of thinking by doing, thinking by drawing, sketching, testing, and making coupled with intensive observational techniques, deep analyses of the entire system, and repeated, iterative testing, reflection and modification.

Within academic institutions, traditional disciplines analyze issues in depth. Design differs from these approaches. Instead of deep analysis, design leverages the knowledge of the many disciplines relevant to any issue in order to yield practical approaches that can help enhance current conditions. Design is a discipline of doing, applying its methods in areas that lack deep understanding but are in need of continual improvement. Design aims to be practical, always attempting to improve upon current conditions, even where full solutions cannot be achieved.

In the past, design has focused upon products and services, but the design methods of continual, iterative cycles of exploration, reflection, implementation and validation can be applied to many societal problems.

DesignX is a compilation and expansion of work being done by numerous organizations, private and public, universities and companies. DesignX attacks the larger problems, those that involve complex systems, where people with different skills need to creatively and reliably work together. There exist numerous examples of this within the past decade by pioneering organizations that provide the foundations upon which to build.

DesignX concentrates on human needs, exploring issues in depth to find root causes, aiming to attack the fundamental problems. It integrates and builds upon the specialized knowledge of the domains, but always attempting to provide practical solutions that are of value today rather than relieving symptoms.

DesignX is particularly suited to and specifically aimed at problems involving a mix of human and societal needs where solutions involve technology. Most of these problems involve networked systems of people, groups, and artifacts, including intelligent systems, partially or fully automated, with different levels of communication among components. DesignX focuses on the resulting complex mix of networked natural and artificial systems.

Complex problems require complex solutions. To accomplish this requires a team composed of all the disciplines relevant to understanding the issues and potential solutions. Teams must be problembased, with all the required members bringing their talents to bear on the problem in a cohesive and collaborative way. DesignX designers must work closely with people from many disciplines, building upon their knowledge and methods, applying whichever method is most effective for the problem at hand, negotiating the multiple constraints, interests, and differing perspectives of all the participants.

DesignX requires skills, knowledge, and a vocabulary that enable it to engage effectively with stakeholders and professionals of many kinds. Design, as a field, has a mixed set of techniques. Some are based on science and experiment, but much still relies on the skill, wisdom, and creativity of the designers. To be successful, DesignX requires a larger set of techniques that have been verified and tested, which means an emphasis upon evidence-based design. Some methods will be based upon and constructed through scientific investigation. Others will be frameworks and design

patterns. Still others will be heuristics for continual refinement and evaluation to ensure that the strengths, weaknesses, and appropriate situations for application are known, understood, and verified.

Problems are more volatile than ever before, and information often changes faster than it can be validated. This is why we need a new research tradition to explore the issues involved in models of education as well as models of practice. We need a theoretical foundation to support new ways of research and education. We need an innovative and inclusive social eco-system to enable the application of new knowledge and methods for positive social and economic change. And we need to develop new methods of experimentation to allow rapid assessment, test, and deployment of prototypes, test trials, and even mock "solutions," the better to give rapid feedback and allow for repeated iterations toward superior results. The mantra should be "learn fast, learn continuously."

Education must also change. Today, universities are focused upon discipline-based education that no longer suffices to deal with large, complex problems that involve multiple disciplines, technology, art, the social sciences, politics, and business. We need robust, new models for education, some based upon disciplinary skills, others based upon problems rather than disciplines, where experts and students from many backgrounds work together on a specific issue. This requires adding problem-based education to the existing emphasis upon disciplines.

It is important to strengthen dialogue between the multiple cultures of the world. It is time to emphasize world-wide conditions that will provide sustainability with alternative measures of quality and performance that move beyond systems requiring high energy and resource consumption.

We seek a radical reformation of design practice, education, and research. It is time for a new era of design activism.

