# Design for the Ingenuity of Ageing: New Roles of Designers in Democratic Innovation

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### **Abstract**

Inspired by concepts from the Participatory Design discourse such as the idea of design process as Things (Ehn 2008 and Binder et al 2011) and the concept of agonistic democracy (Bjorgvinsson et al, 2010), we have engaged a community of over 7000 retired academics who are actively ageing on their university campus in China through a variety of methods since 2011. We call this a reflexive ethnographic study with these ingenious older people and it focuses on how they designed their lives, the *Ingenuity of Ageing*.

A research team composed of design researchers and a sociologist; we have investigated how designers accomplish infrastructuring and the mobilisation of participation in design. From our intensive interaction with this ingenious group, we found important new roles for designers as triggers/activists. Regarding the ways of deliberating people's value in design processes, we employed Ricoeur's ideas of utopia and ideology as the key concept guiding the design of our ongoing experiment, the Scientist Study. This study engages a community of retired scientists who are actively exploring possibilities in their third age, on their university campus in China. After building trust based on a one-year engagement, we have revisited the situation to refine how participation should work with the critical task of designers, i.e. transfer people's ingenuity into insights for democratic innovation that could improve lives for our future selves.

# Introduction: from individual to democratic innovation

Can designers change inherent ageism through the engagement of older people in the design and delivery of socially innovative services and products with them? Can we change our current strategies towards ageing, turning its potential challenges into opportunities to engage, empower and improve the lives of the elderly as well as our future selves? In other words, we are looking for answers to create systemic change for ageing innovation. From the Open Book of Social Innovation to Five Hours a Day, Nesta's spiral of innovation suggests social innovation request organisational systems changes. "It is not just the successful scaling of individual innovations, it's the result of fundamental shifts across a range of domains, based on a novel understanding of the challenges or opportunities presented. Systemic change requires shifts across four key areas Product and service innovation, Market innovation, Political innovation and Cultural innovation (Kahn, 2013)."

As a team with designer-researchers and a sociologist, we focus on another form of innovation: Democratic Innovation (von Hippel, 2005). We began our collaboration to research the new roles of designers on how creative design practices could bring everyone together to trigger democratic innovation to liberate people's ingenuity. We endorse Participatory Design (PD) out of the belief that the user's involvement would enhance the quality of the design outcome and that the practice wisdom

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of users is an invaluable resource during design (Ho et al., 2011; Ho and Lee, 2012). However, we question the current PD development that designers are relegated to a secondary position vis-a-vis that of participants, and eventually merely playing the supportive role in the design process. It turns out that designers are no longer necessary for direct negotiations with participants and that issues around the quality of design have been left undetermined. We argue that designers should play a critical role in the field of design, especially when this profession has been greatly involved in the pursuit of social change. It is also important because the political and moral judgement of designers would play a part in setting the goal of social change.

# The Ingenuity for Design

For us, democratic innovation is linked to the concept of ingenuity. We called it Ingenuity for design (Lee 2012): people's capability in dealing with or solving problems forms the basis of the theory of ingenuity and this could become inspiration for the processes of design. Based on the Royal Society of Arts (RSA) 2011 report that collated different studies of ingenuity, it can be defined as a capability that some people exhibit which contains three attributes:

- 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" (Young 2011). Therefore, this is why we are keen to identify unique ingenious people/communities as our first priority for rethinking the process for everyday practice and social innovation.

# **Design for the Ingenuity of Ageing**

This led us to China as a location for this case study. It relates to the conventional image that China does not advocate this form of democracy as openly as those institutions in the US and European Countries. Relating to the experience of PD, the democratic system in the industrial system of Scandinavia countries certainly facilitates the adoption of the PD rationale, which has its roots in the movement towards democratisation of work places. In contrast in China this sort of movement seems unattainable. However, we discovered that engaging design in change has already occurred in the lifeworlds of Chinese people. They practised their 'ordinary design' for their lives in retirement. Our concern then is not to prove the existence of the possibility of engaging ordinary people in design activities. Instead, we aimed at showing that it is possible to transform the individual efforts in the design of ordinary lives into design at communal level in China. We anticipated finding a kind of localised mobilisation of participation in design through our study of the retired Chinese scientists.

