



The Quality of Design Participation: *Intersubjectivity in Design Practice*

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As a team composed of a design researcher and a sociologist, we initiated the Design.Lives Lab, to examine how user involvement actually works and what elements of the design process would bring forth positive and negative impacts on both design practice and user engagement. In this paper we argue that it is methodologically necessary to practice design participation because of the specific nature of design, which is characterised by “wicked problems” and the necessity of employing abductive logic. After reflecting on our findings from the labs for Hong Kong youngsters, we also suggest the concept of intersubjectivity, which is a threefold model of I-It, It-Thou and I-Thou. The I-It relation can be used as an indicator of the existence of an instrumental relationship and the deterioration of the quality of human interaction, whereas the It-Thou relation is an indicator of the formation of an empathic act, which would certainly help open communicative space. The I-Thou relationship engages each member in an entity as a whole and helps accomplish equal dialogues. We propose this threefold typology of intersubjectivity as a conceptual guide for designers to know how to build up communicative space in which equal dialogues are possible and can extend the impact of design participation on social development.

Keywords – Design, User Participation, Intersubjectivity, Design Exclusion and Social Inclusion.

Relevance to Design Practice – This paper is the result of an attempt to argue for the importance of practicing design participation, and proposes an alternative perspective to design with user involvement in terms of a threefold typology of intersubjectivity. This is the outcome of a reflection on the question of how design mentality enables social inclusion.

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Introduction

The objective of this paper is to present the results of the application of the concept of intersubjectivity to the process of design participation. We believe that design participation is not a political stance but a 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, Lee, & Cassim, 2009). Moreover, as suggested by action research advocates like Reason (2004), participation requires the formation of communicative space. This raises the question of what circumstances render open communicative space possible.

We focused on how to integrate the knowledge of users into the whole design process. As informed by Cross's (2006) analysis of the nature of design practice, we concede that the design process must be characterised by the components of (a) “design with” and (b) co-design throughout the whole design process, as well as (c) solution-focused strategies and abductive logic, and (d) the opening up of communicative space. In light of this conceptual formulation, we organised our training labs in a specific format. With a specific operational arrangement, our input focuses on the application of the concepts of empathy/intersubjectivity and re-description. In the following sections, we argue first for the methodological necessity of forming a communicative space for design practice, and secondly we illustrate the promising aspect of the concept of intersubjectivity. We draw on our findings from

the Design.Lives Labs, our training labs, to examine our design of the training process and the concept of intersubjectivity. We expand the concept of intersubjectivity from a twofold model of I-It and It-Thou relations into a threefold typology with a new dimension termed “I-Thou”. The I-It relation can be used as an indicator of the existence of an instrumental relationship and a subsequent deterioration of the quality of human interaction, whereas the It-Thou relation is an indicator of the formation of an empathic act, which would certainly help open communicative space. The I-Thou relation would engage each of the members in an entity as a whole and accomplish equal dialogues. We propose this threefold typology of intersubjectivity as a conceptual guide for designers so that they can construct communicative spaces in which equal dialogues are possible and can, as a result, extend the impact of design participation on social development.

The Design.Lives Labs were organised by our team, which is composed of a design researcher and a sociologist. In 2009 we were invited by a design education organisation to conduct

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a three-day workshop for 120 teenagers in Hong Kong as part of their design introduction summer programme. The penultimate section of this study is on the outcomes of our reflection gained through the skill of re-description, which led us to refine the concept of intersubjectivity into a threefold typology.

Design is an Emergent Social Process

In order to map our position regarding design research, we begin by presenting the underlying tenets of our Design.Lives Labs in relation to the opening up of the inclusive design process to users. We argue that “designing with people” should be the necessary platform of design participation projects because this concept 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 perceived that design “with” people links both sides, i.e. it links 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, because of the specific nature of design, the use of solution-focused and abductive logic are appropriate, which necessitates the opening up of communicative space. Hence, our proposal of “designing with” is a practice research project looking at and for a better arrangement in order to encourage designers and design researchers to reposition themselves on an equal footing in their relationship with “users”. The outcry for more participation in design clearly is not born from any political motivation, but rather for methodological reasons (van Aalst, 2009). In our view, opening up the community of design practice requires two components: the first is an institutional one in the sense that the design community must have a democratic arrangement, and the other is opening up designers’ attitudes. Our major concern is the second component of opening up designers’ attitudes. We propose using the concepts of “intersubjectivity” and re-description for attitude change. To sum up, we have six elements in the design of our labs for learning inclusive design and design participation: (a) “design with”; (b) co-design throughout the whole design process; (c) solution-focused strategies and abductive logic; (d) opening up communicative space; (e) empathy/intersubjectivity; and (f) re-description. All these elements guided us to design our Design.Lives Lab 2009, which took place in Hong Kong.

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Yanki Lee, a Royal College of Art (RCA) Graduate in Architecture, joined the Helen Hamlyn Centre for Design (HHCD) at the RCA in 2000 as a Research Associate. Since 2005, Yanki has worked as a research fellow at the HHCD and has served as co-investigator of the UK’s research council funded i-design 3 project (2006-2010) to develop www.designingwithpeople.org, an online platform to encourage people-centred design practice. She has also served as co-investigator of the Public Engagement Project: ‘Design Our Tomorrow (DOT)’, the aim of which is to introduce inclusive design methodology to the UK secondary school Design & Technology curriculum. She was awarded the 2011 UK’s BIS UK - China Fellowship of Excellence and spent one year in Beijing to investigate the retired academic community. Since 2011, she was appointed as visiting scholar at the Hong Kong Design Institute, China.

(A) “Design with” in the Place of “Design by” and “Design for”

We categorise various types of design practice into a threefold typology of design participation, as follows:

1. Design for People: Designers control the whole process while people are treated as passive subjects.
2. Design with People: Designers share the process with people who act as active design participants.
3. Design by People: Designers enable people to control the process, and people eventually become collaborators and creative designers.

