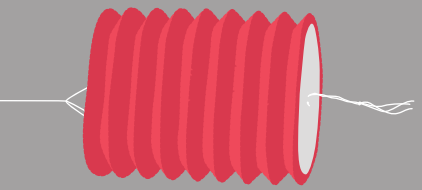
The Ingenuity of Ageing

银龄创新

for designing 黄金清华 · 银龄创新
social innovation

Yanki Lee 李依琪设计学博士



Author Dr Yanki Lee
Design Lottie Crumbleholme
Art Direction and Project Management Margaret Durkan
Photography Dr Yanki Lee, Meng Lau @ Black Sheep Production, Alan Lam @ EXHIBIT at Golden Lane Estate CIC, Petr Krejci

©2012 Yanki Lee & Helen Hamlyn Centre for Design, Royal College of Art

As the author and publisher of this work, we want to encourage the circulation of this work as widely as possible while retaining the copyright. Therefore, we have an open access policy, which enables people to access its content online without charge. This work is made available under the terms of the Creative Commons Attribution-ShareAlike 3.0 license, http://creativecommons.org/licenses/by-sa/3.0/

ISBN 978-1-907342-46-2

Or order a printed copy of the book, visit www.lulu.com/uk

Contents

2 Foreword 前言
11 Why? 争论
19 Who? 群体
41 How? 方法
55 Next? 未来
59 References 参考
60 People 人物

Foreword 前言

(1) Professor Jeremy Myerson, UK adviser

Between December 2010 and November 2011, Dr Yanki Lee, a research fellow in the Helen Hamlyn Centre for Design at the Royal College of Art, spent 12 months in Beijing on a UK-China Fellowship of Excellence funded by the UK Government's Department of Business, Innovation and Skills (BIS).

The award is given to post-Doctoral researchers to conduct cutting-edge research in a Chinese research institution and Dr Lee chose to re-examine the relationship between design and ageing, by collaborating with a unique community of retired academics on the campus of Tsinghua University, one of China's elite educational institutions.

This publication explores a range of discursive ideas to emerge from a piece of international design research that deliberately confronts conventional thinking about design for older people.

The study challenges the notion that ageing is a policy problem to be solved with design solutions handed down to an elderly group that lack the ingenuity and wit to creatively develop new ideas themselves. Indeed Dr Lee presents considerable evidence of the innate ingenuity of older people, albeit that the Tsinghua retirees are a uniquely skilled group.

The study also questions the role of the designer as a problem solver in practice. It promotes instead a participatory model of social interaction and innovation that views older people as more than just a source of inspiration for the expert.

By combining the techniques of reflexive ethnography and action research in her methodology, by engaging with a core group of retired Tsinghua scientists and involving many more through a series of design events planned to coincide with five traditional Chinese festivals, and by keeping her research open-ended, Dr Lee presents an alternative cultural approach to design for ageing.

This is work that raises questions rather than supplies definitive answers. It embraces contradiction and ambiguity in the field and, in its links with Chinese academics in sociology, gerontology and design, could be said to reflect the spirit of the UK-China Fellowship of Excellence scheme. On behalf of the RCA, I would like to express my gratitude to Dr Yanki Lee's hosts and collaborators at Tsinghua University, Beijing, for supporting this study.

Professor Jeremy Myerson is the Director of the Helen Hamlyn Centre for Design at the Royal College of Art and the first-ever holder of the Helen Hamlyn Chair of Design, with a remit to encourage 'design that improves quality of life'. An academic, author and activist in design for the past 30 years, he began his working life as a journalist and was founder-editor of Design Week in 1986. He is the author of many books on design, art and architecture, and sits on the advisory boards of design schools in Hong Kong and Korea.

(1) 英国顾问，杰里米·迈尔森教授

2010年12月至2011年11月，皇家艺术学院海伦·哈姆林设计中心研究员李欣琪博士在英国政府商务、革新和技能 (BIS) 部资助的英中优秀奖学金项目支持下在北京渡过了12个月的时间。

英中优秀奖学金项目是专门为支持博士后在中国研究机构中从事研究而设立的。 李博士选择了中国精英教育机构之一的清华大学，并与校园中一个十分特殊的退休学术社区合作，展开了对设计与老龄化关系的重新检视。

此出版物所探讨的一系列稍显散漫的观点，皆是从研究过程中逐渐浮现而来。而这项国际设计研究则有意识地与为老设计的传统思维相对照。

这项研究挑战了这样一个的观念，即老龄化是一个政策问题，由于老年人群本身缺乏创造力和发展新思想的聪明和才智，需要教给他们一些设计方案来解决这个问题。然而，李博士确在这里向我们展示了许多资料，证明了老年人的内在创造力，尽管清华的退休者们本身就是一个才能横溢的独特群体。

这项研究同时质疑设计者在实践中作为问题解决者的角色。老年人不仅是专家灵感的来源，设计者与老年人之间参与式社会互动和革新模式应该受鼓励。李博士在这里展示了一种为老设计的文化推动方式。这个方式包括方法论方面反省式民族志和行动研究技术的结合，包括与清华退休科学家核心群体的

深入交流和按照研究计划在5个传统中国节日期间与其他退休者们的交流，还包括研究过程自始至终的开放状态。

此项研究工作提出问题，而非提供明确的答案。对这个领域中矛盾和模糊的包容，以及与社会学、老年学和设计学领域中中国学者们的联系，体现了英中优秀奖学金项目的精神。

杰里米·迈尔森教授是皇家艺术学院海伦·哈姆林设计中心主任，也是首任海伦·哈姆林设计教授，任内一直鼓励“改善生活质量的设计”。他的职业生涯始于1986年，当时他是一名记者和设计周刊的创刊主编。在过去30年中，他一直是设计领域的学者，作家和活动家，出版了许多有关设计、艺术和建筑的著述，也是香港和韩国一些设计学校顾问委员会的成员。

杰里米•迈尔森教授
英国伦敦皇家艺术学院海伦•哈姆林设计中心

(Chinese translation by Professor May Xiaomei Pei, 裴晓梅译)

黄金清华

+AgeingInTsingHua

Ageing Innovation

共建银龄创新

这个研究项目是由英国皇家艺术学院,李欣琪设计学博士跟清华美院及老年学中心合作,诚邀清华退休人,一同调查和共同发展创新概念,為我们未来的老化社会作好准备!

研究方法学是参與式设计,‘一同设计生活’,目的是突出“老有所为”,同清華人从不同节曰看退休生活,一起开发这些经验,共打造好的老年服务、老年产品、老年文化,有益其他老人和我们的未来。

Chinese description of Ageing in Tsinghua

(2) 柳冠中教授
中国北京清华大学美术学院

Yanki作为一位外籍访问学者在清华大学的研究实践着实令人感动！她不仅克服了语言的障碍，更值得推崇的是她严谨、求实的学术态度，还有她对设计的独到理解——设计师并不是救世主，而是寻求更周到、更尊重人的设计程序。她一直沉浸于一种新的途径和探索方向——从创造者和接受者双方的视角去做设计的激情。

她在"老龄化"研究的过程和成果中证实了"文化现象是激发设计思路的源泉之一"。她的成果以一种反身性的人种学研究方式对老龄化进程展开研究——由设计研究者和社会学家合作。最关键的是，有老年人自己的参与。研究的问题点在于：拥有创造力的老年人是怎样设计他们的"后工作"生活，这些"老年人"的解决方式又有怎样的深层含义？调查情况表明，超过6,000位正处在他们的"后工作时期"的退休学者，全都成功地抵御了社会给他们的定义，抵御了"老年人"的社会分类。他们的模式对传统意义上，老年人是"被动接受者"的模式形成了挑战。

Yanki在一年中的五个不同的传统节日中，主持了五个设计workshop。她与所谓"老年人"一起设计了特别的互动方式，通过和这些退休人员共同设计社会创新项目，试图探索怎样才能让现有的和未来的老年人能够承认并支持这些有价值的生活战略。这个实验性的研究成果旨在定义并证实这种"后工作生活战略"，它源自一群在20世纪后半段曾经是国家精英的，具有创造力的中国老人。和他们在一个集体共同相处中，我发现他们会主动地排斥被贴上"老年"、"老龄"等标签，这些是50-74年龄段的总体特征。相反的，他们强烈地保持着作为"清华人"的社会身份，以便支持他们进一步追求其个人理想。

设计好像只呈现在对造型、材料、工艺等"物境"的组织上，但其功夫却在"物"之外，在对"情境"的研究中。"情境"是组织"物境"的出发点，"意境"是"情境"的归宿。而对"情境"的研究，创造者必须与接受者共同交互，否则设计师必然会把自己的意图强加于用户，更谈不上为接受者服务了。