Our fieldwork was influenced by Ricoeur's theory of ideology and utopia. This theory is insightful as it provides us with a framework to deal with the critique of ideology. In the engagement process, we have to illustrate the ideological dimension of the participants' appropriation and reification in order to ask participants to rethink their actions. This is important in the context of disagreement and conflicts. If we take PD 'as a way to meet the challenges of anticipating or envisioning use before actual use, as it takes place in people's lifeworlds' (Bjorgvinsson, Ehn and Hillgren, 2012, p. 104), it is necessary to accept that colonisation of the lifeworlds exists and the critique of ideology should be conducted in order to accomplish de-colonisation. Utopia and ideology constitute a practical circle, which could not be decoupled, as it is the unrelieved circle of the symbolic structure of action.

Moreover, Ricoeur argued that this circle is not vacillating continuously but becomes a spiral and a progressive orbit. As he maintained, "it is too simple a response, though, to say that we must keep the dialectic running. My more ultimate answer is that we must let ourselves be drawn into circle and must then try to make the circle a spiral. We cannot eliminate from a social ethics the element of risk. We wager on a certain set of values and then try to be consistent with them; verification is therefore a question of our whole life. No one can escape this. Anyone who claims to proceed in a value free way will find nothing" (Ricoeur, 1986, 312).

What we mean by democratic innovation is also referred to by De Certeau's (1984) concept of tactics as a kind of reflective action. 'Tactics' are based on time and opportunities while 'Strategy' is about the "calculation of power relationships that becomes possible as soon as a subject with will and power can be isolated" (de Certeau, 1984: 36). "The space of a tactic is the space of the other. Thus it must play on and with a terrain imposed on it and organised by the distance, in a position of withdrawal, foresight, and self-collection: it is a maneuver 'within the enemy's field if vision'..." (de Certeau, 1984:37) This is why we are researching everyday tactics, which are beyond strategic institution and system. This is the form of democratic innovation: innovative tactics highly related to everyday.

# Design Case: The Scientist Study in China

During our search for design partners in China, we found an interesting situation at Tsinghua University in Beijing; one of China's most renowned universities, it is an important centre for nurturing talent and conducting scientific research. Tsinghua University has just celebrated its 100th anniversary with more than 30,000 staff members and students. In addition to current students and staff members, there are over 50,000 residents living on campus who support staff members and their families. For instance there's a kindergarten, primary and secondary schools and a shopping centre to support the community. It works like a town. Interestingly, over 7,000 retirees are still living on campus, many of whom are scientists who hold respected social status as subject experts. Many are also mentors to many of China's current key political leaders in the Communist Party, the ruling party in the Chinese government.

For the purpose of demonstrating how we 'design' different tactics for social innovation, we draw our experiences from our on-going experiment of involving a group of retired scientists that are actively challenging the concept of 'old' and redefining their third age on their university campus. Inspired by the famous Nun Study, we also went to search for enclosed communities and worked with aged people in NORCs (Naturally Occurring Retirement Communities). Starting from the 1990s, American Neurologist Dr David Snowdon who engaged over 600 retired nuns for a long-term research project: following the final stage of the nuns' lives and after they died, all participants donated their brain for medical research into Alzheimer and other age-related diseases. "I love sitting with the sisters who have Alzheimer's... They teach us about living life in the moment. I think they're gift to us. The gift they give is the simplicity, their unconditional love." This quotation from the Nun Study demonstrates what we mean by the ingenuity of ageing: recognise and utilise wisdom and experience from ageing processes to personal resources for individual innovation.

These retired intellectuals have developed their own ways to continue their work lives after the official retirement age. They are not the commonly perceived 'old people' who request our help. Instead they are people who develop tactics to help themselves. It is very important for us to learn tactics from these ingenious older people so that we can employ them to our future selves.