Jane Fulton Suri (2005) from IDEO presented the model of “for>with>by” as a new democratic design development that encourages designing “with” people and even “by” people. In this process model, the intriguing bridging element, “with”, needs more attention. Banham’s (1972) assertion that the only real means of participating in design is to “do it yourself” constitutes a more extreme version of the role of participants, providing users with total autonomy to invent their rules and relegating designers to a passive role. We do not take this position, as it creates a kind of power disparity skewed towards users. On the other hand, the idea of “design for” places participants into the passive role, serving only as informants for the designers and researchers and granting them little power to direct relevant activities. Even in recent developments, as shown in Peter Dalsgaard’s work designing for participation in public knowledge institutions (Dalsgaard, Dindler, & Eriksson, 2008; Dalsgaard, 2008) and Battarbee’s co-experience, most theories mainly fall in line with the conventional “design for”. We notice that Battarbee’s co-experience has somewhat modified the “design-for” version (Battarbee, 2003; Battarbee & Koskinen, 2005), but we regard it as a process which is to “design-for” and then “design-by” in the sense that designers decide the end-products first and leave the products to the users, to see how users co-experience the product in a creative way (Battarbee, 2004). User involvement only happens at the final stage of application or consumption of the products (Lucero, Aliakseyeu, Overbeeke, & Martens, 2009), not right at the heart of the design process. This leads to the question of what is the right moment at which people should participate in the design process, and how does design research determine the role assigned to the participants.

(B) Co-design throughout the Whole Design Process

Users, or people, as we prefer to call them, should participate from the very beginning to the end stage of the design process. In other words, they are involved in problem-identification, decision-making, solution-formulation, etc.. Recently, the role of people in the process of design has been re-shaped as being tantamount to that of professional practitioners, termed as “extreme users”, “active design partners”, “experts of their experiences” or “co-designers” who play a crucial role in knowledge development, idea-generation and concept development (Sanders & Stappers,

2008; Sleeswijk Visser, Stappers, van der Lugt, & Sanders, 2005). As a source of knowledge, they are often conducive to the outcomes of design practice and research (Sanders & Stappers, 2008). Design researchers go even further, focussing on the significance of co-reflection in looking for opportunities “to get a deeper understanding of the context, motivational aspects, associate behaviours and desired functionalities but still giving them room to go beyond” (Tomico, Frens, & Overbeeke, 2009, p. 2698). All these efforts bring collaboration into force. In our view, the need for these kinds of “total” collaboration throughout the whole process of design is related to the ongoing cyclical and emergent nature of the design process.

(C) Solution-focused Strategies and Abductive Logic

We should pay closer attention to the emergent nature of design practice. Cross (2006) has identified “wicked problems” as one of the major components of design. Because of this, he suggests the use of solution-focused strategies, which are 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, pp. 18-19). Design research and designing itself, similar to the practice of solution-focused tactics as informed by the action-research method, must be regarded as a process and should be driven by the efforts of researchers and participants to put forward “solutions”, to try them out, to track their effects, and to evaluate them (Elden & Chisholm, 1993). Underlying solution-focused strategies is abductive logic, in the sense that while “...induction shows that something actually is operative[,] abduction merely suggests that something may be.... It is therefore the logic of conjecture” (Cross, 2006, p. 19). In light of this view, we maintain that design does not follow the procedure according to which we start with propositional logic or scientific hypotheses and then employ scientific methods to identify the “real” nature of the problem, and finally put forward designers’ solutions: conversely, we start with a view put forward by Cross, which emphasises “the role of the conjectured solution as a way of gaining understanding of the design problem, and the need, therefore, to generate a variety of solutions precisely as a means of problem-analysis” (Cross, 2006, p. 17). Certainly, design process in the form of solution-focused ways of knowing could be regarded as a kind of travelling experience towards an unknown domain. To us, it is also a kind of learning experience.

This echoes Dewey’s (1966) idea of education and experience that true education can only happen in empirical situations which reflect the real world. That is why we stress hands-on experience. Once we talk about the real world, we know that we are dealing with a real social situation which exists not only for designers but also for ordinary people, potential users, etc. Once we inquire into the problem on our hands, we, together with potential users and even the public, constitute a community. By conceptualising a context in which designers encounter potential

users as “a community of inquiry”, we encounter the issue of what the nature of this community should be. In the traditional scientific domain, scholars and researchers play a dominant role in designing and monitoring the process of research. The community of inquiry in design is completely different. Since abductive logic is used to search for “something that may be”, we need to open up the communicative space in the community.

(D) Opening Up Communicative Space

The term “opening up” can be interpreted in two senses: firstly, it implies a more “open” attitude in performing conjecture; secondly, it implies a more democratic and “participatory in nature” arrangement among the members of the community of inquiry, i.e. both designers and the public (or the potential users, in the narrower sense). Such an understanding of opening up aligns with Reason’s tenet (2004) of action research, in which the major concern is not the accurate representation of the external world but whether our knowing, our belief, can provide reliable guidelines to get what we want. Generally speaking, this is a perspective against metaphysics and against the correspondence of truth:

We cannot regard truth as a goal of inquiry. The purpose of inquiry is to achieve agreement among human beings about what to do, to bring consensus on the end to be achieved and the means to be used to achieve those ends. Inquiry that does not achieve co-ordination of behaviour is not inquiry but simply wordplay. (Rorty, 1999, p. xxv)

Given that our understanding of the purpose of research is to improve our quality of life, the aspiration of action research is somewhat consistent with our reason for adopting participatory design. Both are intended to help achieve agreement among members of a community (whatever that community is), and to arrive at consensus on both the ends and the means of human activities. In order to achieve consensus, the opening up of communicative space is necessary:

[T]o keep the conversation going is a sufficient aim of philosophy, to see wisdom as consisting in the ability to sustain a conversation, is seeing human beings as generators of new descriptions rather than beings one hopes to be able to describe accurately. (Rorty, 1979, p. 378)

