

Ageing in place(s): Cases to introduce solution-focused design methodology for ageing innovation

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Abstract

This paper presents our reflection on a series of action research projects. The authors, a design researcher and a sociologist, conducted three collaborative research projects with three design schools with a view to engaging local people from those cities in design activities. During the projects we worked with local older volunteers in London, built relationships with local residents in a new town in Hong Kong and created interactions with a group of intellectuals within a university campus in Beijing. In this paper, we focus on one of the central questions posed in the project: *How people design their own lives and how their insights can eventually become innovative services for all? How these experiences can become knowledge that will benefit design education as well as design competence?* Through conducting different design activities with different actors, our aim was to sensitise people especially retirees to their valuable designing effort in their living strategies. The objective of this paper is to reflect on our continuing development in exploring the solution-focused approach to the process of design participation. We believe that design participation is not a political stance but is arrived at through methodological necessity. Our attempt was to objectify and substantiate people's ingenuity towards their own lives/living strategies and analyse three forms of designerly ways to enable older people to co-design products-services-programmes for our future selves.

KEYWORDS: Social innovation, design thinking, ageing, community, service design

Introduction

The objective of this paper is to reflect on our continuing development in exploring the solution-focused approach to the process of design participation. We believe that design participation is not a political stance but is arrived at through methodological necessity. User participation must also be highlighted, as the outcomes of design will be utilised by target

users and their concerns are of utmost importance. Users' views and knowledge should play a critical role in the design process (Ho, et al, 2009). As Cross (2006) argued, the use of solution-focused strategies is related to the nature of problems in design practice as *'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'* (Cross, 2006:18-19). We also followed the suggestions advocated by Reason (2004) that participation necessitates the formation of communicative space. This raises the question of what circumstances render open communicative space possible. We draw on our findings from the Design.Lives Labs, our training labs, to examine our design of the training process.

Ageing in place(s) project

The Design.Lives project was informed by a multi-disciplinary approach employing theory and practice from the fields of design and sociology. Since 2009, one of the key social issues we concern is ageing and in particular 'Ageing in Place (AIP)' was chosen as an overarching concept to guide our exploration. The work was driven by statistics that estimate over 50% of our world population will be over 50 by 2050, a phenomenon that has developing faster than expected.

A concept like 'Ageing-in-place (AIP)' can refer to different meanings and implications in different research fields. In social science subjects, AIP can refer to the situations of how people retire in their own home or communities. In the US, initiatives 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 (Bedney B. J. and Goldberg R, 2009). Usually, NORCs are developed when a number of persons move into a community when they are younger and age in 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. This life-course approach promotes and believes in ageing as 'a unique experience for each individual' with slogans such as 'Live in the presence of all your future selves' (Laslett, 1996). Here the emphasis is placed on physical improvement, attitude change and the creation of new business models. In contrast, within design and engineering practice, AIP is more about modification like home automation or assistant technology to keep people in their own home as long as possible.

In view of this situation, we expect to link design activities with social issues such as ageing in the contemporary social world. Since 2010, a number of design labs were conducted with design schools in three cities under the same theme. Each lab was organised by our team in collaboration with staff members in design schools as well as local older people.

Methodology

We collected empirical data from our Design.Lives Labs to analyse and understand the diverse role of older people. First of all, we organised and conducted 'design labs' as part of a design education programme, which aimed to train young designers to become more socially aware and responsible. We followed the practice of 'action research' based on the principle that people have a universal right to participate in the production of knowledge

that directly affects their lives' (Small, 1995). It can refer to a relationship between the 'researcher' and the 'researched', characterised by joint action, involvement and shared responsibility. For us, action research is a 'learning through doing' process. Through 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. Reflexivity is highly appraised in our workshops and we constantly reflect on our findings through creating ethnography as a way of researching our own practices (Davies, 2008).

At the same time, we introduced a solution-focused approach to our participants. Through participating in our labs, designers experienced ways to holistically understand the problem in spite of the common believe that design practice and designerly ways of researching is more about problem solving. As Koskinen, et al (2012) explained,

'[d]esigners 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...'

We also explore the approach through designing different labs. In order to position our action research in design related to design innovative services, we firstly need to present the underlying tenets of our Design.Lives Labs. We argue that 'designing with people' should be the necessary platform of design participation projects which offers a 'midway' between the traditional mode of the designer-user relationship, i.e. design for people, and the future mode, i.e. design by people. We perceive that design 'with' people links both sides, i.e. linking up the 'for' and 'by' approaches, throughout the whole design process, into a community which allows designers and intended users to experience design practice and develop their own appropriate agendas and approaches.