# New roles of designers for democratic innovation

Our overall methodological question is how can design enable a more solution-focused approach to social issues? From our experiences, the angle of design for social innovation in ageing, the first task of the designer is enabling people to understand and interpret their own problems and situations, subsequently coming up with their own solutions. We did an initial one-year ethnographic study to develop relationships. From this it become an on-going project aim to shift findings back to design actions including designing a manual for connected communities and socially innovative services for our future selves. The new and more specific research question is how have built environments been changed over the last 50 years and how do people modify their places to facilitate their lifestyle changes? After the two stages of engagement, we are also transferring the experience to a new situation and exploring social design as a new practice. We had defined three new roles of designers that are beyond facilitators of social innovation.

# 1. Make it public - revealing the possible

For our Scientist Study, we conducted interviews, data analyses, testing out our interpretation with the interviewees. We also persuaded participants by mobilising them in our 'design festivals': random participants were engaged through pop-up design labs in conjunction with Chinese traditional festivals on campus, examining if design activities would bring forth 'good' design ideas from the participants. As researchers, we are framing tactics employed by aged people in their daily lives and we aim to reveal how they bring innovation from their ageing processes into their everyday lives.

"Continue to contribute makes us live longer!" a common expression by many of the retired scientists at Tsinghua Campus. It echoes what Khan's (2013) conclusion of what older people 'really' want.

- 1. To have a purpose
- 2. To have a sense of well-being
- 3. To feel at home and connected to others

The sense of well-being and connected communities are clearly resources for the retirees to search for their purposes after retirement. From our engagement so far, we found three different attitudes towards their retirement life: some continue their lifelong profession; some refused to stop working and developed new areas of research; some develop new interests/ resume unfinished pursuits. They are actively developing tactics to respond to the strategies imposed for older people and define their own life purposes after retirement.

We developed the study of the concept of Tsinghua Ren, an imagined common identity of intellectuals living on campus. Basically, they stressed their identity as being part of the Tsinghua Ren in the sense that they belonged to the community of the University of Tsinghua. We could not find any clear boundary of such a community or clear criterion for membership, but they would say that it was better both physically and socially to live within the Tsinghua campus. Certainly, Tsinghua Ren is a social imaginary among the interviewees. For example, one of the champions of the group who strongly believes in the "prolonging of the third age" for all the retired scientists to extend their meaningful lives. For one visit, we met her at the University of Third Age (school for the elderly organised by the authority, unlike those in Europe which are organised by older people for older people) where she was attending an electronic piano class. Then we walked back to the Tsinghua Elderly Centre. We stopped by the new sign of the Tsinghua Association of Retired Scientists and Technicians, which she was one of the founders in 2000 (figure 1). She was so proud that the association had been formally recognised by the authority. She explained that "Now there

are more than 7000 retirees living on campus and each of them can be actively living for another twenty years after retirement. There is a rich pool of resources that can be used to contribute to the society on different areas."



Showcasing individual stories can help people to visualise this resource pool. In America, there is the elderly lobby group, the American Association of Retired Persons (AARP) and the retired scholars in China also initiated a website, <a href="http://www.china50plus.com/">http://www.china50plus.com/</a> for people over 50 in China. There is a lot of information for the elders on the website but it is more important that it provides a platform for them. Like Prof Alan Macfarlane from Cambridge in the UK who commented while visiting our pop-up design store, "The purpose of my oral history (archive) with retired professors is to present a different path. The aim is for the elders. Those being interviewed are not normal subject of oral but are distinguished scholars. The purpose is for the elders instead: to make others to respect them". Sharing successful stories makes younger people aware of the value of the old as well as making older people realise their own value.