设计事理学指出"为人的设计"强调的不是占有，也不是强加于使用者，而是人、物、环境、社会等各方面关系和谐带来的幸福感。这种"幸福感"就是设计所探寻的"意境"，这样的设计是人们认同的、信任的、愿意使用的，从而能够提升人们的生活质量。"意境"的产生来源于产品或服务符合特定人群的生活方式。生活方式是特定的人群惯常经历的"事系统"与"意义丛"。而这里的"事"，意味着特定时空下，人、物、环境、社会之间的特定关系，也即"情境"。

Yanki的研究实践身体力行了当今设计的精神。
柳冠中
2012年1月15日

柳冠中教授作为中国第一个工业设计系的创建者，从1984年起，柳冠中教授就一直坚持躬耕于这一专业领域，坚持将学术研究的成果和理念运用到教学实践和人才培养中去，为我国工业设计学科理论基础和教学体系的奠定做出了巨大的贡献。他提出的“生活方式说”、“共生美学观”、“事理学”等理论在国内乃至国际设计界都产生了导向性影响，形成了中国自己的设计理论体系；他的教学、学术和设计实践活动遍布大江南北，他培养的大批学生都已成为业界骨干乃至精英人才。现任清华大学美术学院责任教授、博士生导师，中国工业设计协会名誉副会长，香港理工大学荣誉教授等职务。

(2) Professor Liu Guanzhong, China adviser
Academy of Arts and Design, Tsinghua University, Beijing, China

Dr Yanki Lee's research practice as a visiting scholar in Tsinghua University has truly been touching: not only did she overcome the linguistic barrier, what's even more worthy of praise is her rigorous and empirical attitude to academic practice, as well as her unique understanding of design – design is not at all a saviour of the world, but rather, the search for a more ideal, respectful design system.

Yanki consistently immersed herself in developing a new methodology and exploratory direction – with the zeal of designing from the perspective of both the inventors and recipients. Through the process and results of her research on ageing, she has proved the reality of how a cultural phenomenon could be the source of stimulating design thinking. Her findings were a result of a research method based on reflexive ethnography on the ageing process and collaboration between a design researcher and sociologist.

Most importantly, it was done through the voluntary participation of the elderly. The key question of her research was: how has a group of ingenious older people designed their post-work life upon retiring? What could possibly be the deeper significance in the solution-focused approach of this group of 'elderly'? Her investigation has revealed that over 6,000 retired academics have successfully resisted society's perception of them as the 'elderly' group. Their way of living has served as a model to challenge the conventional notion of the elderly as 'passive recipient'.

Over the course of a year, Yanki organised five design workshops during each of the different traditional Chinese festive occasions. Together with the so-called 'elderly', she designed socially innovative ideas through a unique, mutually stimulating approach that attempted to explore how to enable current and future elders to acknowledge and support these meaningful life tactics.

The result of such experimental research has demonstrated how such retirement life tactics have originated from an ingenious group of elderly in China, who formed the country's elite in the second half of the 20th century. From regular interaction with them, I discovered how they would actively confront notions of the 'aged' used to label them. On the contrary, they would strongly uphold their social status/identity as a 'Tsinghuaian', compellling them to further their personal pursuit of the ideal.

Design seems to be typically presented on the level of 'objects' – in terms of form, material, craft etc. – but its power lies outside of the object and in research on the 'situation'. It is the departure point for the organising or ordering of the 'object' – with 'emotional significance' as its goal. And in researching for the 'emotional significance', the creator needs to have a mutually reinforcing exchange with the recipient, or else the designer would inevitably prioritise his or her intentions above the end-user, which leads to even less potential to truly serve the recipient.

The main emphasis behind the idea of 'designing for people', as it is often referred to in design methodology, is neither about the sole rights of, or empowering only the user, but the sense of bliss that results from the harmony between person, object, environment, as well as other factors and relationships. This 'bliss' is the 'emotional significance', which is what design pursues. Such design is what people would identify with, trust, and be willing to use, leading to an improvement in the quality of life.

The production of ‘emotional significance’ originates from how products and services fit the way people live. And what is being referred to as ‘matter’ here implies a specific relationship between a particular place, time, person, object, environment, and society, and thus a specific ‘emotional significance’.

Yanki Lee’s research practice, based on a rigorous personal encounter, embodies today’s spirit of design.

Professor Liu is the creator of China’s first industrial design programme and is a key contributor in building the body of knowledge and framework of study for this field. His design imperatives, such as ‘Lifestyle Theory’, ‘Symbiotic Aesthetic’ and ‘Affairology for Designing’ have profound influence in the international design community. He is currently the professor in-charge of Tsinghua University Academy of Arts and Design, doctoral tutor, Honorary Vice President of China Industrial Design Association, and Honorary Professor of Hong Kong Polytechnic University.

(English translation by Shirley Surya)

Why? 争论

This first section explores possible new relationships between the disciplines of design and ageing research, and explains the link to the theory of ingenuity.

Is Ageing a Problem?

'Ageing in itself is not a policy problem to be solved'[1] was the conclusion of the DEMOS'[2] report of the Mass Observation Project[3]. It agreed with historian Peter Laslett[4] who stated that ageing is 'a unique experience for each individual.' Laslett's famous slogan was 'live in the presence of all your future selves,' which promoted a life-course approach to address ageing issues. In other words, ageing is a condition that everyone will experience as part of his or her life. Later this concept was extended by the DesignAge programme at the Royal College of Art, the first design movement in ageing; it became 'Design for Our Future Selves,' which will be discussed in more detail later.

We all know that there are problems related to the ageing process and these problems are seen by some as wicked problems. According to Rittel and Webber[5], 'choosing a solution to a wicked problem is largely a matter of judgment'. Camillus[6] further elaborated,

> 'Wicked issues are different because traditional processes can't resolve them… a wicked problem has innumerable causes, is tough to describe, and doesn't have a right answer… not only do conventional processes fail to tackle wicked problems, but they may exacerbate situations by generating undesirable consequences.'

To address wicked problems related to the ageing processes through design, it makes more sense to pinpoint the appropriateness of a solution-focused approach rather than a problem-solving approach for ageing populations. I agree that design solutions do not always start with any propositional logic or scientific hypotheses followed by scientific methods to identify the 'real' nature of the problem. Instead designers more often gain understanding of the 'design problem, and the need, therefore, to generate a variety of solutions precisely as a means of problem-analysis'[7].

1 Bazalgette, Z et al (2011) 'Coming of Age', Demos

2 UK-based thinktank focused on power and politics

3 http://www.massobs.org.uk/mass_observation_project.html

4 Laslett (1996) 'A Fresh Map of Life: Emergence of the Third Age', Palgrave Macmillan, p.ix

5 Rittel, Horst, and Melvin Webber (1973) 'Dilemmas in a General Theory of Planning,' pp. 155–169, Policy Sciences, Vol. 4, Elsevier Scientific Publishing Company, Inc., Amsterdam

6 Camillus, J.C. (2008) 'Strategy as a Wicked Problem', Harvard Business Review, Vol. 86, pp.98-106

7 Ibid, p.17

Could design help?

This is why I believe when design practice meets the ageing process, the use of a solution-focused approach is more suitable to address related issues. As Cross[8] pointed out, the use of solution-focused strategies is related to the nature of problems in design practice:

> 'Design problems are inherently ill-defined, and trying to define or comprehensively to understand the problem (the scientists' approach) is quite likely to be fruitless in terms of generating an appropriate solution within a limited timescale'[9]

Certainly, in light of the combination between a solution-focused design approach and the ageing process, we should start from individual people's solutions in dealing with their own specific ageing problems, especially those who have more experience. Younger designers should work with older people to explore how their creative solutions could become social innovations on a larger scale.

The DesignAge programme, started in the 1990s at the Royal College of Art in London, was one of the pioneers in the field of 'bringing older people, designers and industry together to improve the quality of goods and services in general, and the quality of life of older people'[10].

It was what was described by Laslett as 'an arranged marriage'[11] of an art and design school with the University of the Third Age (U3A), 'an organisation of autonomous, local, self supporting groups of retired people [where] … the general approach is to learn for pleasure and study at leisure.' [12]

In the preface of the publication, Working Together: A New Approach to Design, DesignAge director, Roger Coleman explained that it was about 'a new collaboration between older people and young designers, and a new approach that is part of a growing trend towards a more thoughtful and respectful design process.'[13]

It was set up as a mutual relationship. The common goal was to develop better designs that include the needs of all users with the starting point focused on the needs of older people. The common ground was about the passion to design from the perspectives of both creators and receivers.

In order to find this common ground today, I believe it is important to find a balance between the agendas of different stakeholders. In this case, it is younger designers and older users. Both groups have changed since the DesignAge programme at the beginning of 90s.

On one side, those who were then in their Third Age[14] then are now in their Fourth Age, i.e. over 74 years old. Even though they are all older people, they are from different generations[15].

For the younger designers in their Second Age (aged 18-49), design as a subject/practice has become more socially aware. As Maze R. and Ericson M. stated, 'Design is not, however, reducible to the natural laws governing matter and structure – design artifacts are profoundly social constructions, comprising subjective experiences, political agendas and cultural memories… A critical question for design is how to understand its intervention as more-than-spatial, as social and political praxis'[16].