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^{*} A joint statement, written by "The Design Collaborative," authored by (in alphabetical order): Ken Friedman (Tongji University, College of Design and Innovation and Swinburne University Centre for Design Innovation), Yongqi Lou (Tongji), Don Norman (University of California, San Diego, Design Lab), Pieter Jan Stappers (Delft University of Technology, Faculty of Industrial Design Engineering), Ena Voûte (Delft), and Patrick Whitney (Illinois Institute of Technology, Institute of Design). Contact email: designxcollaborative@gmail.com

DesignX 是一种基于佐证的设计新途径,用以处理当今世界面临的众多复杂而严峻的问题。它是对现今设计方法的补充和增强,将重塑设计的角色。现代设计已经从对产品和服务的专注发展成为扎实和强大的方法体系,应用于广泛的各种社会议题。一旦与专业学科的知识和能力相结合,这些设计方法提供了各种有力的途径,来发展处理大型、复杂问题的有效方式。

今天,人类面临的重大问题都涉及由利益相关者和问题 构成的复杂的系统。这些挑战经常牵涉到大量的人和机 构,还参杂技术,特别是那些传播、计算和交通相关的 技术。医疗、教育、城市化和环境问题拥有这样的特征; 可持续、能源、经济、政治和整体福祉相关的问题同样 如此。

为了理解设计如何能够协助处理这样的问题,有必要先对设计专业的历史做个简要回顾。现代的设计实践发轫于工业革命。设计及其前身提供了一种系统的方式,帮助企业创造欧美新兴中产阶级需要的产品和信息。在大批量生产和装配空前发展的时代,设计师的首要关注点是为企业提升内在价值和利润。

第二次世界大战之后,设计的关注点转而强调产品外观,而外观与产品本身的表现以及如何被人使用并无太大关联。随着电子电路和计算机芯片的发展让设备具备了更多功能,对外观的重视导致了复杂、又令人费解的交互方式。设计的下一个阶段——也就是我们现在所处的阶段——正在通过发展针对人的需求和能力而设计的方法来纠正这些问题。其结果是让人和技术之间的互动变得更易于理解,更加愉悦。

强调满足人的需求和能力,也导致了工具的发展,去发现需求背后深层的基础(根本)问题。今天,人们越来越意识到这些新方法可以被用于极为广泛的各种议题,包括管理、组织结构,最重要的还有人类社会面对的那些快速改变中的、模糊的、复杂的大问题。然而,尽管目前的设计工具已经开始应对这些问题,我们仍然需要更多的综合性方法。

DesignX 的目标是增强工具,帮助人、组织和社会开发用于应对个人和社会重大需求的系统和程序。DesignX 建立在设计专业知行合一的重点之上,强调通过制图、草图、测试和制作来思考问题,同时结合高度的观察技巧、深入分析整个系统、一再进行迭代测试,以及反思和修改。

在学术机构里,传统的学科深入地分析问题。而设计有别于此。为了获得能够改善现有情境的实用方式,设计会使用与要解决问题相关的多学科知识。设计是一门行动的学科,将方法用于缺乏深入理解却需要不断改进的领域。设计以实用性为目标,总是试图改善现有的条件,即便是在无法圆满地解决问题的条件下亦是如此。

在过去,设计关注产品和服务。但是以探索、反思、执行、确认形成的不间断的迭代循环为基础的设计工具,可以被运用到许多社会性的问题中去。

DesignX 汇总并且拓展了无数组织正在从事的工作,不论这些组织是私人的还是公共的,是大学还是公司。 DesignX 向更大的问题发起进攻——那些涉及复杂系统的大问题,其中有着不同技能的人们需要以一种创造性的可靠方式共同工作。过去的几十年里,先驱型组织已经涌现了众多这样的实例,为此打下基础。

DesignX聚焦人的需求,为寻找根本原因深入探索问题,目标是应对重大问题。它基于不同领域的专门知识并加以整合,但永远试图提供对当下而言有价值的、切实可行的解决方案,而不是仅仅缓解症状。

DesignX 特别适合、也专门针对那些人和社会的复杂需求混杂在一起、且解决方案高度依赖技术的问题。绝大多数这样的问题涉及由人、群体、人造物组成的网络化的系统,包括半自动或全自动的智能系统,组成部分之间存在各种不同层级的交流。DesignX 关注自然和人工网络化系统的复杂混合。

复杂问题需要复杂的解决方案。为实现目标,需要由与理解问题和潜在解决方案相关的所有学科组成的团队。团队必须是基于问题的,所有成员都采用一致的协同方式把自己的才能投入到问题解决中去。DesignX设计师们必须与来自许多学科的人们紧密合作,在他们的知识和方法基础上继续努力,运用任何针对手头问题最行之有效的方法,和多重制约条件、利益,以及所有参与者所持的不同观念进行协商。

