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What if...users do not know how to be inclusive through design

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Abstract

Inclusive Design is a response to design exclusion and aims to create design that is mainstream in nature, which can benefit the majority. Over the years, working with people who are commonly excluded by design has proved to be an effective way of developing inclusively designed products, services, environments and communications for other groups in the population. One educational mechanism that has achieved this is called the Inclusive Design Challenge. This knowledge transfer mechanism was started in 2000 by Cassim in the United Kingdom as an open competition for professional designers who were members of the Design Business Association (DBA). She has introduced this methodology to other countries such as Japan, Israel, Singapore, and the Scandinavian region and has developed it as a design and inclusion training workshop for companies and educational institutions.

This paper looks at the 48 Hour Inclusive Design Challenge that took place in Hong Kong in August 2008 and involved participating designers from Hong Kong, Mainland China and East and Southeast Asia. Besides identifying different design practices and their relationship with social development, the focus of this paper is the introduction of 'creative engaging tactics' (exclusion, segregation, integration and inclusion) that were developed to inspire 'users' who are 'design excluded' to understand the importance of design as a subject and enable them to be effective 'design partners' who can work with designers and thereby be included in the design process. Reflections are made and suggestions are discussed.

Keywords

Design, Inclusive Design, Disability, Design Exclusion and Social Inclusion

Why is it necessary to develop active design partners?

In inclusive design practice, a key method is to 'work with users' and especially those who are excluded by design. Heading this category are 'extreme users' i.e. people with

severe disabilities who are invited to participate in 'critical user' forums where they can meet and inspire designers. The term 'critical user' was coined to describe the 'extreme users' who participate in the Design Business Association (DBA) Inclusive Design Challenge, an annual inclusive design competition organised by the Royal College of Art Helen Hamlyn Centre and the DBA (Cassim, 2007) since 2000. People with different disabilities are invited to participate in project-specific critical user forums, to brainstorm with the participating design teams and to evaluate the resulting solutions. They are among others users ('typical users' and 'boundary users') who are asked to respond to design projects set up by designers. The five-month-long competition has been successfully developed into different intensive versions based on the Challenge template (Cassim, 2007). Over time, the role of the 'extreme user' has gradually evolved from that of design advisors or evaluators to active design partners.

The significance of active design partners

First of all, it has been important to look at the general development of design and social inclusion. Historically, design has been practiced as an egocentric process with designers looking within themselves for answers to address the problem (Moggridge, 2001). Each designer tackles a design brief using their own aesthetic values and their own likes and dislikes. This can often lead to design exclusion (Myerson, 2001), where the intended user cannot use the end product and therefore rejects the design.

Before the introduction of the term inclusive design, the social dimensions of design were promoted by such pioneers as Papanek, (1971), Tzonis and Lefaivre, (1972) and more recently by design advocates/activists of social design (Mau, 2004 and Thackara, 2005). Like Mau's provoking statement, *"It's not about the world of design. It's about the design of the world"* (Mau et al, 2004). In other words, 'design' is becoming a type of social activity, which relates to the development of societies. Starting from Goldsmith's *Designing for the disabled* (1984) from the 1970s, among all these social issues, the study of design and disability is an important subject. Disabled at the age of 23 after an accident on a holiday trip to Italy, Goldsmith gradually became an expert on disability and its relation to design especially in the built environment. His books are powerful because they were developed from the first-hand experience of a disabled architect. However, the purpose of his book is to persuade architects to consider the 'needs' of disabled people while they are designing. In the preamble, it is clear that his book is based on a pity-based attitude where the professions are asked to 'help' disabled people: *'...[P]eople who are disabled are people who need help from architects, help in the planning of the houses they live in and the design and organisation of the buildings they use for work, education, recreation...They need to be able to get the most out of life and they need architects to help them'* (Goldsmith, 1984). Goldsmith's work is more a model of integration since it emphasises the needs of disabled people but still remains in a professional/expert mode stressing the benefits to a disabled person of being integrated (Oliver, 1996). However, his practice aims definitely towards inclusion since its purpose is to change our built environment and stresses the outcomes and the dream of the creation of perfect spaces for all.

A recent advocate who has brought the worlds of design and disability together is Graham Pullin with his new book, *Design Meets Disability* (2009). However, Pullin aims to influence the design professions in a different way than Goldsmith. In his paper, 'when

fashion meets discretion' (2007), he points out the power of design and its relationship to culture and its ability to change perspectives of difficult social issues such as disability and discrimination. By analysing the successful example of how spectacles were transformed from an assistive medical product to a fashion accessory, Pullin challenges the notion of discretion (2007) and encourages more confident and accomplished design to support positive images of disability.