Ingenuity for design

To rethink this new relationship between young and old in relation to design practice, I decided to start with older people's experiences in dealing with the problems of ageing. People's capability in dealing with or solving problems forms the basis of the theory of ingenuity.

Based on the Royal Society of Arts (RSA) recent report that collated different studies of ingenuity, it can be defined as a capability that some people exhibit which contains three attributes[17]:

8 Cross, N. (2006). 'Designerly Ways of Knowing'. Springler-Verlag, London

9 Ibid, pp.18-19

10 Crosthwaite (1997), 'Working Together: A New Approach to Design', Royal College of Art, p.7

11 Laslett (1996) 'A Fresh Map of Life: Emergence of the Third Age', Palgrave Macmillan, p.226, which he wrote about the DesignAge project was aimed to 'reshape the common objects of daily life – from toothpaste containers and plastic wrappings around food, from light switches to men's and women's pullovers and ballroom gowns; from the notices on pictures in art galleries to the doors, sitting angles and other aspects of motor cars – to redesign them all so as to make them suited to the Third Age. This has indicated a natural alliance for the U3A…'

12 Crosthwaite (1997), 'Working Together: A New Approach to Design', Royal College of Art, p.27

13 ibid, p.3

1. An inclination to work with the resources easily to hand.
2. A knack for combining these resources in a surprising way.
3. An ability to use these resources to solve some practical problem.

Furthermore, ingenuity can be seen as an individual's competence and is the basic element needed for societies to develop collective creativity and social innovation on a larger scale. 'If creativity is the process that conceives of new ideas, then innovation is the process that executes them, scaling them up and monetising them as appropriate.'[18]

Identifying individual ingenious older people became the first priority for rethinking the process for ageing and design practice. According to the United Nations 2009 report, the global population of people aged 60 and over is 680 million, representing 11% of the world's population. It is true that the whole world is ageing. However each country has its own development pattern and ageing reflects the diversity of different cultures. Therefore, for design researchers, who should be our research subjects and where is the starting point?

[14] According to the Carnegie Enquiry, the definition of the Third Age in chronological and birthday-age terms: the years between 50 and 74

[15] 'The dramatic increase in the number of people reaching age 65 — coupled with their increased life expectancy — have expanded the classification of those age 65 and older to include three sub-populations commonly referred to as the 'young old,' the 'old,' and the 'old-old' groups.' Quotation from www.transgenerational.org

[16] Maze R. and Ericson M. (2011) 'Design Act – Socially and Politically Engaged Design Today. Critical Roles and Emerging Tactics', Sternberg Press, Germany and Iaspis, Sweden

[17] Young (2011) 'How to be ingenious', Royal Society of Arts (RSA), UK, p.12

[18] ibid

Who? 群体

As a researcher investigating design processes for social inclusion and participation, rather than looking for a general group of older people, I looked for extreme cases for inspiration. Where would I find the extraordinary older people who are designing their own productive retirement lives?

Why China?

China is ageing faster than any other country in history: 'It is unique in that it is growing old before it has grown rich. Its one-child policy is largely responsible for this effect. Chinese officials state that 300 million births over the past 30 years were averted as a result of this policy. China's transition to an ageing population is particularly abrupt …'[19]. People aged over 60 in the UK are about 16% of the population, a higher percentage than China's 13.3%, but the actual number of over 60s in the UK is 8.6m, while there are already over 160 million Chinese over the age of 60[20].

As a Hong Kong and London-trained design researcher, I was fortunate to have the opportunity to visit Beijing's Tsinghua University in 2000 where I met Professor May Pei, director of the Tsinghua Gerontology Centre. Tsinghua University is one of China's top higher education institutions, and has just celebrated its 100th anniversary. It features advanced facilities in science and technology with more than 30,000 staff members and students. Through Professor Pei's introduction, I found a unique situation: over 6,000 retirees still living on campus, many of them scientists who have respected social status as subject experts, as well as mentors of many China's current key political leaders in the Communist Party, the ruling party in the Chinese government.

Since 2000 I have been based in London, engaging with an international design research community investigating design for an ageing population and inclusive design. During this time, I noted the cultural differences in attitude to ageing, especially to the perception of age as related to design thinking.

The two most important demographic effects determining a country's issues of population ageing are longevity and fertility. According to the Demographic Transition Model (DTM) developed by the American demographer Warren Thompson in 1929, as a country develops from a pre-industrial to an industrialised economic system there is a transition from high birth and death rates to low birth and death rates.

19 http://trak.in/tags/business/2007/05/24/india-and-china-population-a-blessing-in-disguise/

20 http://www.bbc.co.uk/news/world-asia-pacific-13218733

China, Brazil, Thailand and many emerging economies have passed through the DTM very quickly, due to fast social and economic change. Therefore, older people in such countries are developing their living tactics to address their ageing issues on the ground, while the government has not yet developed methods to handle these challenges. With comparatively fewer resources, older people in developing societies tackle their own ageing issues in their own creative ways and can show how the power of ingenuity offers clues for the global ageing phenomenon.

For example, in China, unlike many established economies, hikes in the retirement age have not been brought in since 1978: it is still 60 for men and 55 for female civil servants and 50 for female workers[21]. Because of the huge and diverse population in China, people have different viewpoints about raising the retirement age as a good way to deal with an ageing population and ensure the healthy and stable development of social security: heavy industry workers are too tired to work longer and university graduates fear that any rise in the retirement age could limit their employment opportunities[22].

As the government struggles to resist a consensus, retired intellectuals in China are setting up different organisations of senior experts as part of a national movement of productive ageing. Their aim is to continue their life pattern of contribution to the people, party and nation. For example the Tsinghua Association of Senior Scientists and Technicians was founded in 2005 and together with other retired experts, they launched a website[23] offering information for those over 50 and, more importantly, to provide a special web platform for retired experts to post their expertise and link with those looking for advice. Thus, they have developed their own ways to continue their work lives after the official retirement age.

Why NORC?

As Laslett[24] predicted in the 1980s, '… even for the Chinese, not far short of two hundred millions, of individuals over 60 years old, might it not be granted that Third Age living is a characteristic of a considerable number of their citizens, especially those in the most favoured social positions, if not a characteristic of those nations as wholes? … What applies to China applies to any nation despotically and oligarchically controlled…'

These are not the commonly perceived 'old people' who request our help. Instead they are people who are developing tools to help themselves. I believe it is very important to learn these 'tools' from these ingenious older people that can then be applied to all our future selves.

How do people retire in their own communities and develop their own ways to tackle ageing? Initiatives in the US have started to promote supportive service programs (SSPs), delivered on-site to older adults who live in 'naturally occurring retirement communities' (NORCs) that could reduce health care costs among older adults[25].

Usually, NORCs are developed when a number of people move into a community when they are younger and age in the same place together over years. Each NORC is unique and develops over time. Governmental programmes may enhance its development but the resources that evolve from the communities are more important. Unlike other countries, NORCs attached to universities were quite common in modern China, but they are disappearing due to rapid changes and redistribution of resources – for example, some Third Agers (recently retired) prefer living with their families rather than collectively.

21 www.china.org.cn/china/2011-03/22/content_22190715.htm

22 ibid

23 http://www.china50plus.com

24 ibid, p.120

25 Bedney B. J. and Goldberg R. (2009) Health Care Cost Containment and NORC Supportive Service Programs: An Overview and Literature Review, http://www.norcs.org/page.aspx?id=198924

The Case: Ageing in Tsinghua

I decided to conduct a study of the unique NORC of retired academics at Tsinghua University in Beijing. In the context of people-driven ageing innovation, my main question was: how does this NORC operate? To further explore the ingenuity of this group of retired academics, I asked: what resources do they have? How do they combine these resources and what can their experiences tell us about ageing and quality of life? What problems do they need to solve and could these experiences inspire more ageing innovations for our future selves?

Identifying resources

The first element of ingenuity is to identify resources. For this project, Ageing in Tsinghua (黄金清华), I explored the operational system(s) on a university campus where ingenious older people are living.

As one of China's most renowned universities, Tsinghua University is an important centre for nurturing talent and conducting scientific research. Following its motto 'self-discipline and social commitment' and the spirit of 'actions speak louder than words', Tsinghua University is dedicated to the welfare of society and world development.

In addition to 30,000 students and 10,000 staff members, there are over 50,000 residents living on campus who support staff members and their families. There is a kindergarten, primary and secondary schools and shopping centres to support the community. It works like a town. There are also over 6,000 retirees living in the community.

How well are they being looked after within the campus? According to the Quality of Life (QOL) Profile, there are three life domains, each of which has three sub-domains, consistent with recent definitions of health and health promotion as provided by the World Health Organisation (WHO)[26]:

1. Being (who one is): physical being, psychological being and spiritual being.
2. Belonging (connections with one's environments): physical belonging, social belonging and community belonging.
3. Becoming (achieving personal goals, hopes, and aspirations): practical becoming, leisure becoming and growth becoming.