(E) Empathy/Intersubjectivity

Given that the design process is an emergent process, we must prepare ourselves to open up our communicative space. As has been argued, such an opening up has two aspects. The first is a more democratic arrangement in the social realm of design, which is similar to Wegerif’s (2007) notion of opening up and maintaining a “dialogic space” for the co-construction of new understanding. The second is opening up our attitude in performing conjecture. It is this second sense which draws our attention. In the literature of collaborative learning, the concept of intersubjectivity has been highlighted as a critical concept for designing tools to facilitate collaborative learning. However, this

concept is based on a Cartesian model of the individual who has an inner consciousness and an a priori cognitive faculty for thinking and reflection. In this view, human agency and the individual's contribution are stressed. Intersubjectivity then refers to a situation in which at least two agencies join together to work something out through joint activities (Matusov, 1996, 2001). As Rommetveit (1992) argued, intersubjectivity could be achieved by reciprocal perspective setting and perspective taking. Pifarre and Staarman (2011) also contended that in collaborative activities, "it thus seems crucial that the social interaction is focused on the ideas of the participants and that the participants are not only willing to share these ideas, but do so in a respectful and open-minded manner" (p. 3). Informed by this understanding, intersubjectivity is a state of being which participants anticipate reaching; before that, each individual can be seen as a self-contained mind with feelings, emotions, knowledge and orientations. However, we follow Husserl (1989), who developed the concept of empathy by seeing it as constitutive of the other and as the condition of possible knowledge of an existing outer world. Finlay (2005) summarises that "empathy can be understood as feeling with the Other—a reciprocal process where one seeks to find ways to allow the Other to present him- or himself to and through one" (p. 289). Finlay further suggests that there are three interrelated layers of an intersubjective process to achieve empathy: connecting-of, acting-into, and merging-with. Hence we make use of practicing empathy in participatory design as the way of advancing the individual's knowledge and experience through a reciprocal reflection between a person and the "other".

(F) Re-description

Informed by the action research methodology, we attempt to use one of the skills of using language proposed by Reason (2003), namely re-description, which refers to "a talent for speaking differently, rather than for arguing well" as 'the chief instrument for cultural change' (Rorty, 1989, p. 7). Re-description is also strengthened by imagination. Rorty (1999) suggested that we "should stop worrying about whether what one believes is well grounded and start worrying about whether one has been imaginative enough to think up interesting alternatives to one's present beliefs" (p. 34). This concept helps to leave the concern with the validity of our findings and start "thinking up interesting alternatives" to our analysis. We found this concept useful in developing the twofold typology of intersubjectivity into a threefold one. In the next section, we will illustrate our lessons in drawing on the insights from re-description to revise the phenomenological formulation of intersubjectivity to figure out a threefold model of designer-user relations.

Design through Intersubjectivity

We firstly summarise here the operational design of the *Design.Lives Lab 2009*, which was informed by the six components listed above, and then move on to discuss how the concept of intersubjectivity has been applied and re-formulated in our interpretation of our experiences drawn from the event.

(A) Design.Lives Lab 2009: A Case of Inclusive Design for Teenagers

The Design.Lives Lab 2009 was a teenager version of the ideas and design of the 48-hour Inclusive Design Challenge in Hong Kong 2008 (Cassim, 2007; Lee, 2008). It aimed to help potential and novice teenage designers or younger adults experience the inclusive design process and glimpse the nature of design in a shifting social context, particularly in the fuzzy front-end that increasingly includes the participation of (potential) users. Similar to its precedents, a group of disabled or older Hong Kong people were invited to participate in this 2009 lab as active design partners, and the majority of participating "designers" were mainly from secondary schools in Hong Kong or foundation courses at Shantou University, China. As a further localised version, the lab adopted Cantonese, the mother tongue for all participants, to enhance their communication for both educational and executive purposes. Eight teams were set up. Each team included one-disabled/elderly design partner and approximately 10 to 15 students. Additionally, each group was supported by a research student who played the role of facilitator and whose input was limited to recording and time-management. Research student facilitators were from universities in Hong Kong with either design or social science backgrounds.

Guided by the principles of "design with" throughout the whole design process, all participant designers and active design partners were involved from the very first moment of the seminars to the last minute of the event. The Design.Lives Labs had three operational components including seminars, interactive critique sections and presentations. Seminars were used to clearly convey the principles and objectives of inclusive design. Interactive sessions were based on a designated template by which participants were asked to organise their work and to report their results. "Starting from the active-design-partners" was the first move, and the participants began their dialogue with the active design partners, whose daily lives were recorded in detail. In the training process, we incorporated the concept of "empathy" to enrich our understanding and practice of the inclusive design projects. This concept was drawn from our original version of the concept of intersubjectivity, which was intended to help participant designers to understand the inner and social lives of the active design partners (Ma, Ho, & Chuah, 2010). Inspired by this concept, we focused on how the participant designers obtained experience of the consciousnesses as well as the inner lives of the active design partners. We also expected that both the active design partners and the participant designers would learn how to achieve equal status and establish equal dialogues.

In this section, the organisers (the authors of this paper) instructed participants to practice empathy in their interpretation of the needs, wants, desires and even dreams of the active design partners. In the critique section, the organisers were somewhat critical of the proposed design ideas. This was intended to bring the participants' focus onto their proposed solutions, i.e. practising solution-focused tactics. The participants then went

back to the studio, reviewing and revising their ideas of design, presented in the ensuing section, named “developing the ideas of design”. After that, they were expected to answer three questions for their final presentation: (1) what is your idea of design? (2) what are the design components in your plan? and (3) how does it operate, and who benefits? The participants figured out their design brief in the presentation section. As one of the aims of the lab was educational in nature, it was also very important for the participant designers as well as the active design partners to learn through the comments of a panel of judges.

(B) Intersubjectivity in Practice

In order to highlight the importance of dialogue and to create an equal footing between designers and users in design participation, we inserted the components of empathy and intersubjectivity in the critique section of the interactive session of the Design Lives Lab 2009. Design researchers, just like social researchers studying the social lives of other groups of people, are part of the design endeavour. Designers should treat themselves as a research instrument which would to a certain degree include them in the perceived nature of the object under investigation.