Figure 1. Professor Yu with her sign

# 2. Drive actions - reimagining the everyday

We are particularly interested in how these retired people design and develop their own ways to tackle ageing. We are also interested in whether they could be convinced and mobilised to organise participatory research/design projects. We collected a variety of innovative ideas by retirees about the welfare of Tsinghua Ren such as an elderly restaurant to maintain their health, Greener burial methods, e.g. tree burial, Body donation advice, a class to learn how to take care of the old, etc. Throughout the process, we found few disagreements and conflicts with the authorities as retirees had a strong inclination to do something for the imagined identity of Tsinghua Ren. Their tactics are solution-focused and prototyping. For example, there are not enough care homes within the campus. Therefore, keeping themselves healthy through constant exercising and healthy food are their tactics to keep themselves staying on campus. Additionally, they are developing communal care services by the third age volunteers to take care of those in fourth age, this further helps to maintain a connected community. Finally, there were campaigns negotiating with the university authority to explore the possibility of a Tsinghua Cemetery for Tsinghua Ren. They even researched intensively of 'tree burial' as a way to persuade the authority to let them retain their deceased on campus. Unfortunately, the authority had already rejected their proposal with the reason that a university is a place for learning but not for mourning. It is for the young but not the old or dead. They even vetoed the body donation programme for Tsinghua Ren where they wanted to donate their bodies for medical research within the campus. There is no exception even with university campus to simplify the procedure of body donation in China: need specific agreement by their family.

Throughout our 1st year's study, we engaged over a dozen retirees through the existent network of the Tsinghua Association of Retired Scientists and Technicians and Tsinghua Gerontology Centre. All of the members we met were ingenious older people, improving their quality of life through their own ways with self-initiated activities for ageing well. Many of who are locally famous for their new ways of retirement living. "Retirement means freedom" a lot of them expressed this strong statement. Like the founder of Chinese Calligraphy Research Group, when we went to visit his home after

seeing his solo exhibition on campus, he was so excited to share with us his research into calligraphy and getting people to develop an interest in Chinese fonts. One of his fonts was even adapted and digitised to be an applied font. Then we asked him about his pre-retirement life, which is important for us to understand his timeline, his attitude suddenly changed. He was a professor in engineering but seemed not want to talk about it. Thus, he mentioned about freedom after retirement: creating something based on his own interests.

Understanding different situations in the community seems an essential element to help self-actualisation that can facilitate individual innovations to happen and scale up. One of the situations is the 'patterns of living', a survey of housing usage with over 30 typologies of housing design in the campus. We have discussed this with Professor Lim; a retired professor from the architecture department who is currently an active researcher within elderly housing. He demonstrates what we call the ingenuity of ageing; publishing research papers about elderly housing and communities through the eyes of an 80-year-old retired architect where he constantly combines his professional expertise (housing design) and bodily ageing experiences to generate new insights for others. He is our co-researcher and together we are planning co-creation workshops and continue the participatory design approach in the knowledge that trust has already been established with this group of ingenious people. We are also going to work with current students from the Architecture Department and housing research unit who will help to capture the interactions and creative dialogues through photos, drawn floor plans and texts of quotations (figure 2).



Figure 2. Prof Kim's Home

### 3. Create social innovation - exploring social design practice

By using Ricoeur's idea of ideology and utopia, we could on the one hand analyse participants' dreams and distorted visions of the world and on the other, have the perspective to know what social situation they would like to change. This is to enhance the social awareness. In our design process, we made use of interview data to identify the foundation on which the participants acquired their communal sense. In our case, it is the concept of 'Tsinghua Ren'. This concept provides a strong sense of collectivity, to which the participants are keen on contributing.

Although collectivism seems to be a factor restricting people from chasing individual accomplishments, in our case, such a collective sense becomes a strong reason for the retirees to live

out their tactics. When we focus more on the common goodnesses of the 'Tsinghua Ren' in the second session of our research process, the participants were really excited to search and design of their 'virtual' community. In the second session, we also identified barriers in the implementation of the proposed ideas through the discussion on the role of the management of the university. In this session, the majority of the participants came to the conclusion that the management of the university was the genuine leader of their community but simultaneously it was also the barrier against their proposals as they estimated that the management would take financial constraint as the reason for not implanting their proposal. To the participants, they were aware of the necessity for dialogues and negotiations between them and the senior management of the university. However, in the design process, we also reported to participants that their idea of being a 'Tsinghua Ren' would entail social exclusion. Their image of a good and decent 'Tsinghua Ren' would exclude those who could not live up to their standards, whatever this standard was.