I adopted this QOL Profile as a framework to understand individuals' health and wellbeing in relation to the ageing experience. As Wilcock explained, 'many older people have a great deal of expertise to point the way to the maintenance or improvement of their own health, particularly as it relates to their physical, mental and social wellbeing. This differs from many in government and the health professions who deem the ageing population as health problems by relating health solely to the absence of disease or dysfunction'[27].

This reinforced my idea of engaging ingenious older individuals on the Tsinghua University campus and exploring their personal tactics to address the three life domains of 'individuals' physical, psychological, and spiritual functioning; their connections with their environments; and opportunities for maintaining and enhancing skills'[28]. This is what I call the ingenuity of ageing.

The familiar and connected community of Tsinghua came about because academic staff members are given apartments for life so that they can stay on campus even after they are retired. More importantly, this sense of belonging enhances the sense of safety, both physically and psychologically. Within the campus, they are respected academics, while outside they might just be 'old people.' With pensions equal to half of their salaries before retirement, this group of retirees are financially independent. According to research done by the university, a quarter of them are living with their children on campus.

26 http://www.utoronto.ca/qol/concepts.htm

27 Wilcock, A. A. (2007) 'Active ageing: Dream or reality?' New Zealand Journal of Occupational Therapy, 54(1), pp.15-20

28 ibid

Apart from their personal flats and facilities such as restaurants shared with students and current staff members, there are four types of extra facilities for the retirees:

1. Elderly Home, a transformed old courtyard house with eight rooms for frail retirees in need of more focused care. It is organised by the university authority as one of the benefits for retirees and is in high demand.
2. Elderly Centre, with activities for the older people. It is the first contact point for advice. It provides travel and medical check activities. It has a multifunction hall, sport facilities and rooms that retirees can use. Many self-initiated groups have been formed since the building was opened ten years ago.
3. University for the Third Age, which is different from other Universities of the Third Age since it is funded and organised by the university. A few staff members are retirees but most of the staff are younger people employed to run the organisation for the retirees. Similar to the U3As in the west, the teachers and students are retirees, i.e. retirees teaching retirees.
4. Tsinghua Association of Senior Scientists and Technicians, a totally self-initiated organisation which seeks support from the university authority. It has been given an office space with two retirees as staff members. There is a committee formed by retirees to manage the operation and network with other similar organisations nationally. Since the start in 2005, it has become a platform for retirees to continue to contribute their knowledge to external organisations as well as the Tsinghua community.

From these four types of elderly facilities/organisations within the university campus, it is clear that the authority considers the needs of older people. However, the physical environment of the campus is deteriorating with outdated standards of accessibility and there are growing pressures on the authority's ability to manage the physical wellbeing of the 6,000 retirees. With limited experience and short-term planning, more problems are arising for the community. There are no extra resources from the authority to improve the 'belonging' and 'becoming' profiles of their constantly increasing numbers of retirees.

Investigating the possibilities

As part of the study, I worked with more than a dozen retired Tsinghuaians through the network of the Tsinghua Association of Senior Scientists and Technicians and Tsinghua Gerontology Centre. They are all ingenious older people and they are improving their quality of life through their own ways with limited resources. These methods of combining resources in an unexpected way are described as the second attribute of ingenuity.

In the next section, there will be a more specific methodological discussion of how to engage with this group of ingenious older people. Instead of only collecting empirical data through conventional interviews or questionnaires, my main goal was to develop relationships so that I could investigate with them their tactical ways of addressing ageing and quality of life. It was about developing common ground and instigating a creative dialogue. Each interaction began with an interview using open questions, but the aim was to get the 'interviewee' to take over the conversation.

Professor Ping-Pong

Professor Singing

Professor Green Ageing

Professor Slogans and Blogging

Professor Physics

Professor Oxygen

Professor English

Professor Style

Professor Work

The retirees I met are locally famous for their new interpretation of retirement. I conducted 'creative dialogues' with them in their homes or workplaces. They are a special group but their ingenuity in creating their own retirement lives with limited resources aligns with the classification of the QOL profile:

Table 1. Tactics for retirement developed by ingenious older people from Tsinghua University, Beijing

Quality Of Life index	Ingenious older people tactics	Examples
Being (who one is)	Physical being Psychological being Spiritual being	Professor Ping-Pong Professor Singing Professor Green Ageing
Belonging (connections with one's environments)	Physical belonging Social belonging Community belonging	Professor Slogans and Blogging Professor Physics Professor Oxygen
Becoming (achieving personal goals, hopes, and aspirations)	Practical becoming Leisure becoming Growth becoming	Professor English Professor Style Professor Work

Being (who one is)

Many retirees are keen to keep fit and are fully committed to maintaining their health. They use their run-down apartment building (four to five storey blocks with no lifts) and take their old bicycles to poorly accessible communal areas to maintain fitness and flexibility. For example, Professor Chen was an electrical engineer: since retirement 20 years ago, he has played ping-pong every day at 4pm. He is happy to play with anyone in the facility. He explained that, 'Playing ping-pong is good for my body as well as meeting new and old friends!' In addition, he and his wife, who was also a professor of engineering, go to the Older Summer Palace, a national park next to the university, every morning. I visited the park with them one morning in June 2011, and Professor Yu said, 'We come here every day between 8am and 11am when it is the best time to take in oxygen for our bodies'.

Professor Yu, the wife of this model couple on Tsinghua Campus, is not as fit as her husband, so she has developed her retirement life around singing. She enjoys singing with other retirees as well as performances at special events. She sang an English Christmas song for over 250 members from the Tsinghua Association of Senior Scientists and Technicians at their Chinese New Year Celebration party in 2011. For her, singing is the best activity for her physiological and psychological wellbeing.

Another factor of importance to the retirees is spiritual wellbeing. Ms Lim is one of the pioneers in the Tsinghua community to promote green ageing. She was a senior tutor in material science and wrote books about the subject with her husband, also a material scientist. However, after retirement, she wanted to be greener. Now she spends half of her time in a rural area as an amateur farmer. She explained, 'Retirement means having freedom to me. At the same time, leaving Tsinghua and the city means I can reclaim my freedom after contributing to academic knowledge and teaching for over 40 years.'

Belonging (connections with one's environments)

The second level of the QOL profile is about the sense of belonging to community and environment. This group of ingenious older people grew up together as classmates, colleagues and neighbours. They also went through the political transformation of China and learning to live as a collective.

Communal sharing is sometimes more important than personal interests. Professor Liang who taught the subject of marketing before retirement, uses his skills in marketing to share his adventures in maintaining his health through his online blog. He has also transformed his personal experiences of ageing into slogans and calligraphies for home decoration for others on campus and beyond.

The other two levels of the belonging factor are social and community. I found two retirees' experiences that demonstrate these two sub-factors. For 40 years, Professor Mo worked as a nuclear power expert under the government's agenda and contributed to military development. Retirement also means freedom for him, where he can work on self-initiated projects related to his own expertise. Originally trained as a physicist, in his second year of retirement, he invented a new method of X-ray body scanning, which got a national patent with investment to continue research for its applications. After eight years, he received a second round of investment and is working with young researchers to develop new social applications of this technology in the healthcare domain.

A secondary school classmate of Professor Mo, Professor Wanq's experience of his own self-initiated project had a more difficult path. As a trained chemist, he was also given the task of researching nuclear development during his whole academic career. After retirement, because of his own health, he started to research oxygenation, especially through eating and drinking. He named his liquid form of oxygen Fitness Oxygen, which was patented nationally.

All the research was done in his own kitchen or laboratories at his previous department outside of school hours. More importantly, he used his own body for the first test of his invention. He got support from a voluntary elderly group (including retired medical experts, professors and physicians) to help him to conduct a long-term trial. He aims to prove that this new product could help our bodies to get many health benefits. After ten years, it is still in limited production because it is an alternative health care concept that requires formal clinical trials. However, he has a blog[29] that many people read every day.

Becoming (achieving personal goals, hopes, and aspirations)

At Tsinghua, becoming is really about actions that go beyond individual expertise to transfer knowledge to everyone so that others can age well.

Professor Fan was a professor in linguistics. She enjoys her retirement and has joined singing and dancing classes organised by fellow retirees. Her additional role is as a living dictionary and translator for the retired community because she is very fluent in English. She is spokeswoman for the community and links to the external world. She also helps the university to welcome foreign visitors. She is still very active in discourses on international linguistic development and constantly exchanges emails with overseas scholars.

Similarly, Professor Yu (Style) is also well known in the community. Before retirement, she was a professor of micro-electrical engineering even though her original field is chemistry. She once explained to me her viewpoint of current education, 'Students are now trained without hands-on ability and they are incapable of solving diverse problems outside their own expertise… however, when we studied, we were trained with the principle of problem solving and hands-on ability that can apply to any subject.' Since retirement, she has been working as the office manager for the Tsinghua Association of Senior Scientists and Technicians where she has promoted active engagement with external organisations and current students. For leisure, Professor Yu is a wardrobe stylist for many female administration staff members. She also spends time taking care of her aged mother.