Intersubjectivity has been highlighted in phenomenology as a way of analysing the active constitution of the objects of experience (Crossley, 1996). Crossley’s exposition of Buber’s concept of intersubjectivity starts with the distinction between the two ways that human subjects hold epistemological attitudes, namely I-It and I-Thou. I-It is the way an observer builds intersubjectivity with other individuals, “objectifying” them in the sense that the other constitutes an object (an “It”) to be experienced and used. In contrast, I-thou is the alternative way of initiating mutual understanding, and thus a mutual relationship is initiated. Crossley (1996) noted that the differences between I-It and I-thou are:

[T]he first case [the I-It] entails that the other is experienced as consisting in parts and being located in space, and that it is mediated by a knowing consciousness, whilst in the second case [the I-Thou] the relationship is immediate and space is shared with the other, who is present as a whole. The other is not experienced in this case. We may not even be aware of them, as such, because we are too closely involved and harmonised with them. This can be summarised by saying that in the first case the other is an object of our experience, whilst in the second they are a subject who is in communication with us. The I is privileged in the first case, reducing otherness to itself and to its ideas. The ‘It’ is an object to be controlled and manipulated. In the second case, by contrast, both partners are equal and ideas move between them in a communicative exchange. (p. 11)

In the conception of I-thou, the contents of any consciousness cannot be reduced or owned by either participant. In the case of I-Thou, the other is a subject who is in communication with the I: both parties are equal and ideas flow between the I and the Thou. As interpreted by Crossley (1996), the I-Thou relationship is:

[A]n interlocutor, irreducibly bound to the other with whom it is engaged. There is no sharp sense of distinction in this case, no reflective awareness of either self or other. Self is too engaged and involved with other to be reflectively aware of either its own existence or theirs. (p. 11)

Both participants are formed in and belong to the “inter-world”, which is the irreducible and primordial structure of social interaction.

The exposition of Buber’s distinction between I-It and I-Thou gives cues to position Husserl’s version of intersubjectivity. The I in Husserl’s account is a subject of experience and contemplation, but has nothing to do with engaging with the other—it is basically a solipsist claim. To us, this is equivalent to the delineation of the relationship between designers and users as professionals and laymen, or the knowledgeable and the unknowledgeable. The I is “a subject of knowledge and experience” (Crossley, 1996, p. 11). Husserl (1989) further provided us with a view of how the other individual is constituted: the other, supposedly external to the observer, is always “created” by the observer through an imaginative and analogical process. The concept of analogical apperception is suggested to show how the observer can obtain experience of the other consciousness. Crossley (1996) succinctly explains the analogical aspect of apperception:

[T]his analogical transfer is not a process of conscious reasoning, according to Husserl, but it is nevertheless a reasonable process which might be reconstructed (consciously) as follows: the other has a body which is identical to mine and they move as I do, my body and movement embody conscious life and experience, therefore the other’s probably does too. Furthermore, there is always room for verification or refutation of this imaginative hypothesis. One will continue to believe that the other is a conscious subject and to imaginatively transfer experiences onto them for as long as they continue to behave in a way which is understandable from the point of view of a conscious subject. (p. 6)

Crossley highlights the significance of Husserl’s explication of the methodological path to constructing intersubjectivity by comparing Husserl’s version with that of Buber. To Crossley, there is a possibility of It-Thou relationship. He argues that,

[T]he I of the Husserlian account is a subject of experience and contemplation who observes rather than engaging with the other. Nevertheless, the other is not constituted as an ‘it’ in Cartesian Meditations. They are precisely constituted as another consciousness or ego. They are experienced as experiencing. They are a subject-object or an It-Thou’ (Crossley, 1996, p. 15)

To put it simply, he puts forward the idea of empathy. This is the reason why we have incorporated Finlay’s (2005) idea of three interrelated layers of an intersubjective process to achieve empathy: connecting-of, acting-into, and merging-with.

Explicating the Threefold Typology of Intersubjectivity

In the original design of the Design.Lives Lab 2009, the I-It and It-Thou relations were highlighted. We continuously reminded the participants of the dangers of ignoring the roles, ideas and feelings of the active design partners. This was regarded as an indication of I-It relationships. We also encouraged the participants to use empathy to put themselves into the places of the active design partners. Although we found that it was difficult to avoid the emergence of the I-It relations, we did achieve the formation of It-Thou relationships.

In the following sections we intend to illustrate the extent to which the I-It relation can destroy inclusive design, and how I-Thou and It-Thou relations presented themselves.

(A) The I-It Relation and Deterioration of Human Interaction

The practice of the I-It relationship was initially common among the participants of the Design.Lives Lab 2009. In a group in which Granny Tam, an eighty-four-year-old widow, was the active design partner, the participants ironically perceived her as both extreme and ordinary, i.e., although Granny Tam was perfectly healthy and walked fast despite her age, the students continuously offered to help her. They even assumed that they could discover the “flaws” in her life. It was not surprising to see that they were frustrated when they barely found any hints for solutions. After learning she would go home in the afternoon, they decided to visit Granny Tam’s nursing home. However, they showed no interest in her experiences in transportation, how she arranged her room in the nursing home, how she shared the communal space of the house with other elderly people, and her experience of living with her diseases. The students were frustrated because most of the time Granny Tam did not give them “direct” or “valuable” answers. In a discussion among the student participants, one student remarked that “the main problem is how to help Granny Tam to have a better life.” Another girl added, “Granny Tam is already 84 years old and being well cared for is obviously what she mostly needs and wants, which is exactly what we cannot change.” Disappointed

with fruitless exchanges and under pressure to prepare a presentation, they began to ask desperate questions such as: “What is inconvenient in your everyday life?”, “Do you have any regrets about things you haven’t done yet?” But Granny Tam just briefly responded to them by saying “everything is fine.” It appeared that the exchange was deadlocked. Granny Tam did not fit the preconceived image the students constructed of her, eventually, Granny Tam stopped showing up to the workshops and the link broke up. The group just put forward a series of proposed social service activities like sharing sessions and promotion events. As shown in Figure 1, the students designed a logo saying that “hearts will not grow old” to go on a t-shirt (left and centre), and a postcard promoting sharing sessions in which the elderly can tell their stories (right). This group of students thought of designers as professionals who were responsible for offering assistance to people.