We are not able to yet show if our research practice can lead to more 'positive' design outcomes for the participants and the retirees at large. But, to some extent, our position as research activists is free of critique and examination by any parties. Throughout the process of data collection and analyses, the skills and techniques were also subject to the management of the researchers. This needs another round of deliberation in order to reveal the openness of our design research format, which is supposed to be full of uncertainty, ambiguity and free of professional manipulation. We will continue to investigate new situations to research the practice of social design as well as conducting design experiments to trigger democratic innovation.

# **Conclusion: Social Innovation = Social Design and Democratic Innovation**

Central to this piece of work is the development of design responses to the statement 'Ageing in itself is not a policy problem to be solved' (Bazalgette, 2011) and instead introduces 'Ageing as a culture to inspire social innovation' (Lee 2012). Knowledge, processes, outcomes and experience will be shared and collectively we aim to investigate new services, tools, solutions that can be designed together with the elderly, when thinking about our future society.

The Scientist Study is our on-going experimental study and it demonstrates the new role of designers as design activists and the importance of the idea of designers as a moral subject has been spelt out. As Hekman (1995) pointed out, every individual is inevitably involved in a moral language game in their daily lives. Designers participating in the design process are also involved in a moral language game with their counterparts. To Hekman, in every culture, to become a person is to become a moral person. As she argued, "my moral beliefs constitute who I am as a person. When I make a moral statement, I am not saying that I believe this is right but could just as well believe that something else is right. I am asserting that this is right; I would be a different kind of person if I believed differently" (Hekman, 1995, 127). In other words, we should not define ourselves as designers without mentioning our moral judgement and belief. Once 'designer' as an identity has been endorsed and turns out to be a kind of subjectivity, we meanwhile assert our belief and moral judgement. This is what Hekman said of the 'form' of the employment of moral language games. This form is needed by everyone, no matter if one is a designer or just an ordinary person. Regarding the contents of the moral language game, we acknowledge that the morality of our culture is a historical product, and is always located, historical and contextual. This discussion has two implications. Firstly, designers have their own moral language games, as their moral language content is specific, as long as the subjectivity of a designer is formulated. Secondly, there is a plurality of moral language games, like those in which participants are involved. This entails the possibility of having various kinds of language games. In the process of design, a designer should, in the light of his or her morality, determine which language games are regarded as hegemonic while others as marginalised moralities in a design process.

Additionally, it is important to unfold the meaning of social innovation and understand the different elements of the practice. The first element should be the development of social design. While design as a discipline is expanding from creating artefacts to interactions, innovations, participations and other services, there were many design movements such as Crucial Design/ Universal Design/ Inclusive Design/ Participatory Design over the years culminating in public performances, exhibitions and publications for global debates. We believe these practices will help to bridge gaps in design practice/research and social innovation. As Lucy Kimbell, head of social design at the Young Foundation, debated, "... It's more that different kinds of professionals are trying out design-based approaches and methods on projects: early prototyping for project teams and the publics they serve, paying more attention to people's experiences of engaging with services in situ, and explicitly getting diverse people involved in doing designing..." Bailey J (2012).

Then the second element for social innovation should be the investigation of the changing roles of designers when democratising innovation. As Manzini and Rizzo (2012) from the DESIS network constructed a new typology of the role of designers: triggers, co-design members and design activists. We believe designers should initiate social design experiments to train novice design practitioners in order to turn them into a social-change agency. This would 'spark' a public into being and formulate a special relationship with the potential users of their object of design, constitute their political ethics of design and practise the designerly ways of doing.

# Acknowledgments

We would like to thank all the participants and collaborators on the project, which include retirees and current staff members and students of Tsinghua University, China. This project could not have happened without support from HKDI DESIS Lab at the Hong Kong Design Institute, NESTA and the Department for Business, Innovation and Skills (BIS) – UK-China Fellowship of Excellence programme and the Helen Hamlyn Centre for Design at the Royal College of Art, London.

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