Finally, Professor Lim from the Architecture Department was my collaborator throughout the process. With a similar background, we met regularly and Professor Lim became my research partner. His role evolved from passive subject to active partner, even adviser at some points. As a scholar, he continues to write essays to address ageing with regard to his own profession. For example, recently, he has been researching green rooftop technology and has found a retired engineer who is building an ever extending house with fruit and vegetables growing on the roof. When he was the vice-chairman of the Tsinghua Association of Senior Scientists and Technicians, Professor Lim initiated and edited two books of stories about ingenious older people from other countries. He gradually became an advocate of productive ageing and a campaigner for job opportunities for retired people.

[29] http://www.china50plus.com/news/?action-category-catid-85

Innovating for the future

These stories from retired Tsinghuaians demonstrated that they have the ability to combine existing resources and especially within limited situations. The final attribute of ingenuity is to solve practical problems. What are the problems that this group intends to solve?

Back to the QOL index. Everyone I met is solving the basic needs of being, i.e. as retired people solving ageing problems. They are working hard to make sure that they themselves are ageing well. They are also concerned about how their experiences can help others within the community and beyond. This is how they are also performing the roles of belonging and becoming.

Lessons: Inspirations for Design

As a group of ingenious people, they are working and stimulating each other to tackle persistent myths about old people, a culturally based fear of ageing. It is clear that this unique situation of collective living has become an incubator that allows innovations to happen. They are constantly developing ways to maintain quality of life (being, belonging and becoming). Working together with this group of ingenious older people, this study explored their lifestyles to prove that ageing could be seen as a culture that we can draw lessons from and that will support our own ingenuity of ageing.

How can this aged culture relate to design practice and research? First of all, the concept of 'ingenuity of ageing' can also relate to a new model of social inclusion, which is about co-designing ideas for a better world based on inspiration from interactions with excluded people such as older and disabled. As Heylighen et al[30] explained, the three models based on disability are:

1. The medical model of disability: 'considering disability as an individual, physiological disorder to be treated or cured: The medical practitioners would implicitly act as the dominant figure and put patients in a subordinate position. This leads to tension between experts and followers, doctors and patients.
2. The social model of disability: 'recognising the interaction between a person and the context of his/her actions', puts more emphasis on social connectivity and responsibility.
3. The cultural model of disability: 'the potential of disability [is] … a source of refreshing perspectives, which challenges categories that tend to be taken for granted in design, and reshuffles boundaries in between them. Subject to this questioning and reshuffling are boundaries within the material environment, boundaries between the material environment and people/the body, and boundaries between (groups of) people'.

This cultural model of disability acknowledges both the medical and social dimensions of disability but also attaches more importance to bringing the discourse and practice to a new level that stresses the potential of disability to question normative practices and prevailing frames of reference in society[31]. Similar to new perspectives to address disability, capturing how older people tackle issues related to ageing can be seen as exploring the behaviours and beliefs characteristic of a particular group in our society – a culture of ageing that could inspire design and innovation.

[30] Heylighen, A, et al. (2010). 'Conservation Meets Inclusion. Model Meets Reality'. In P.J. Clarkson, P. Langdon & P. Robinson (Eds.), Proceedings of the 5th Cambridge Workshop on Universal Access and Assistive Technology (pp. 209-218). Cambridge (UK): University of Cambridge

[31] Devlieger, Rusch & Pfeiffer, (2003) 'Rethinking disability: the emergence of new definitions, concepts and communities'. Garant, Antwerp

精品名茶

Compared to youth culture, the diversity within the aged culture is greater because of the large numbers of people in the same age group. According to the Carnegie Enquiry into the Third Age (1989-1992) in the UK, the Third Age 'brushed aside the title and attitude of 'old age', the 'elderly' and so on and to establish a fresh set of divisions of the life course'[32]. In chronological terms, the Third Age is between 50 and 74 but in fact it is more about people's lives after retirement from work. In our life course, each age represents lifestyle changes. So for the aged culture, it covers people who are retired and in their Third and Fourth Age.

This is why the first contribution of this study aims to demonstrate how investigation of a group of ingenious older people in China could be used as a case to understand the social contexts of ageing everywhere, looking at the diversity of ageing and older people, and at different factors that are important to the experiences of old age and ageing. My aim was to use design to set up a platform to identify, present and discuss examples of the aged culture.

[32] Laslett (1996) 'A Fresh Map of Life: Emergence of the Third Age', Palgrave Macmillan, p.ix

TsingHua University Campus as an Organic System

Academic buildings

Community buildings

Student accommodation

Staff accommodation

Railway

River

Major road

Facilities for the community (almost 30,000 on campus)

Hospital

School or Kindergarten

Restaurants

Markets

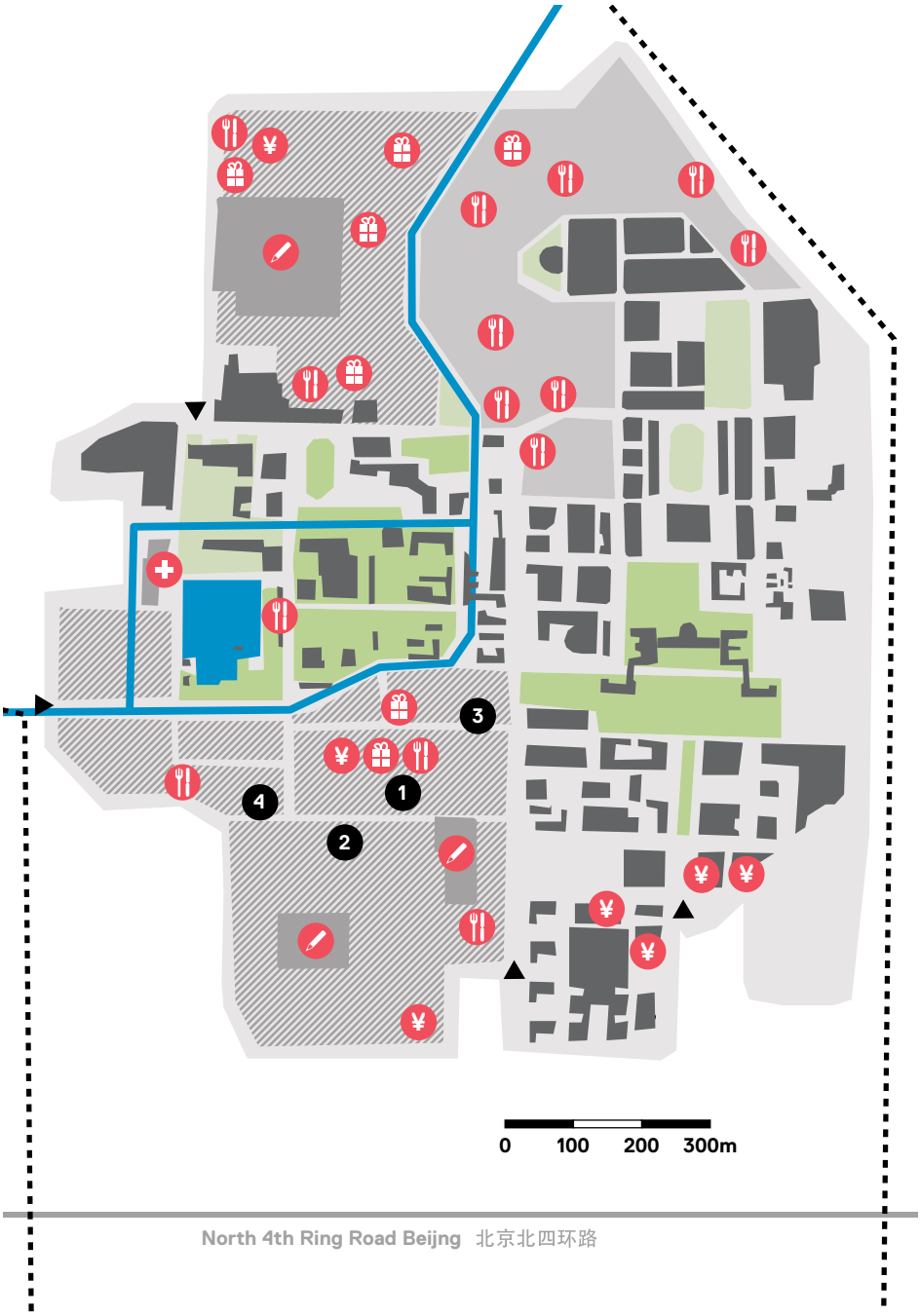
Banks

Facilities for the elderly (over 6,000 people)

1. **Elderly Home**
2. **Elderly Centre**
3. **University for the Third Age**
4. **Tsinghua Association of Senior Scientists and Technicians**

Tsinghua University Schools

School of Architecture
School of Civil Engineering
School of Mechanical Engineering
School of Aerospace
School of Information Science and Technology
School of Sciences
School of Life Sciences
School of Humanities and Social Sciences
School of Economics and Management
School of Public Policy & Management
Tsinghua Law School
Academy of Arts and Design
School of Medicine
School of Journalism and Communication
Institute of Nuclear And New Energy Technology
Department of Physical Education


1
2
3
4
0
100
200
300m
North 4th Ring Road Beijng 北京北四环路

銀齡创新
(四)安排
遗体
捐助
的服务
代理
遗体
捐助

How? 方法

Ageing in Tsinghua is not a study about understanding solutions to solve ageing problems. Instead, it aims to use designerly ways of thinking to provoke and promote ageing innovation by older people, which I call 银龄创新 in Chinese.