Moreover, with the influence of inclusive design practice, we intend to work with design-excluded groups, i.e. older or disabled people, as our first encounter. However, according to Rogers, E. M. (1995) & Moore, G.A. (1991), many user researchers for technological development focused on the early adopters who are usually young people and ignore more marginalised groups such as the elderly. Because of this 'lead user concept' (von Hippel, E, 2005), many older people are viewed as '*passive receivers of innovations who are often in need of help to understand new designs*' (Essen A and Östlund B, 2011). In the case of designing an age-friendly world, there are no fixed outcomes or technologies that represent the best means to solve the related problems. In fact it seems better to design with or by people especially those who have the most experience of the issues in hand.

The Cases: 'Ageing in place(s)' projects in three cities

'Ageing in Place(s)' projects aim to challenge conventional thinking about designers as experts and propose an alternative, participatory model of social innovation through which the ingenuity of older people can be revealed in their community. This community-centred approach led us to develop co-creation workshops with students of different design schools in different cities.

'Ageing in Tiu Keng Leng' was a three-week design lab for a vocational training design college in Hong Kong in Jan 2011. A brief was given to students and staff members alike, enabling them to design 'actions' that would engage local communities. Each team worked closely with one local housing estate and was asked to design, build and operate a stall. In

total six stalls were built and together they formed a 'Design Market'. The market acted as a focal point for Chinese New Year celebrations and a place for local people to meet and exchange ideas. The market was particularly significant as the design school was newly built and the market was the first public engagement with the local people.

'Ageing in Kensington' is a weeklong design lab conducted every Nov since 2008 at a postgraduate art & design college in London. Each design team was asked to design and conduct a design event to promote sustainable lifestyles for all. The local area was selected to be the test bed for teams because of its proximity to the college and the highest life expectancy in the UK (82.4 years, 10 years more than many other areas of the city). With its outreach programme for local schools and on-going ageing research, our labs aimed to expand the empathic conversation with specific organisation such as the Age UK.

'Ageing in Tsinghua' was a one-year reflexive ethnographic study funded by the UK's Department of Business, Innovation and Skills (BIS) through their UK-China Fellowship of Excellence. Between December 2010 and November 2011, 1st author of this paper travelled from London to the University campus in Beijing; where a unique community with over 6000 retired academics still live on campus with current students and staff members. Working with design students and researchers, five pop-up design stalls were created throughout the year. The stalls facilitated specific interactions that enabled ingenious older people to value their own living strategies and contribute design ideas of social innovation programmes for the present and future ageing populations.

Interventions: Practicing Solution-focused Methodology

Aged people are designing ageing innovation for themselves. What are the relationships between young designers and older users in order to nurture the ingenuity of ageing and expand the outcomes for others? Overall it is not an easy situation to understand and in conducting our Design.Lives Labs, we have witnessed different answers to this question. As explained, our design research methodology is basically informed by Reason's action research. We understand that the research process does not always emerge in a tidy and linear manner and that the outcomes may be radically unpredictable. Three insights of roles, outcomes and impacts were defined to help designers to understand how design thinking can contribute to the new production of innovative services.

1. Co-production between stakeholders

In the practice of participatory design, designers are part of the service circle and are responsible for infrastructuring (Ehn, 2008). Like our Design.Lives Labs, we worked along with design students with different experiences. The labs are all customised made and aim to inspire participants to think about designers' roles as well as to equip them to work in the era



Figure 1. 2D-3D workshop to challenge students creativity in form building as well as building team spirit

Figure 2. Tea Party for local residents – first time for residents to visit the design school

of co-production with different social groups.

For design students in the 'Ageing in Tiu Keng Leng' project – many of whom are in their late teen - ageing is a very far-away topic. Additionally, none of the students have experience in the user-centred

design process and this project was an introduction involving other people in their design process. Therefore, we designed a three-stage workshop introducing the fundamental methodology of user-centred design and the wider concerns of ageing populations and diversity.

In the first week, we inclined to allow more free space for the students to practice problem-solving methodology in the sense that they just employed their favourable methods to find out their concerns, such as visits, interviews and data mining. At the same time, we conducted short design exercises (Figure 1) giving students chances to present their tentative results and build team spirit.