Making assistive devices more attractive or even making statements by design can doubtless, minimise the stigma of disability. These design actions acknowledge the shift in perspective from a 'medical' to a 'social' model of disability. They are strong reflections from the design professions. However, the voices of disabled people are not directly heard. With the rare exception of disabled design professionals and those active as access auditors or advisors, people with impairments are rarely involved in design processes. Pullin raised two important issues here: firstly it is the power of design to change social perspectives on critical issues, to change from the expert-dominated medical model to social model. The result in this regard seems to be remarkable. Secondly, how to create the context in which people with different needs, lifestyles and expectations can express their views and voices and be seen and heard? Our answer is: through bringing in active design partners!

Three foci in working with active design partners

Three foci should be highlighted in inclusive design projects. Firstly, learning from the social model, inclusive design is not another attempt to deal with the experience of impairment but a way to figure out 'a pragmatic attempt to identify and address issues that can be changed through collective action rather than medical or other professional treatment'. (Oliver, 1996:38) While design remains a professional activity, design practitioners should remind themselves of the trap of being a dominating expert in the partnership with active design partners. In such a case it cannot be likened to an exchange of equals. The partnership between designers and active design partners is understood as a form of collective action, aiming at empowerment through social inclusion and the enhancement of quality of life.

Secondly, as Pullin puts it, it is important to recognise the relationship between design and culture. Given that we are entering the post-traditional context, we should take life-politics seriously into account. Giddens has made a clear distinction between emancipatory politics and life politics. While the former refers to 'a generic outlook concerned above all with liberating individuals and groups from constraints which adversely affect their life chances', life politics refers to 'a politics of choices...Life politics concerns political issues which flow from processes of self-actualisation in post-traditional contexts, where globalising influences intrude deeply into the reflexive project of the self, and conversely where processes of self-realisation influence global strategies' (Giddens, 1991:210-213). One of the concerns in life-politics is the reflexive appropriation of bodily processes and development, and especially in post-traditional contexts the body itself becomes more immediately relevant to the identity the individual promotes. This aspect of life politics is certainly profoundly related to the daily life of people with disabilities.

Thirdly, regarding the methodology employed in inclusive design, we have sensed the incompleteness of either the medical and social models. As Simmon *et al.* argued,

'by privileging specific discourses in relation to disability research, knowledge relating to inability has been foregrounded whilst notions of personhood and individual identity have often been lost' (2008:734). In order to reveal the personhood and individual identity in the process of design, it is necessary to use an alternative approach to reduce the biases of the designers against the manifestation of the self-realization of the active design partners. On the other hand, it is also necessary to identify the social processes that would structure the attitudes and beliefs of active design partners. We attempt here to incorporate reflexive ethnography to enrich our understanding and practices of the inclusive design projects (Schelly, 2008). Generally speaking, we focus on how the active design partners articulate their self-identity, which would be revealed in their needs for new forms of design and the factors that would hinder or be conducive to the self-actualization process of the active design partners.

Transformative creative tactics for those who are design excluded

Certainly the emphasis of the Inclusive Design Challenge especially the intensive version lasting one to three days is when designers and 'extreme users' work in partnership to develop proposals for future concepts of design. However, when this partnership model is brought to other social situations, the equality between partners (designers and extreme users) has been challenged.

For many people, 'design' is an activity that does not relate to their everyday lives and only belongs to designers. However, this assumption is gradually changing and 'design' is becoming a type of social activity, which relates to the development of societies. Therefore, the developments of 'design' have different paces and paths that respond to different cultures and societies. This can be proved when the concept of inclusive design was brought from the UK to Hong Kong and the China region by running an Inclusive Design Challenge for Chinese and East and South Asian designers in August 2008. During the preparation process, the authors found that the definition of design is different from the UK. For example, 'design' in Hong Kong or the China Region is mainly related to commercial implications and the social value of it is not yet recognised as the most important element either by the practicing design community or the government agenda (www.hkdesigncentre.org/en/about/design.asp).

While recruiting 'design partners', it was clear that the perspective of disability is even more varied between the UK and Chinese cultures especially within the disabled community. Even meeting the disabled activists who are at the forefront of the fight for disability rights, design was generally perceived as being related to 'services to disabled people' in the form of assistive technology or adapted objects that aimed to 'help' disabled people to be integrated or just not to be segregated. 'Inclusion' is not achieved yet and 'design' is something out of their realm. Therefore, a series of activities were conducted between two of the authors of this paper (Lee - a design researcher from the UK and Ho a local sociologist) before the Challenge event happened. The main goal of these activities was to explore collectively how the UK experience could be transferred to a local context; to learn from the UK experience: understand the intention of social

inclusion and what design can offer. The next section documents the post-rationalisation of the four stages or tactics of these activities that were conducted to engage disabled people to think about inclusion as well as design.