Ingenious older people develop ideas to solve their own ageing problems. How could they be fully aware of their ingenuity? How could these ideas be captured and extended into social innovation for all?

Koskinen, et al explained the characteristics of how designers approach research: 'Designers trained in the arts are capable of capturing fleeting moments and structures that others find ephemeral, imaginative, and unstable for serious research. They are also trained in reframing ideas rather than solving known problems. Above all, they are trained to imagine problems and opportunities to see whether something is necessary or not. It is just this imaginative step that is presented in discussions on innovation in industry'[33].

As a trained designer who became a design researcher, I agree that this designerly way of researching is different and believe it is useful for the whole research community. Furthermore, two social science research methodologies, reflexive ethnography and action research, have helped me to redefine the interpretation of the research relationship between design and ageing.

The Methodology

Reflexive Ethnography

Since my PhD research[34], I have adopted the methodology of ethnography. The key element of ethnographic research is the assignment of well-defined fieldwork, which aims at providing an experimental ground for researchers to take part, observe and analyse prescribed social issues. For my study, the fieldwork was firstly defined by geography – the Tsinghua University campus. It gradually became clearer as a community with a common characteristic – aged culture. I applied and experimented intensively the designerly way of researching through this one-year study with a group of ingenious older people on Tsinghua campus.

[33] Koskinen, et al (2012) Design Research Through Practice: From the Lab, Field, and Showroom, Elsevier/ Morgan Kaufmann, section 1.3

[34] Lee, Y., (2007) 'Design participation tactics: involving people in the design of their built environment'. Doctoral thesis, Hong Kong Polytechnic University

Stewart[35] defined five important methods for researchers to carry out ethnographic research which were all applied during my study:

1. Participant observation – everyday settings need to be studied'. I went into a living community and engaged with people there.
2. Holistic description – a need to create a holistic construct of 'culture' or 'society' and wide-ranging comprehensive data. I analysed the community as a living system and developed an understanding of its operation.
3. Contextualisation – 'explain one set of observations in terms of connections with others and with concepts used for their fit with the context'. A series of festival related activities were created over the period of the study as a platform of engagement.
4. Socio-cultural description – 'personal involvement in human contexts, the detailed depiction and analysis of social relations and culture'. Relationships were developed with different design schools and organisations in the city, which sent students and researchers to support the study.
5. Theoretical connections – 'theory matters, then, but ethnography is not as focused on theory, or on concepts, as is ground theory'. Instead of traditional social theories, this study referred more to social research frameworks such as the QOL profile so that it can be directly related to practice.

Ethnography has been widely adopted in design practice. However, the application of the ethnographic approach in this study is slightly different. It is more about changing the role of design researchers enabling people to actualise their own ingenuity through design thinking.

A reference for participant observation conducted by a designer is Patricia Moore's 'Disguised' experiment. As she explained, '[a] potential problem was that I was not trained as a sociologist; I did not have a PhD in any area of behavioural science, and I respected those who did, so I was somewhat reluctant to press my views about old people on them… There was much debate in academic circles at that time about advisability of participant-observer research, in which the subjects are, in a sense, fooled by the researcher'[36].

The main concern about this form of design ethnography study is the ethical relationship with the people being researched: do they want to participate? Are we intruding on people's lives? I am aware of such questions in relation to my own research practice. My solution was to conduct a longterm participatory observation as my ethnographic approach – the entire year.

There were no financial or material incentives for the creative dialogues. Participants were informed about the motivation of the study but there were no formal procedures of informed consent. Free conversations were developed and recorded. The only request for the participants was to choose a spot in their home or community to take a portrait photo.

In order to understand the diversity of aged culture and avoid locating the designer in a powerful position to judge which outcomes are preferable, I adopted the approach of reflexive ethnography. According to Davies, this reflexive approach has been influenced by postmodernism: 'a process of de-differentiation, of breaking down boundaries and rejecting the autonomy of different realms'[37].

35 Stewart (1998: pp.5-8) Stewart, A. (1998) 'The Ethnographer's method', London, UK: SAGE Publications

36 Moore, P. with Conn, C.P. (1984) 'Disguised! A true story'. USA, Word Books

37 Davies C. A. (1998,2008) 2nd Edition, 'Reflexive Ethnography: A Guide to Researching Selves and Others', Routledge, UK, p.14

Davies[38] further interpreted reflexive ethnography with two key elements in practice:

1. A research process based on fieldwork using a variety of (mainly qualitative) research techniques but including engagement in the lives of those being studied over an extended period of time.
2. An ethnography – the eventual written product that draws its data primarily from this fieldwork experience and usually emphasises descriptive detail as a result (cf Ellen 1984:7-8; Hammersley and Atkinson 1995:1-3)

As part of the fieldwork looking at the universal ageing process, I explored different alternative medical treatments for health and used my own body to test these treatments. This approach was inspired by my interactions with Tsinghua retirees who are constantly researching ways to 'keep in good health 養生之道' as part of their anti-ageing tactics. Research into their ageing process helped me to understand mine. At the same time, my reflexive reactions also enabled the retirees to acknowledge their ingenious tactics.

Following the reflexive ethnography approach, I decided to make my first ethnography – this publication, a written product. I intentionally do not use the method of persona. I wrote about real people with their permission. Davies explained the use of autobiography as a way of researching selves, '[t]he open admission of the involvement of ethnographers with the subjects of their research came to be welcomed as an opportunity to liberate the field from a positivist commitment to value-free scientism and to address ethical concerns about the anthropological endeavor and its links to exploitation of Third World peoples (cf. Scholte, 1969)' .

In addition to 12 creative dialogues with those ingenious older people on campus, I also created five design festivals, a new design participation method I have developed. As a result, I engaged an extra 100 retirees, with some assistance from design and technology students from Tsinghua and other Beijing universities[39]. This student involvement represented another aspect of my reflexive approach. Most of the younger generation in China are from one-child families with limited contact with their grandparents. Engagement with my project offered them an opportunity to meet and learn from the older generation.

This engagement was important to see if it was possible to develop a better version of participatory approach in which design researchers into ageing could research with other people and learn from the aged culture. It was a difficult task but, as my collaborator Professor Ji Yang expressed, 'As long as we find one enthusiastic and humanistic student, we can train her to be the leader to train the others'. Luckily, we found one during our year of collaboration. She was interested in social innovation in communication technology and now she has re-focused her work to address ageing populations. She had just helped Professor Ji to organise the first ageing photography competition and exhibition in Beijing and will lead one of the Living Labs[40] in a local community that Professor Ji set up.

Action Research

As an advocate of reflexive ethnography, Davies (1998, 2008)[41] expressed the view that this approach might 'lead to a form of self-absorption that is also part of the definition of reflexivity in which boundaries between subject and object disappear, the one becomes the other, a process that effectively denies the possibility of social research'. To many social scientists, this warns of using a method that leads nowhere. To me, as a design researcher, I continue my journey in the light of the ideas of design and ageing being combined with an action research methodology.

38 ibid, p5

39 Students from the Academy of Arts & Design, Tsinghua University and design researchers Beijing University of Posts and Telecommunications and Beijing Industrial Design Centre

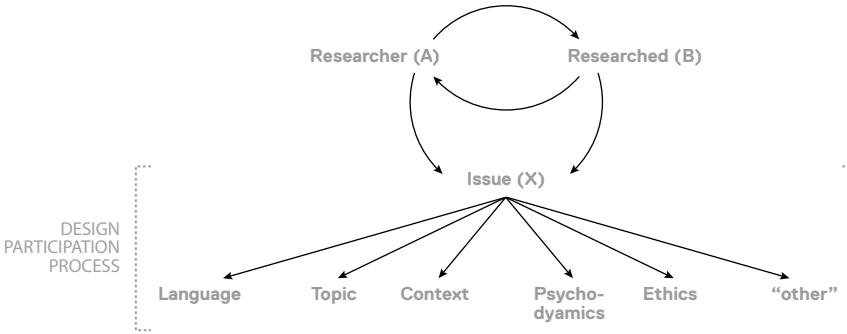
40 Living Lab is an innovation playground where consumers, knowledge institutions and companies work in close cooperation to develop new products and services. The unique mix of inhabitants, excellent infrastructure and knowledge institutions creates a wonderful opportunity to use the city as a testing ground for innovation. (http://www.openlivinglabs.eu/become_a_member)

41 ibid, Chapter 9

'[Action research] is based on the principle that people have a universal right to participate in the production of knowledge that directly affects their lives'[42]. This is reiterated by Greenwood and Levin[43], 'a better and freer society can be built through promotion of broad participation in research processes; and support actions are expected to lead to a more satisfying situation for all the stakeholders'. Thus, action research can refer to a relationship between the 'researcher' and the 'researched', seen as an inter-subjective and interactive relationship characterised by joint action, involvement and shared responsibility.