In the second week, we conducted games with students in order to understand the significance of non-verbal experiences and challenge their habitual ways of knowing. We emphasised people's involvement in design and asked students to invite residents from their assigned housing estates to join a tea party at the design school (Figure 2). As expected, with limited experience in designing 'with' people, those students felt embarrassing and questioned why they need to meet people as designers.

In the third and final week students were responsible for setting up six design stalls to create a Chinese New Year Market to 'sell ideas' to the local residents. Instead of designing objects for sale to celebrate Chinese New Year, students were asked to design means of participation to engage the local community. Our goal was to use the market as a bridge to link the design school with communities from the housing estates in their neighbourhood. Even though not all the students understood our intentions regarding the importance of the empathic experience for design, one of them did express, 'this project is different from other projects because we were not designing for our selves or lecturers but designing for the communities.' This reflects an important premise of our work, as researchers/educators we aim to inspire young design students to act as triggers and design activists and teach them how to negotiate with participants in the context of conflicts.

2. Re-production through design

It is common practice for designers to work towards a final product, leaving little room for modification by others, let alone by users. For example, in the 'Ageing in Tiu Keng Leng' project, with the youngest students, we got one group that revealed a strong inclination to treat their work as a 'monument'. In day two of the market, they just left their created work, a large lantern, as a monument in the middle of their stall without attention. We decided to dismantle, or re-modify, the lantern for them. Cutting down all the ropes hanging the sieves, which were supposed to be the place where residents could place their Chinese year greetings. Twenty minutes after the 'intentional attack', one of the students from the group came back and asked the 'destroyer' for the reasons of the attack. She said the work is 'sacred' and deserved 'respect' from all people.

On further discussion we asked her what if we were residents, whether we would be granted the right to 'modify' or 're-design' the work. She looked speechless. We further asked her about their coded message underlying their work. She revealed that it was a tool for communication and a place for putting and sharing Chinese New Year greetings. She further explained that they would stand by the work and tell any onlookers the way of using their work. A few minutes later, three more students came back and expressed their grievances. It was clear that the design students thought that design is about making 'products' but not 'purposes'. It seemed they designed and built the 'lantern' and expected residents would use it to communicate. More important for them was that the product needed to be aesthetically sound and acceptable. It also proved that designers in general would treasure their work

and gave no room for manoeuvre for any potential users. Users could participate in ‘using’ and ‘expressing their feedbacks’, but not in any process of design.

Designing tools for people to re-produce new experiences might be easier for postgraduate design students who have at least 5 years experience in designing. In the case of ‘Ageing in Kensington’, one group was asked to focus on playing and ageing. An interdisciplinary team with students from communication, engineering, fine art and product design spent a lot of times debating about collective concepts of ageing and playing and tried to achieve some sort of consensus. It was the third day of a weeklong design lab and they were still unsure what they needed to do. In a tutorial session, one of the authors asked them to forget other factors and express their own ideas about playing as the starting point. Then keywords from each idea were written down on a large piece of paper and grouped by theme. Three groups of ideas were identified and group members were told to choose one keyword as their ‘moment’. Thus, everyone needed to attach to this ‘moment’ and work around it.

Finally, they picked out the word ‘smile’ and went out to collect images of people’s smiles. In light of the fact that the brief was to design and conduct a design event to promote a more sustainable lifestyle for all, the group created the ‘Kensington Smiles’ campaign. The campaign featured photographs, conversations with people about happiness further inspired them to curate pop-up exhibitions at bus stops and pass ways, continuing the dialogue. (Figure 3). Their video was entitled *‘I play therefore I am’* to capture their design activism project, promoting the concept of ageing as a culture rather than a problem in our society. In our view, empathy grounded on inter-subjectivity helps us understand the user experience.



Fig 3. Ageing in Kensington _ smiles and pop-up exhibitions

3. Communal production for all

Understanding self-experience, however, is not easy, because it requires actors to perform reflective efforts to transcend their immediate experience. This is why we decided to organise workshops to see how collective design is made possible. We conducted a study of the unique community of retired academics at a university in Beijing. With people-driven, ageing-innovation happening, our main questions were about the ingenuity of this group of retired academics, we asked: what resources have they got? 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?

There are 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 out-dated standards of accessibility and there are growing pressures on the authority to better manage the physical wellbeing of over 6,000 retirees.

With limited experience and short-term planning, more problems are arising for the community. As part of the study, we met with over a dozen retirees through local networks and they all proved themselves to be ingenious older people in that they improved their quality of life through their own ways with limited resources.