Tactic 1: Design Exclusion

If there is no exclusion, we do not need to think about inclusion. Therefore, understanding exclusion is the first step to achieve inclusion. We made friends with people with disabilities through introductions from local disability organisations. One of the 'users' was invited to share ideas with a class of social work students (fig.1). The responses of sorrow from the young students showed that there is lack of general understanding of disability in the Hong Kong society. At the same time, the design researchers introduced the idea of design and its application to disability to the local 'extreme users'. Provoking topics such as love and the sex lives of disabled people emerged and were discussed and proved to be the foundation on which to build a trusting relationship.



Figure 1: Disabled people was invited to 'teach' at a class

Tactic 2: Design Segregation

When the relationships were being set up, some 'special design services' were delivered which actually brought into prominence the situation of disabled people to others by design. We called this the 'positive segregation', i.e. using design to make them feel proud of themselves. One of the activities was to design a special logo to represent Mucopolysaccharide Diseases (MPS) patients. The logo was inspired from interactions with two brothers who both have been diagnosed with the No.2 model of MPS. This became part of their signatures, as they now put 'MPSII' under their names. This was the special 'services to disabled people' but aimed to enable them to get out from a segregated setting.

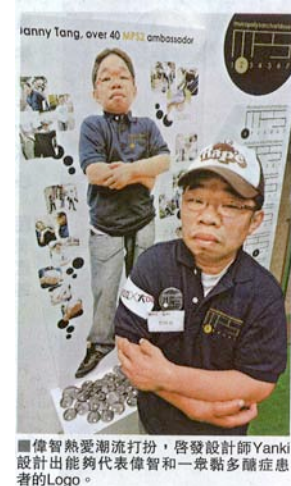


Figure 2: MPS logo inspired by interactions with patients, by Yanki Lee

Tactic 3: Design Integration

After all the informal interactions with different people with disabilities in Hong Kong, a collaboration with a local magazine was set up to conduct a media-version of the Inclusive Design Challenge. Instead of an actual interactive event with a public audience as was the case for the 48 Hour Inclusive Design Challenge; four stories were reported from the perspectives of the design researcher and sociologist with editorial input from the magazine reporter. All were based on interactions between an invited designer and a selected disabled person (Fig.3):

1. A graphic designer was paired with a visually impaired university student.
2. A design engineer was paired with a young wheelchair user.

3. A fashion designer was paired with two brothers who are living with MPSII.
4. A photographer was paired with a person with dementia and her carer.



Figure 3: Collaboration with Ming Pao Weekly, Hong Kong popular culture magazine

All were dialogues of integration, where the stress was placed on process. Even though they were interesting experiences for the designers, the greater influence was actually on the perception of the disabled participants who saw this as part of a process of social integration. This contrasts with the different perceptions of the Challenge process by the disabled design partners who have participated in either the DBA Design Challenges or challenges of shorter duration in the UK and Scandinavia. All live independently and are active socially and on the work front. Participation is seen less as an exercise in social integration and more as a co-design process where the disabled participants are no longer subjects or ergonomic evaluators of existing designs as per their usual role but active partners in a relationship based on creative equality.

As noted by Jenni-Juulia Wallinheimo, a textile designer and lead user of the Finnish Team who participated in the 24 Hour Inclusive Design Challenge held as part of the European Business Conference in Oslo in 2008: *"It has been a great empowering experience for me because in most cases when people are designing products for me they are not interested in my knowledge, they only want information based on my weak bones not based on what interests me."*

Tactic 4: Design Inclusion

After identifying and 'training' all the 'design partners' to participate in the Challenge Event, another workshop for volunteers was organised with design students and young disabled people - two groups of young people in Hong Kong society that are unlikely in the normal course of events to work together. Therefore, the workshop was set up to get them to work together to 're-investigate' their city and identify some new insights through the experience of their partner's disabilities. They were also introduced to the concept of inclusive design and the social implications of design in general. The intention was to equip them contextually to understand and assist the process of design inclusion during the Challenge event particularly since it involved participants from different cultures.