Fig 1. is a conceptualised diagram that displays the relational framework. As indicated, the triadic relationship features the 'Researcher(s)' (A) and the 'Researched' (B), who are jointly involved in addressing an 'Issue' (X) that embraces a series of modalities of reality. Each action research setting is unique contextually and historically, and there is a different A, B and X in each system.

Fig 1. The ARX triadic feature of action research (van Beinum et al. 1993)



According to Small (1995), there is no prescribed methodology for action research as it emphasises practical problems. Like other action-oriented processes, the aim of action research is to inform policy and practice and lead to social action/changes. Like reflexive ethnographers, most action researchers reject mainstream social science's conception of objectivity and the separation of researcher and the researched[44]; they are also against the idea of the superiority of the researcher as expert and the ability of the research process to be value neutral[45].

Action research can be described as a 'learning through doing' process. Through completing actions, more information on specific topics is found. This characteristic of action research matches the working pattern of most design researchers who want to develop new insights about design through realising design projects. This was also the model adopted by the DesignAge programme at the Royal College of Art with actions involved for both young designers and members of the University of the Third Age[46]:

1. User Forums at the Royal College of Art, giving students the opportunity to work with older people.
2. Design Workshops for students to explore their ideas with professionals working in industry.
3. Design Study Groups were set up among U3A members after their interactions with designers.

Unlike the Birmingham 1000 Elders Group, which was formed in the early 1980s by Professor Bernard Isaacs and continues to run[47], the 'marriage' of the RCA and U3A finished five years after the DesignAge programme was funded. DesignAge expanded to become the Helen Hamlyn Centre for Design at the end of the 1990s. User forums were organised with individual U3A members and later the Design Study Groups at the U3A were dissolved.

Both the DesigAge programme and my Ageing in Tsinghua project follow the action research model. However differences can be seen in the 'researched' – DesignAge explored issues with members of the design community, my target is older people themselves.

42 Small, S.A. (1995) 'Action-oriented research: Models and methods', in:Journal of Marriage and the Family, Minneapolis, 57(4), p.941

43 Greenwood, Davydd J (1998), 'Introduction to action research: social research for social change. Country', Thousand Oaks: Sage Publications.

44 Oquist, P. (1978) 'The epistemology of action research' in: Acta Sociologica, 21, pp.143-163

45 Susman, G. I. & Evered, R.D. (1978) 'An assessment of the scientific merits of action research', in: Administrative Science Quarterly, 23, pp.582-603.

46 Crosthwaite (1997), 'Working Together: A New Approach to Design', Royal College of Art, p.16

47 http://www.birmingham.ac.uk/research/activity/mds/centres/healthy-ageing/elders.aspx

Start

Legacy

Together

Changes

Respect

The Method: Design Festival to Celebrate an Exchange of Ideas

To enable older people to investigate their ingenuity of ageing, I applied and tested the Design Festival method in this project: five pop-up design stores were set up during five traditional festivals in the Chinese calendar. These design interventions were on an ad hoc basis but there were three components essential to all of them.

First, I referred to traditional customs and developed these into specific topics to engage the target group:

1. Start for the Spring Festival, January, Chinese New Year is the most important festival in China.
2. Legacy for the Qingming Festival, April, the festival to commemorate the dead.
3. Changes for the Dragon Boat Festival, June, a traditional festival for dragon boat racing and celebrating the beginning of summer.
4. Together for the Mid-Autumn Festival, September, a traditional festival for people to get together with their families, appreciate the full moon and eat mooncakes.
5. Respect for the Chong Yang Festival, October, a celebration of the ninth day of the ninth lunar month, also named the Elderly Festival, underscoring an opportunity to care for and appreciate the elderly.

Second, the interventions were deliberately tentative and always ready for modification. Thus, expressing the idea that design is a process through which solutions are continuously proposed, tested and evaluated. Apart from the Spring Festival for which I participated in the party organised by The Tsinghua Association of Senior Scientists and Technicians, I ran three days of events for each festival. Design and operation of the store was evolved in response to participants. Each festival also informed the design and focus of the next one.

One common goal was to identify a series of social innovations suggested by ingenious older people. At the fourth event, the Mid-Autumn Festival, I set up a pop-up tent within the community and presented ten ageing innovation ideas back to the group, (listed in rank order according to their popularity):

1. Elders restaurant to maintain their health.
2. Greener burial method: some retirees had mentioned the idea of tree burial on Tsinghua Campus to the authority but it was rejected.
3. Local travel group: the Elderly Centre on campus has organised oversea trips for retirees which have proved to be very popular. However, there are no trips being organised to visit Beijing's new development sites which a lot of retirees are curious about while they are living in the protected area on campus.
4. Internet club: retirees want to engage with new technology but some of them are not confident enough. However, they do not prefer formal lessons after retirement so they welcome a self-initiated group with friends to learn new technology without pressure.
5. Group exercise club: most of the retirees exercise everyday at home or in their communal areas but a trip to the national park next door would be beneficial.
6. Green ageing: retirees care about the planet and about their health, so they all like the idea of escape to rural areas or learning urban farming, for example.
7. Class to learn how to take care of the old: as older people, many of them still have elderly parents and they think they do not have experience to care for them.
8. Body donation advice: as part of their idea of contribution to knowledge, they would like to find out ways to donate their bodies for medical research or make other useful contributions.
9. New ways to engage young people: as teachers, they would like to find new ways to engage current students,
10. Tomb and funeral service: retirees worry about their legacy and would like to address the context of their funeral services so that others are not bothered by this.

The third component of the design interventions was an awareness of pre-reflexive thinking. All the temporary stores were set up to provide an alternative way to solve problems. Participants selected their preferred innovation and were encouraged to contribute their own ideas. Extra ideas were suggested such as: a good quality care home on Tsinghua campus where retirees can stay in their community until they die; a time-bank system within the community to encourage mutual help between the Third and Fourth Age. Essentially, participants were keen to find ways to show that they can still contribute to society. They said that helping themselves to use fewer resources is already a way of contributing by reducing the pressure of an aged population on the government.

These innovations by older people show what I called the ingenuity of ageing.

Elders restaurant

Greener burial method

Local travel group

Internet club

Group exercise club

Green ageing

Class to learn how to take care of old

Body donation advice

New ways to engage young people

Tomb and funeral service

Special thanks to Susan Griggs for her creative dialogues

Next? 米米

My design research did not stop on the Tsinghua Campus. My project with the ingenious retirees has inspired a number of new experiments in design education in London and Hong Kong.

'Creating "Ingenious Britain" will mean harnessing ideas from the public and private sectors, users, professionals research and academia to create more effective products, services, processes and methods of service delivery to drive economic growth. The UK must unlock the talent of its entire population if it is to become a nation recognised continually for innovation'[48].

This quotation by the well-known inventor Sir James Dyson pointed out that the ingenuity of people is important. The constant question for me during my UK-China Fellowship of Excellence 2011 was how to 'unlock the talent'. This is the main goal of the study, Ageing in Tsinghua. I chose to work with the most ingenious older people in China who are living in a unique situation, as a collective for over 40 years where they shared working and living. Two main elements were evolved through the study and related experiments are starting to translate the findings across cultures.