Another clear example illustrating the existence of the I-It relationship in interaction was the case of two young male student participants, who brought their own very clear ideas of the nature of design to the workshop. They conceived of design as having a clear procedure, a well-defined design brief and a product-oriented attitude. Directed by these ideas, the two participants promptly executed their method of needs identification and the construction of a design brief. As a result, their dominance of their group left the other participants feeling self-restricted and passive. In conversation with these two young men, they admitted that they had previous design training and emphasised that they knew clearly what design was; one was very proud of winning a number of awards. The process of their interaction with the active design partner showed that it was very difficult to change their minds, and thus, under their dominance, the final design products were mainly for the purpose of “assisting” or even “helping” the active design partners, who were excluded from many dialogues and the decision-making process throughout the workshop. For example, the group devised a series of assistant technologies to “help” a wheelchair user to use library services (Figure 2). They did not solicit any views and feelings from the active design partner. A facilitator in the workshop reported that the active design partner asked in the next day morning if the group was willing to listen to his stories: clearly he was fed up with the dominance of the “active” expert-like participant designers and let down by the silence of the rest.

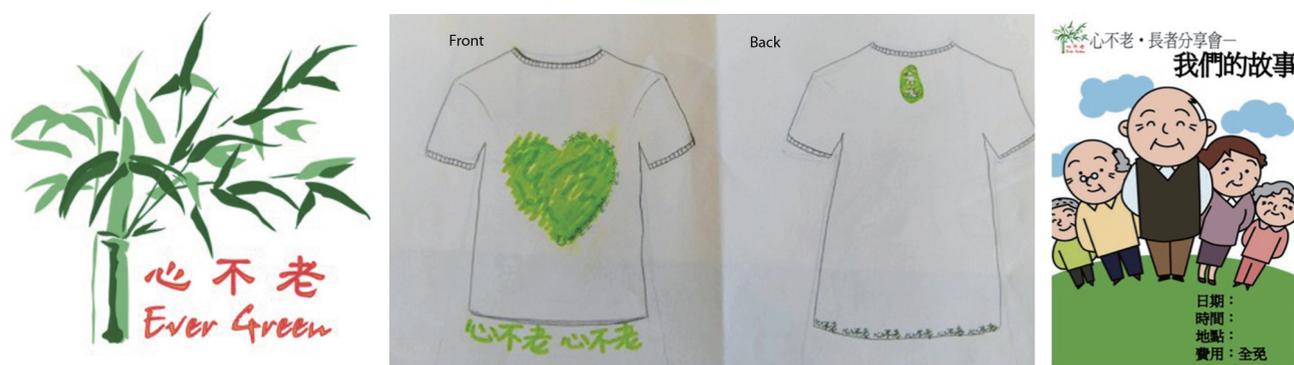


Figure 1. Designs for a logo, t-shirts and postcards for proposed elderly services.

* The Chinese on the right-hand poster says “hearts never grow old” and on the left is “sharing sessions with the elderly—Our Stories.”

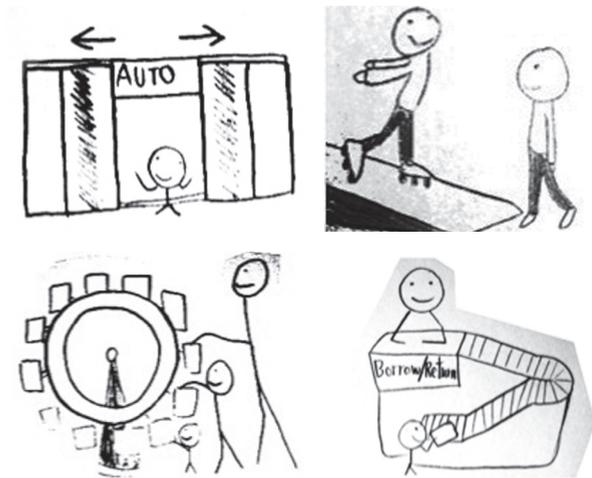


Figure 2. A series of designs to help wheelchair users to use library services.

This kind of mental description in terms of the I-It relation was common among the eight design teams. In the critique sessions, the design students were reminded of the importance of evaluating their proposed solutions and searching for what else had been missed or ignored. Furthermore, it was necessary for them to see how the proposed solution helped reveal the nature of the problems which users could encounter. However, we discovered a very interesting way of thinking about the nature of problems among the design students. Having an I-It relation in mind, the student designers regarded the problems they encountered as technical issues. For example, in one group who had an active design partner with skin cancer, the questions among the student designers mainly revolved around his difficulties in daily activities and personal abilities. They focused on researching the issues which they felt that they could do something about. In the first hour, they were frustrated because the active design partner kept saying that he was fine in his daily life. Upon hearing that the active design partner disliked being “dumped” and isolated, the student designers came to the conclusion that this was a social issue affecting the active design partner and they had to focus on it. They thought that the active design partner’s personal experience revealed the occurrence of social discrimination and they were dealing with a social problem, and so they decided to do something to educate the public that it was wrong to make people feel this way.

The final product was a game-like feature in a magazine (shown in Figure 3), telling a story of how a socially isolated child is accepted by other children. The final product is a kind of straightforward pedagogic tactic. The first two pages show a tug-of-war game with three children on one side and one (who represented the active design partner) on the other; above him on the cartoon there is a statement saying “only you.” There is another page next to these two pages. If readers hold the insert between the second and third pages in an upright position, the new page three shows other children pulling the rope behind the fourth child (the active design partner), and the caption above reads “Only you? No, you are not the only one be there.”

The student designers regarded the issue of being dumped and isolated as a personal issue, and felt that showing that the protagonist was not actually alone would be a solution to change the public mindset. They did not test their pedagogic tactic among their group members to determine if this kind of story telling could provoke any personal reflection among the readers. The design students argued that this was for the good of the active design partner, and what they saw as his personal misery should be told to the public: this was their solution. However, it was ironic to see that the active design partner could not actually take part in such a tug-of-war game in reality, as his hands and feet were largely covered by nevi (Figure 4). He found this solution very socially exclusive, but the student designers did not notice this.