Design Partnership and Legacy of Design

Finally, the Inclusive Design Challenge was successfully held in Hong Kong. Both teams who won the awards for best idea and best presentation worked with 'design partners' who had experience of the 'creative engaging tactics' described previously. From their experience, it proved that the practice of 'design partnerships' between designers and disabled people using design processes could be used as a stimulative tool to arouse an awareness of civic education and the practice of social inclusion. The equal dialogues can also extend the impact of Inclusive Design Challenge events and leave a legacy of design practice for social development. Throughout the two versions of Inclusive Design Challenge (the media version and the real interactive challenge event), we identified two major obstacles in the realisation of life politics. One obstacle comes from the daily world of the design partners whereas the other came from the group as a whole.

In an interview with the design partner who is a wheelchair user, the dialogue was filled with his imagining a new social model. He has been a social activist on an individual basis for a long period but came to think in more collective terms. He was working with a mixed team of designers from Asia and New Zealand with the lead designer from the UK. Together, they designed a new circular game that anyone can approach and use. Low-tech and hardwearing, it can be installed in any public park. When he was asked to reflect on this winning design idea his team had proposed in the challenge (Fig.4), he kept saying that the game was designed for all consumers of the park and good for both people with or without disabilities. The interviewer asked him



Figure 4: Fruitball: interactive game for all in the park (Best presentation at the 48hr Inclusive Design Challenge in Hong Kong Aug 2008)

several times if he considered anything for his personal interest and he expressed that he is not used to think about himself. Thus, the interviewer suggested that he might suppress his own interests and expectations and he admitted that it might be the case that he seldom thought of his own needs.

It is a different case with the MPS brothers who have participated in three different design situations. For the 48hr Inclusive Design Challenge, this pair of brothers were working with a group of designers from Hong Kong and Southern China and the design ideas was a chopstick mouse, (Fig.5), which was inspired by the sight of one of the brothers serving team members at lunch. The majority of the participants in the Inclusive Design Challenge Event endorsed it and it was winner of the best idea prize. However, honestly speaking, the product of the digital chopstick is more like a product informed by universal design rather than inclusive design as the mood hanging over the design group



Figure 5: MPowerStyx: Chopstick mouse at the 48hr Inclusive Design Challenge in Hong Kong Aug 2008

was to find a product that would be usable for both MPS patients and those without disabilities. Before that, one of the authors of this paper had worked with the MPS brothers and finally produced the personal image they endorsed (mentioned previously in Tactic 2). Comparing these two design ideas inspired by the two brothers with MPS, we would argue that the former one was designed to reflect personal 'taste'. It is the image of the patient's creation and what he really expects to construct in his daily life. In the process of preparing the magazine version before the 48 Hr Inclusive Design Challenge, the invited fashion designer raised the possibility of designing a hat for the MPS brother. However, it appeared that both the designer and the organisers (including Ho and the editor of the magazine) were reluctant to adopt it, as it

seemed to be too personal. As a result, the fashion designer accepted the idea of using cloth to design an urban survival kit. Clearly, most of the participants in the Challenge were likely to be influenced by the discourses of emancipatory politics rather than life politics. This is not to argue that we should force the idea of life politics onto all the parties involved but should be sensitive to the manifestation of the request for more space for the active design partner to mould their self-identity.

Conclusion and Discussion

The process of creation and design should be understood as a process of conscious and unconscious deliberation between the designers and the active design partners. As Bourdieu (1984) has pointed out, the existence of *habitus* would provide spontaneity without consciousness or will to inform our choices and practices in constructing our daily life. Both designers and active design partners would embrace some burgeoning

ideas arising from our desire to actualise our selves, which would be fragile and vulnerable in face of the domination of experts and professions. In our experience, the active design partners have shown their anticipation of more freedom and self-actualization, and emancipatory politics is not enough to foster this pursuit. Of course, we understand that as shown in the case of the wheelchair user, emancipatory politics is a primary tactic, as the primary *habitus* would to a certain extent suppress any consideration of individual interest. The Inclusive Design Challenge thus aims at both levels of practices trying to realizing both emancipatory and life politics for all participants – for the designers in creative terms and for the disabled design partners on several levels depending upon the cultural context in which the Challenge takes place.

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Information on the 48-Hour Inclusive Design Challenge in Hong Kong

www.britishcouncil.org.hk/48hour/index.html

www.hkdesigncentre.org/en/about/design.asp

Information on the European Business Conference 24 Hour Inclusive Design Challenge

http://www.hhc.rca.ac.uk/1489/all/1/24_hour_challenge%2C_Oslo_2008.aspx

Information on other Challenges

http://www.hhc.rca.ac.uk/405/all/1/challenge_workshops.aspx

Interview with Willy Lo, one of the design partners for the 48-Hour Inclusive Design Challenge in Hong Kong, on 16th Feb 2009.