From Beijing to London and Hong Kong

As pharmacologist Tu Youyou, the first scientist on the Chinese mainland to win the Lasker Award in 2011 at the age of 81, said 'Continuous exploration and development of traditional medicine will, without doubt, bring more medicines to the world'. This is similar to the development of social innovations, as founder of the DESIS network, Ezio Manzini, explained, 'when we speak of "design for social innovation", we usually refer to projects based on some existing social innovation initiatives (that is, something different from what normally is intended with the expression 'social design' or 'design for social inclusion' … 'older and disabled people' is of course a strong and important topic. But, for us, it is not characterising the DESIS initiative. Design for social innovation and sustainability can include some activities related to older and disabled people, but not only. And the same older and disabled people initiatives are to be included in DESIS only if they start from, or at least are related to, some form of social innovation.'[49]

[48] Ingenious Britain – Making the UK the leading high tech exporter in Europe, A report by James Dyson March 2010 "Ingenious Britain" news insert is published with the support of The Department for Business Innovation and Skills, UK Trade Invest, The OECD, The Technology Strategy Board and NHS, 29/05/2011

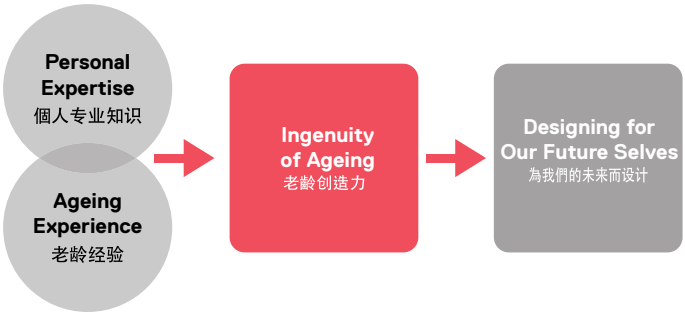
[49] Email exchange with Ezio Manzini on 3 April 2010

This community-centred approach led me to develop an initiative, entitled Ageing in Place(s), with students in different design schools. Different activities were conducted to promote the concept of ageing as a culture rather than as a problem in our society. For example, with Royal College of Art students, I introduced the brief, Ageing in Kensington. Design teams were asked to design an event to promote a more sustainable lifestyle for all. I did the same with students and staff members at the Hong Kong Design Institute where I was asked to conduct a research project about design implications of an ageing population. I expanded the focus from older people to the ageing process and local community by conducted a three-week design lab, Ageing in Tiu Keng Leng.

The third of the other experiments was called Design.Lives Projects, in partnership with Dr Denny Ho, a sociologist based in Hong Kong. We conducted a series of labs to develop learners' capability to deal with important issues of social exclusion and their own ways of enhancing social inclusion through design practice. Our work was informed by the belief that fixation on the role of the designer as the decision-maker and the suppression of reflexivity on the designer-user relationship creates a power disparity which leads to social exclusion.

All of these design education experiments were inspired by my project on the Tsinghua campus.

Conceptual framework for the Ingenuity of Ageing



References 参考

— Bazalgette et al (2011) Coming of Age, DEMOS, UK - 'Ageing is not a policy problem to be solved'
— Coleman (1993) Designing For Our Future Selves, Royal College of Art
— Cross, N. (2006) Designerly Ways of Knowing. Springler-Verlag, London - Designerly ways of living
— Crosthwaite (1997) Working Together: A New Approach to Design, Royal College of Art
— Devlieger, Rusch & Pfeiffer (2003) Rethinking disability: the emergence of new definitions, concepts and communities. Garant, Antwerp
— Dyson J. (2010) Ingenious Britain: Making the UK the leading high tech exporter in Europe, Dyson Foundation
— Heylighen, A, et al. (2010) Conservation Meets Inclusion. Model Meets Reality. In P.J. Clarkson, P. Langdon & P. Robinson (Eds.), Proceedings of the 5th Cambridge Workshop on Universal Access and Assistive Technology (pp. 209-218). Cambridge (UK): University of Cambridge
— Laslett (1996) A Fresh Map of Life: Emergence of the Third Age, Palgrave Macmillan
— Tanner (2010) Managing the Ageing Experience: Learning from Older People, The Policy Press, UK – 'Keeping going', 'Staying me', 'The slippery slope' & 'Sustaining the self'
— Wilcock, A. A. (2006) An occupational perspective of health (2nd ed.) Thorofare, NJ: Slack.
— Wilcock, A. A. (2007) Active ageing: Dream or reality? New Zealand Journal of Occupational Therapy, 54(1), pp.15-20
— The World Health Organization (2002) Active Ageing: A Policy Framework, for the Second United Nations World Assembly on Ageing, Madrid, Spain, April 2002.
— Netherland Design Institute (1999) Presence New Media for Older People
— Victor Minichiello, Jan Browne and Hal Kendig (2000) Perceptions and consequences of ageism: views of older people. Ageing and Society, 20, pp.253-278
— Young (2011) How to be ingenious, RSA, UK

People 人物

Research Partners

The Helen Hamlyn Centre for Design, Royal College of Art, London
The Helen Hamlyn Centre For Design undertakes design research and projects with industry that will contribute to improving people's lives. Its approach is inclusive and interdisciplinary and its projects are organised in three research labs: Age & Ability - design for a more inclusive society irrespective of age and ability; Health & Patient Safety - creating safer and better health services; and Work & City: research into changing patterns of work and urban life. As a centre for design-led research and innovation, the Helen Hamlyn Centre For Design is an integral part of the RCA, one of the world's leading postgraduate schools of art and design, and is endowed by the Helen Hamlyn Trust.

Royal College of Art helen hamlyn centre for design

System Design Lab, Academy of Arts & Design, Tsinghua University, Beijing, China
Apart from Professor Liu, there are four senior researchers working together in the lab with PhD candidates and aster students. They all work under the influence of the director's concept of system design and on many research projects about social innovation and cross boundaries between design disciplines and other subjects. As a team, they received an award of <Excellent teaching team of Beijing> and <National excellent teaching team> in 2009 in the core knowledge of the industrial design discipline and beyond.

Acknowledgments 致谢

裴晓梅教授Professor May Xiaomei Pei, Director of Gerontology Centre and administration staff of Department of Sociology, Tsinghua University

柳冠中教授 Professor Liu Guanzhong, Director of System Design Lab, Academy of Arts & Design, Tsinghua University, Beijing with Dr Liu Xin, other staff members and students of the Lab

Academy of Arts & Design, Tsinghua University:
Dr Ying Chun Zang, International Office and her student, 徐倩
Dr Chao Zhao, Deputy Head of Industrial Design Department

Beijing University of Posts and Telecommunications
Professor JI Yang and his student, 周舒欣

Beijing Industrial Design Centre (BIDC)

清华大学老科学技术工作者协会 Members of Tsinghua Association of Senior Scientists and Technicians: 于诗南教授 林賢光教授 王锡麟教授 閆炳义老師 嚴普強教授 梁光启教授 林子為老師 貊大卫教授 俞國寧教授 陳世猷教授 方琰教授 申明教授 陳彌老師

Professor Christina R Victor, Professor of Gerontology and Public Health, Director of the Doctorate in Public Health (DrPH), School of Health Sciences and Social Care, Brunel University, UK

Dr Patricia Moore, Moore Associates

The Author

Dr Yanki Lee is a design advocate focusing on social innovation through design and user research methodologies. She graduated with an MA in Architecture from the Royal College of Art before joining the Helen Hamlyn Centre for Design in 2000 as a Research Associate. In 2003, she was awarded a research studentship for her Doctoral research in which she built up her expertise in design participation and was awarded a PhD in design from the Hong Kong Polytechnic University. Her thesis, entitled, 'Design Participation Tactics; involving people in the design of their built environment' explored a range of methodologies to design participation with Professor John Frazer.

Since 2005, she has worked as Research Fellow, focusing on design methodology for participation, social inclusion and social innovation. She was Co-Investigator of the UK Research Council funded i~design 3 project (2006-2010) developing tools for designers to engage with people and she initiated an online platform, www.designingwithpeople.org to build a community of social design practice. She also developed a collective design exercise, The Methods Lab, for designers to work in tandem with the web tool. She's also initiated a new public engagement project, 'Design Our Tomorrow (DOT)' to introduce inclusive design methodology to UK secondary schools.

Recently, she extended her research and practice in design participation into China. Yanki Lee launched the Design. Lives Projects with sociologist Dr Denny Ho from Hong Kong, and has collaborated with organisations such as the Hong Kong Design Centre, MAD ASIA and Hong Kong Design. In 2011, she was awarded the BIS UK-China Fellowship of Excellence to support her one-year study at Beijing Tsinghua University with Professor Liu Guan Zhong in his System Design Lab.

For her design practice, she co-founded EXHIBIT (www.exhibit-goldenlane.com), a Community Interest Company with her partner, Alan Lam, an architectural lighting designer in 2005. This operates a small design gallery and shop at the Golden Lane Estate in London as well as conducting social design projects.

Funder

Department for Business, Innovation and Skills (BIS) – UK-China Fellowship of Excellence programme
BIS is a ministerial department of the United Kingdom Government. It has responsibility for enterprise, business relations, regional development and fair markets, along with responsibility for science and innovation, further and higher education and skills.

BIS | Department for Business Innovation & Skills

What can a remarkable community of 6,000 retired academics living on the campus of Tsinghua University, Beijing, tell us about strategies for 'ageing well' in societies around the world?

The Ingenuity of Ageing tells the story of an experimental piece of design research carried out by Dr Yanki Lee, a research fellow in the Helen Hamlyn Centre for Design at the Royal College of Art, who spent a year in China investigating new approaches to design for ageing.

Supported by a UK-China Fellowship of Excellence from the Department of Business, Innovation and Skills (BIS), Dr Yanki Lee's post-Doctoral study combines the techniques of reflexive ethnography and action research in order to challenge conventional thinking about the designer as expert. It proposes an alternative, participatory model of social interaction and innovation through which the ingenuity of older people can be revealed.

李欣琪
設計學博士
英國倫敦皇家藝術學院