Instead of collecting empirical data only through conventional interviews or questionnaires, we developed relationships to co-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 like an interview with open questions, but the aim was to get the 'interviewee' to take over the conversation. This is the creative dialogue. This group of ingenious older people grew up together as classmates, colleagues and neighbours. They also went through the political transformation of China and learned to live as a collective. Communal sharing is sometimes more important than personal interests. After creative dialogues, we came up with the idea that they had a very strong communal identity and titled themselves as 'Tsinghuaian' - the people of the university. We determined to employ this identity as the target of design.

Five pop-up design stores (Figure 4) 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, we referred to traditional customs and developed these into specific topics to engage the target group:

- » **START** for the Spring Festival, January, Chinese New Year is the most important festival in China.
- » **LEGACY** for the Qingming Festival, April, the festival to commemorate the dead.
- » **CHANGES** for the Dragon Boat Festival, June, a traditional festival for dragon boat racing and eating rice-dumplings
- » **TOGETHER** for the Mid-Autumn Festival, September, a traditional festival for people to get together with their families, appreciating the full moon and eating mooncakes
- » **RESPECT** for the Chong Yang Festival, October, celebration for the ninth day of the ninth lunar month and was named the Elderly Festival, underscoring one custom as it is observed in China, where the festival is also an opportunity to care for and appreciate the elderly.

Secondly, the interventions were deliberately tentative and always easily modified. Thus, design is a process through which solutions are continuously proposed, tested and evaluated. We are not working to 'design in one go'. 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, a pop-up tent within the community was set up to present ten ageing innovation ideas back to the group which had been collected by the authors from past events and creative dialogues:

- » **Elders restaurant** to maintain their health,
- » **Greener burial method:** some retirees had mentioned the idea of tree burial on Tsinghua Campus to the authority but this idea was rejected.



Fig.4 Design festivals – a new method to engage people

- » **Local travel group:** the Elderly Centre on campus 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.
- » **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.
- » **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.
- » **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.
- » **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 the experience to care for them.
- » **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.
- » **New ways to engage young people:** as teachers, they would like to find new ways to engage current students,
- » **Tomb and funeral service:** retirees worry about their legacy and would like to address the context of their funeral services so that this does not bother others.

All these innovative services were suggested by the aged people in the creative dialogues and pop-up design stalls, it was clear they were keen to translate these radical ideas into some services to benefit everyone. Some innovations were selected to be shown at the exhibition area in order to encourage more innovative ideas from the community. Leading from this extra ideas were suggested: a good quality care home on 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 their society. They also commented that helping themselves use fewer resources is already a way of contributing by reducing the pressure of an aged population on the government. We believe unlocking the ingenuity of ageing can develop services that benefit everyone now and for the future.

Conclusion

This is an attempt to incorporate a solution-focused methodology into design research and practice through three recent Design.Lives Labs and we have the following conclusive remarks:

Young design students have too much stereotyping about the nature of design and ultimately such kind of mental maps would hinder their orientation towards the needs and expectations of the targeted users: as shown in the Hong Kong case where design students took their design works as monuments.

In the London case, students were encouraged to be more empathetic and thus obtain more understanding of the targeted users. Through this process they understood more about the nature of the issues in hand, especially their 'natural attitude' about the users. However, their personal mind maps prevail and it was challenging to bring them to a design plan at a communal level.

In the Beijing case, we started with a lot of personal interviews and creative dialogues, without the expectation of design plans. We just explored what their communal concerns might be. Through a glimpse at the residents' communal identity and common orientation in respect of ageing, we conducted design labs, which were totally about designing for the members of their campus. We repeatedly stressed their original design that had been crystallised in their personal daily lives. We also stressed their imaginative power used in thinking about their utopian orientation, about what their community within the university campus should be.

We argued that, as Cross suggested, the nature of design practice is necessarily determined by its target, i.e. the wicked problems and by the ability it needs, i.e. design ability. It has been pointed out by Cross that '*design ability is therefore founded on the resolution of ill-defined problems* by adopting a solution-focussing strategy and productive or oppositional styles of thinking' (2006, 19). By using oppositional styles of thinking, we understand that no one can claim any prestigious position to judge what the best practice is. In light of this understanding, we suggest the opening up of the design practice community in which both designers and potential users are engaged; markedly different from the traditional one where designers remain the key person in the whole design process. We also see the contribution of co-production and co-design by which the knowledge and practice of all parties would contribute to the design processes of innovative services for our future.

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