A similar idea was also proposed by another team, which designed a T-shirt with the slogan “Living in MORE...” (Figure 5) to promote self-esteem and positive living for all. We noticed that there was little input from the design students themselves about how they understood the emotions and feelings of their active design partner, who in this case was a person with a disability. What they did have in mind was that the public should know “more” about the needs of people with disabilities. The view of the design students was that the public needs to know more and people with disabilities need more, even if they (the students) could not figure out what the public and people with disabilities really need. Therefore, they translated this message into a slogan of MORE so as to persuade the public to know more, look more and live more. This design was eventually endorsed by their active design partner, who regarded his endorsement as a means of showing support to the design students. The active design partner said afterward that this design had nothing to do with his situation, let alone being able to inform the public what people with specific disabilities need in their real lives.



Figure 3. An advertisement to promote public awareness of discrimination.



Figure 4. The hand and foot of an active design partner.

(B) The It-Thou Relation and Practising Empathy

Informed by Finlay’s (2005) idea of the “aesthesiological layer of the other,” we took the opportunity to practice empathy in the interactive workshops. As Husserl (1989) stated, individuals can transpose themselves to another’s place so as to achieve the meditation of empathy. Therefore, it is necessary for researchers to experience how subjects experience their lives in situ. As Husserl suggested,

I secure [the person’s] motivations by placing myself in his situation, [with] his level of education, his development as a youth, etc., and to do so I must needs share in that situation; I not only empathise with this thinking, his feeling, and his action, but I must also follow him in them... (p. 9)

In our lab, firstly, we emphasised the importance of listening carefully to the comments of the active design partners. This is the initial step of constituting the empathic aspect of intersubjectivity, i.e., the It-Thou relationship. As Finlay (2005) said, “the researcher’s task is not simply to listen to another’s story: the researcher also needs to be open to being with the participant in a relationship” (p. 277). Following this initial activity, the participant designers practiced “designing with empathy” by connecting the embodiment of the other to themselves. Generally speaking, this was to achieve empathetic understanding of others’ experience of embodiment through intimately connecting to the researchers’ own lived experiences. In Design.Lives Labs, we

intentionally invited active design partners with disabilities to join the design process as we thought that their embodied experiences would be a good starting point for design students to practise empathy through embodiment.

This was not an easy task: it required the active design partners to relate very specific embodied experiences for design students to explore. One group of design students went to a garden with their active design partner, a wheelchair-user who had participated in other inclusive design workshops and social activism projects. In our first Design.Lives Lab 2009, we asked this active design partner to give more personal feelings and experiences about his daily life. We expected that the design students could practise empathy by connecting with the other’s embodiment, with respect to the experiences arising from the daily life of a wheelchair user. However, the active design partner could not differentiate his personal experiences from those of other people with disabilities. In our interview with him, he said that he was always asked by designers and social researchers about the general hardships of the daily lives of people with disabilities. He often acted as a spokesman for people with disabilities, and thus had difficulty bringing forward his own personal feelings and embodied experiences. Clearly, in his mind, he was ready to provide general information about the hardships faced by most disabled people, rather than to provide a specific opportunity for the design partners to experience his own personal feelings and daily life. During the trip in the garden, he did not ask the student designers to understand his own specific embodied experiences as a wheelchair-user in a public area. This episode reminds us of the possibility that active design partners were also likely to have an I-It relationship as their mindset, thus perceiving “people with disabilities” as a kind of collective entity sharing common characteristics and similar experiences to be studied.

In our view, relating an embodied personal experience could be facilitated by people with less experience playing the role of representatives. We have another case, where we had different results. As ageing is one of our concerns in the labs, we invited two older people to tell their stories to the participants. We found this encounter important to reduce the chance of having the I-It relationship in the design students’ mindsets. The two older active design partners, who were in their late seventies, were keen on physical exercise. The lady (Granny Tam, mentioned earlier) practiced Chinese Kung-Fu and so was able to perform in front



Figure 5. A t-shirt promoting self-esteem.

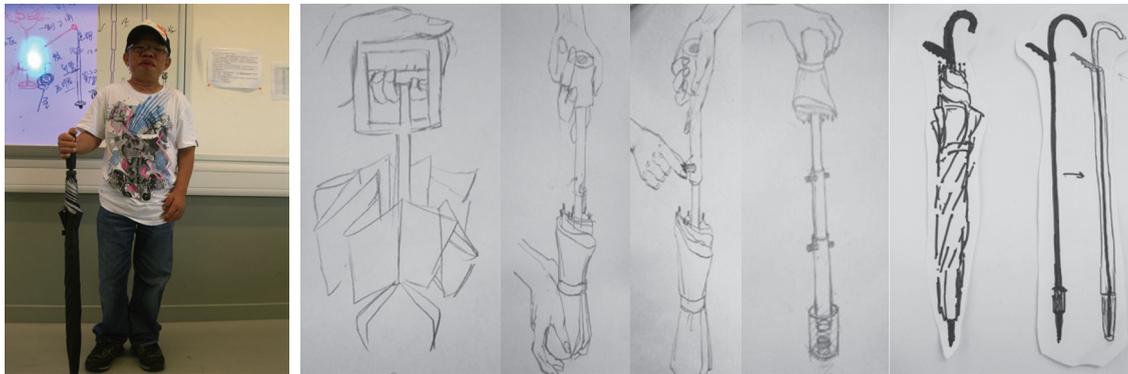


Figure 6. A design for a new device that combines the function of an umbrella and chopsticks that enables users to pick up coins on the floor without bending.

of the design participants. Another active design partner showed in the lab how he did his daily physical exercises. Many design participants were baffled, as in their minds the older should be physically weak. They at first remained doubtful and attempted to test the physical abilities of the two older people. After a round of questioning, they finally confessed that it was wrong to keep searching for what these active design partners needed. The decision to stop searching for needs to address became concrete once they followed the two elders' instructions on how to do the exercises: they found it difficult to perform as well as the active design partners could. To the two elders, ageing was not equivalent to being disabled. We could argue that practicing empathy is a good way to "un-learn"—we are inculcated with the view that being old and being physically impaired entails needing assistance from others, especially from experts, such as medical practitioners and designers. In the eyes of the expert, those people then become subjects to be studied, investigated and assisted. This certainly reinforces the I-It relationship between the expert and the client. The first task of practicing empathy, then, is to "un-learn" this kind of common idea.