DesignX 需要技能、知识和一种表达方式,有效地让利益相关方和多种专业人士参与其中。设计,作为一个领域,有一系列整合性的技能。有一些基于科学和实验,但更多的仍然依赖设计师的技巧、智慧和创造力。为了获得成果,DesignX 需要更多已经被验证和测试过的技能,

这意味着强调基于佐证的设计。有些方法将会建立在科学研究的基础上,并且通过科学研究来完善;而另一些,将会是探索式的方法,用于不断完善和评估,以保证优缺点和适当的使用情形能够被知晓,被理解,被证实。

如今的问题,比以往任何时候都更不稳定,信息常常在可以被确认之前就已经改变。所以,我们需要一种新的研究传统来探索与设计教育模式和实践模式相关的议题。我们需要一个理论基础,来支持研究和教育的新方式。我们需要创新且包容的社会生态系统,运用新的知识和方法去实现社会和经济的积极转变。我们需要发展新的实验方法,让快速评估和测试成为可能,有效利用原型、复核试验,甚至是模拟的"解决方案"来提供快速反馈,并且允许反复迭代直至获得超众的结果。奉行的准则应该是"学得更快,学无止境"。

教育也必须改变。今天,大学专注于基于学科的教育,而要处理大型的复杂问题(涉及多学科、技术、艺术、社会科学、政治和商业),这样的教育模式已经不再够用。 关于教育,我们需要有力的新模式,有一些基于学科技能,而另一些基于问题而非学科,来自许多不同背景的专家和学生可以就某个特定问题一起工作。这就需要在基于学科的现有模式中加入基于问题的教育。

同时,增进全球不同文化之间的对话也十分重要。是时 候强调世界大环境的作用,找出衡量品质和表现的替代 标准来实现可持续,超越一味追求能源和资源高消耗的 系统。

我们追求彻底改变设计实践、教育和研究。设计行动主 义的新纪元已经开启。

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EDITORS' WORD

编后语

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Thank you for reading our stories. If you would like to start from this chapter, we assure you that there won't be any spoiler.

Every summer is the season for us to collect, tell and visualize stories, since it's the best season for passionate stories. For the last five years, different people have been part of realizing the annual stories each year, since we are willing to share more possibilities of different SFC with more people.

Every five/ ten-Year will welcome a big celebration in Chinese culture. As SFC is going to celebrate its five-year birthday, we have offered a bonus chapter named "Five Years Footprints" in the end. Along the historical path, if you are the builder, participant or witness of those big events happened in the past five years, you might find out the photos at that time to memorize the passed time. While as editors, we hope this storybook could make you interested in joining our stories in the future. How about next year?

Last but not least, a small tip for you: as the whole country is focusing on innovation and entrepreneurship nowadays, there are many pain points in SFC waiting to be unveiled and solved, which might become your entrepreneurial opportunity. You are warmly welcome to SFC and find out your target groups as well as open sesame treasures.

谢谢你耐心看完了我们分享的故事。当然如果你直接翻到这里,请放心我们不会剧诱。

每年的夏天,是我们收集故事、讲述故事和可视化故事的时间,因为夏天的故事比较有激情。五年来,创作团队都不一样,可能是每个人心目中都有他/她自己的中芬,而我们愿意与更多的人分享更多的可能性。

按中国人的习惯,逢五逢十都是大日子,要庆祝,所以在讲述完今年的故事后,我们还特别加入了庆祝彩弹"五年回顾"。沿着回顾路线,如果你是这五年中大事件的缔造者、参与者、见证者,可以翻出那时的照片,感慨一下时光飞逝和岁月之刀。作为编者,我们更希望,这本册子能引起你的兴趣,加入我们未来故事的书写。不如就明年?

在最后的最后,我们还有一个小提示:当下举国都在谈论创新创业,中芬中心还有许多痛点或许能成为你创业的契机。我们欢迎你亲临中芬,挖掘你身边的用户群和"芝麻开门"的宝藏。





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Anniversary