Practicing empathy is not only for "un-learning" but also for "active learning." One group of design students made good use of what they learned from practicing empathy. This group was working with an active design partner with mucopolysaccharidosis (MPS). This rare genetic disease causes difficulties in moving joints and breathing. The active design partner had also been involved in the other Inclusive Design Challenge in Hong Kong in 2008, and, in collaboration with a group of designers, designed a pair of digital chopsticks that won the challenge. The design students watched the video about how MPS caused difficulties in the active design partner's daily life and learned that it was possible to do more for him. In the video, designers learned that picking up coins from the floor was a difficult task for the MPS active-design partner and eventually decided to create a pair of digital chopsticks. The design group decided to focus on the situation and see what kinds of problems arose from using the chopsticks. They found that it was somewhat inconvenient for MPS people to carry; moreover, the MPS active design partner also felt that the concept of the digital chopstick as too simple and not gimmicky enough. Finally, they incorporated the idea of

digital chopstick into an idea for an umbrella and thought that this new device (Figure 6) would be comparatively more fashionable but also more socially acceptable.

Another example of practising empathy for active learning is the group who designed a cheerful game that every participant could play and enjoy, including their active design partner, B, which showed the promising result of this empathic activity. B, a fine arts university student, is hearing-impaired but could lip-read. In order to encourage the participant students to practice empathy, we asked them to talk without making any sounds. Moreover, in order to learn how to put oneself into another's place, the facilitator asked the participant designers to know more about B's inner world. The participant designers found that she was passionate for life and possessed a keen sense of colour. As one participant designer recalled, her stories struck a chord with them, as they had had similar aspirations as youngsters. Then, the facilitator asked them to start again by listening and talking to B (i.e., a mutual exchange), particularly asking what B liked to do. Finally the participants found that B favoured art, specifically drawing and photography, and understood that these activities facilitated her expression of her inner feelings. B loves photography because a colourful world, to her, is equivalent to the rhythm of music (as she could not hear music). At the same time, she admitted that she is very sensitive to colour. The facilitator then asked the participant students if they had any idea why this might be so. The participant students had no answers, so the facilitator asked them to imagine they were underwater, incapable of hearing anything, and if they then found that images were much more prominent. The participants tried while the facilitator asked them to close their ears and walk for a distance in order to feel the active design partner's ways of "listening to colours." This was the tactic of putting one's feet into the user's shoes. The participants finally came to the conclusion that in place of listening they could use lighting, visual and figurative hints, and vibration as substitutes. This illustrates how to link another's embodiment to one's own: it is the act of acting out another's bodily experience, brought forth by the imagination of replacement. This is the first layer of empathy. When the facilitator asked the participants to talk without making sounds, the act represented the second layer of empathy: acting out another's bodily experience.

The outcome of the collective effort was a kind of game in which a conductor translates the melody of a song into gestures that are supposed to be signals conveyed to the “musicians”. The musicians hold a two-coloured bottle and follow the conductor’s instructions to perform different bodily movements (Figure 7), performing a kind of translation from music to action. In the final presentation, they lined up and each holding two transparent water bottles filled with various vivid colours. Directed by their facilitator, they shook the colourful bottles in a unique rhythm and pattern. Finishing the game, they reminded the audience that they should experience it as an alternative music piece. Their active design partner B’s unique experience had been translated with an attempt at synaesthesia, which was achieved empathetically by the student designers entering into B’s experience of music, aided by imagination with colours and bodily rhythms. This echoes Finlay’s (2005) suggestion of the third layer of empathy—that is, merging with another’s bodily experience. This example illustrates the important impact of practicing empathy in design processes and outcomes. The most critical element in the game was the involvement of the active design partner and the participant designers’ imaginings of being underwater, soundless communication and listening to colours; these were not experiences the participant designers were familiar with. Probing into the researchers’ embodied responses

opened up a rich understanding of those being observed and interpreted. This game appears to fulfil one of the objectives of the inclusive design, as the facilitator pointed out:

Through the workshop, participants are able to discern that the aim of design might not be a professionally designed product which would conversely provide an icon to ‘label’ the active design partners and to elevate their disabilities to the status of core identity. (quoted from a facilitator’s notes)

(C) The Anticipated I-Thou Relation

We should admit here that the I-Thou relation was neglected in the original design of the Design.Lives Lab. However, in our analysis and reflection, we attempted to apply the concept of re-description in order to find other possible interpretations (or inferences) of the meanings from the actions performed by our design participants and the active design partners, and found its importance. We read the recordings done by the facilitators and tried to use concepts other than the I-It and It-Thou relationships to see how the participants positioned themselves in the process. Two instances attracted our attention, and later we attempted to use the concept of I-Thou to make sense of these instances. We found that the game “music without sound” and the Granny Tam



Figure 7. ‘Music without sound.’

incident reminded us of the existence of the I-Thou relationship between participant designers and active design partners. As explained in the previous section, in the I-Thou relationship, the other is a subject who is in communication with the I; both parties are equal and ideas flow between the I and the Thou. It is a kind of mutual exchange and communication. However, if we follow the explication of Merleau-Ponty's concept of concrete intersubjectivity, we can have one more dimension of the meaning of the I-Thou relationship. Merleau-Ponty argued that "all subjectivity is intersubjective" and attempted to understand the relationships between individuals through the analysis of perception, but denied that perception was a private inner state. To him, it was about the "openness to being." Crossley's (1995) example could be used to elaborate this idea:

[I]f I see a table then there are not two tables, one in a world and one in my head, but one table which is seen. This is relevant to the question of the other because it suggests that perceiving subjects are not locked in their own private worlds but are in-the-world, a world (in the singular) which is shared by all. (p. 57)

The shared world is conceptualised as the inter-mundane space, in relation to which only decentred perceptual subjects exist. Merleau-Ponty suggested the notion of inter-corporeality, which denotes the existence of a primordial carnal bond between human beings, just as Crossley (1995) described:

[S]ubjects are joined by their belongingness to a common world. Furthermore, it denotes that they 'open' onto each other. To see the other is not to have an inner representation of her. It is not to have her as an object of thought—although this is possible. (p. 57)

In light of this analysis, the carnal bond implies the existence of intersubjectivity—a common world—and that we are joined to others by means of our perceptions, actions, bodily gestures and even spoken thoughts.

This point can be illustrated by the encounter between Granny Tam and the participants. Observing the interactions between Granny Tam and the designers revealed some emotional changes. When she was telling stories, she was huddled by the students. She seemed to be happy and glowing. Her granddaughter, one of the organisers, frequently came to check on her and reminded her of an appointment with her doctor in the afternoon. Granny Tam always smiled and said, "so many cute kids, I'm happy to stay." When the students asked if they could accompany her back to the nursing house where she lives, she instantly agreed and decided to cancel her medical appointment. Once Granny Tam started telling stories about herself and her experience of the ups and downs of Hong Kong's continuously changing society, the students were so absorbed that they almost stopped asking questions. They even moved from chairs onto the floor, huddling more closely around Granny Tam. She obviously enjoyed this, and told them more about her grandchildren with great pride and affection. She even offered to play matchmaker for one young facilitator, which made the facilitator instantly shy away, complaining that "it [had] gone too far." All these things suggested that the group were just sharing stories, with

no intention of achieving any solutions or design output. They seemed to be talking to someone they did not personally know. The protagonist in Granny Tam's story remained a stranger and represented no personal relationship between Granny Tam and the team members. However, the turning point of this atmosphere was when the facilitator encouraged the students to raise more relevant questions so that a persona of Granny Tam could be constructed in order to more efficiently elicit problems of Granny Tam's life. The mode of address returned to the I-It relationship. The students then bombarded her with a train of questions about her current everyday life, and Granny Tam grew quieter and quieter. The previous old-and-young relationship they all enjoyed had been replaced by a problem-owner-and-problem-solver relationship. This episode demonstrates that the dominant I-It relation will suppress a pre-existing "I-Thou" relation.

The situation was somewhat different in the group that explored "music without sound." As the group suddenly came up with the idea of acting out the other's bodily experience, the group members started learning a new kind of language through bodily movement. They had to learn to formulate a common language which had been developed by the conductor. The principles ruling the system of bodily movement and gesture emerged through their process of experiment and exploration. Such a learning experience was new to all group members, including the active design partner B. They had fun through working out the bodily rhythm and trying to act like a team, like an orchestra. It was somewhat natural for them to think in the I-Thou relationship, in the sense that they were engaging with others in communicative relations—there was no boundary between the active design partner and the participant designers. They were trying to work out a bodily melody, to formulate or create an unknown language. Throughout the whole process of trial and error before the presentation, they acted like they were all taking a journey to no-man's-land. As a result, their product was a new game that no one could claim ownership of. Moreover, the distinction between designers and users became blurred.

We are not arguing that only this kind of design method is the best, but such experiences always provide the possibility of building up an I-Thou relation through which an enjoyable design experience can be found. Without a clear subjective identity for any party, no matter whether one is a designer or an active design partner, each member opens up his or her mind and body to communicate with the other and to try different possible ways of designing new things. Comparing the experiences of these two groups, we found that Granny Tam enjoyed the I-Thou moment during the storytelling, but suffered from the I-It relation once the student members reassumed their identities as designers and problem-solvers. To us, this change is not inevitable, but highly possible—especially as I-It relationships are beginning to predominate in modern rationalised and industrialised societies. Finally, Granny Tam did not appear the next day, seemingly preferring to be an independent human subject rather than an object under the scrutiny of professional designers. The group was concluded with social exclusion.

Concluding Remarks

The result of our reflection from our first Design.Lives Lab is the re-formulation of a threefold typology with I-It, I-Thou and It-Thou relationships in relation to intersubjectivity. We believe that the threefold typology of intersubjectivity provides the tools to analyse a possible designer-user relationship, through which different kinds of interactions between users can be practised and performed. Crossley (1996) has argued that there was no way—and no need—to eradicate any one of these three relationships, and that all exist in human subjectivity and practical social life. Human subjects, during the process of anticipating and achieving an understanding of another's consciousness, cannot avoid fluctuating between genuine, open dialogue with others and imaginary constructions of our counterparts. Sometimes people fluctuate between objectifying the other with a view to manipulating that person and attempting to accomplish an equal and open communicative exchange, but we have shown that the I-It relationship is just an indicator of the existence of an instrumental relationship and of deterioration in the quality of human interaction. This may be good for conventional design, which has long been influenced by positivist philosophy, but it is not good for design participation, which is informed by co-experience, co-design and co-reflection. From our methodological view, an instrumental relationship will inevitably reinforce the dominance of designers and the monopoly of knowledge by designers. Of course, it is our ideal to advocate for design participation by applying the It-Thou and I-Thou relationships in the process of interaction between designers and users. The It-Thou relation is in fact a moral act, as "self puts itself in the place of other, acknowledging the other as a subject and thus recognising a moral status of that other" (Crossley, 1996, p. 15). An empathic act would certainly help open communicative space. On the other hand, the I-Thou relationship engages its participants in an entity as a whole. Its meaning is to a large extent similar to the concept of intersubjectivity employed in studies of collaborative learning, such as that of Larusson and Alterman (2009), who defined intersubjective space as the "background for interpreting the actions and motives of other participants....It is the common 'sense' of the interaction that emerges, but it is also those parts of what has occurred, is occurring, that are not mutually understood" (p. 374), or that of Suthers (2006, p. 317), who understood intersubjectivity as a simultaneous process of mutual constitution among participants (Yukama, 2006). Probing into this level of tacit communal knowledge and an unconsciousness life-world would be promising, as it could be a pool of communal resources from which we could draw out our commonality to establish the foundation for co-design and co-reflection. This threefold typology of intersubjectivity could serve as a guide for us to know how to build up a communicative space in which equal dialogues are possible and could extend the impact of design participation on social development.

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