

Ethical Leadership in Participatory design

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Abstract: The purpose of this paper is to highlight the need for ethical leadership in Participatory Design and to consequentially integrate elements of ethical leadership in design methodology and education. We propose a framework for ethical leadership in Participatory Design building on four fundamental orientations: (1) the Humane Orientation, (2) the Justice Orientation, (3) the Responsibility and Sustainability Orientation, and (4) the Moderation Orientation. The relevance of these orientations is illustrated through a Participatory Design project undertaken in Cambodia. The challenges related to participation and ethics experienced in this project are described. Our rationale is that Participatory Design practitioners can to a greater extent contribute to social innovation by acknowledging and fulfilling their role as ethical leaders - and not just as facilitators - in design processes.

Key words: *Ethical leadership, Design for Social Innovation, Participatory Design*

1. Introduction

In participatory design it is often advocated that designers should act as facilitators rather than leaders. Even though this is an admirable aim, and in line with the democratic vision of participatory design, design processes need leadership to move forward and to result in specific outcomes. In this paper, the relevance and importance of ethical leadership in participatory design (PD) will be highlighted and discussed. It will be argued that the role of designers in PD should not be downplayed to facilitation but should rather be recognized as leadership that requires continuous scrutinizing of ethics.

“Design has a projective nature and is aimed at changing and transform the world” (d’Anjou, 2011, p.45). With this strong potential for change and transformation follows great ethical responsibility, as change should be geared towards something better. Contradicting interests and values among stakeholders and uneven consequences of technical interventions for local and global communities, make ethical dilemmas inevitable. As designers are increasingly aiming to design for social innovation and change, the implications of design processes and solutions are getting more attention. The need for designers to be aware of ethics is recognized and reflected upon in several publications (e.g. Lloyd, 2009; Margolin; Morelli, 2007; d’Anjou, 2011; Steen, 2011). However, the role of ethics in relation to leadership in design is rarely discussed. We will in this paper argue that design for social innovation can only succeed if designers embrace their role and responsibility as ethical leaders of interdisciplinary design teams.

1.1 Participatory design, design thinking and design for social innovation

The basic core of participatory design is the direct involvement of users in co-designing tools, products, environments, businesses, and social institutions. The idea behind this approach is that the ones who are affected by a design should also have the opportunity to influence it. Designers therefore team up with users and strive to

engage them as active design partners in the design process (Robertson and Simonsen, 2012; Schuler and Namioka, 1993).

In recent years, Design Thinking has gained popularity as a design philosophy and approach. It builds on the idea that designers should be involved in the big picture of social innovation rather than focusing on the economic bottom line. It also emphasizes that design is a collaborative effort and therefore requires the participation and of various stakeholders and disciplines. Designers and participants are encouraged to prototype and test ideas early in the design process. Additionally, they should strive to develop empathy with end-users and understand their needs and perspectives (Brown, 2009). As noted by Björgvinsson, Ehn, and Hillgren (2012), these principles are in line with PD, and Design Thinking and PD are in fact very similar.

Both approaches fit into a broader category of design that can be labeled as Design for Social Innovation. Murray, Caulier-Grice, and Mulgan (2010, p. 3) define social innovation as "[...] new ideas (products, services and models) that simultaneously meet social needs and create new social relationships or collaborations. In other words, they are innovations that are both good for society and enhance society's capacity to act." According to Manzini, the strong relationship between design for social innovation and PD is the reorganization of end-users as not only being people with problems and needs, but actors that can contribute with local knowledge, specific competences and ideas for solutions in the design process (Manzini, 2011). Whereas PD was earlier focused on design of workspaces, it is now becoming increasingly engaged in public spheres and social innovation (Björgvinsson, Ehn, and Per-Anders Hillgren, 2012).

In this paper, we have chosen to focus on PD but our propositions are relevant for all design initiatives within the Design for Social Innovation-category.

1.2 Ethics and Design

There are two mainstream schools of ethics in Western culture: deontological and consequentialist ethics. Deontological ethics is focused on personal responsibilities, universal, moral rules, and logical reasoning; the content of the act itself makes the act morally "right" or "wrong". Whereas in consequentialist ethics, the consequences of actions are given emphasis, i.e. it is not the actions and intentions that determines what is ethical but the consequences of those actions. The focus is, therefore, put on reflecting on the positive and negative consequences of one's personal decisions and actions. As noted by Steen (2011), both of these two schools are concerned with universal duties and abstract rules, and not with specific practical and social practices that would be more applicable in design processes.

There is no consensus in the design community on how to best approach ethics within design. Studies have shown that ethical dilemmas are usually dealt with implicitly (Loyd, 2009). Steen (2011) calls for an explicit, reflexive approach throughout the design process. Rather than just evaluating the outcome of a design project, questions that promote reflexivity should be asked in the entire process. This paper builds on Steen's (2011) initiative but also brings the concept of ethical leadership into the design process and goes further in defining more specific questions to be asked for facilitating ethical decision-making.

1.3 Ethical Leadership

Leadership in general can be defined as the process of influencing others to achieve goals shared by the leader and his/her followers (Gardner, 2000; Locke, 2003; Yukl, 1989). It comprises of a task oriented component of defining goals and making strategic decisions and an intrapersonal component of guiding others towards these

goals. Ethical leadership thus entails to pursue ethical goals and to influence others in ethical manners (Eisenbeiss, 2012). But who decides what is ethical?

Most literature on ethical leadership proceeds from Western perspectives and takes a relativistic approach to defining what is ethical. Research is usually based on philosophers (such as Plato, Aristotle, and Plato), the Christian religion, or interviews conducted with Western managers and employees (Eisenbeiss, 2012). In social science, often a relativistic approach to ethical leadership is taken by defining it as normatively appropriate behavior. This definition leaves it up to leaders to choose which norms to refer to when promoting them to followers (Brown et al., 2005). Eisenbeiss (2012), on the other hand, argue that it is insufficient to define ethical leadership as normatively appropriate conduct without also defining a conceptual framework for the central principles underlining such conduct. Otherwise, leaders can argue for using norms that benefit their companies and organizations but that may not be regarded as ethical outside of that specific context. Based on an interdisciplinary analysis of both Western and Eastern religions and philosophers, she defines four approaches to ethical leadership that represent central cross-disciplinary and cross-cultural principles:

1. The Humane Orientation; to treat others with respect and dignity and as ends as opposed to means.
2. The Justice Orientation; to make fair and consistent decisions and not to discriminate against others
3. The Responsibility and Sustainability Orientation; to be aware of and critical of long-term views on success and to be concerned for the welfare of society and the environment
4. The Moderation Orientation; to show temperance and humility and balanced behavior

We will argue that these orientations are also relevant for designers and outline how they can be used as guidance when undertaking participatory design projects.

2. The Role of Designers in Participatory Design

Several authors have advocated that designers in PD processes should act as facilitators; they should facilitate end-user and stakeholder participation and that participants can take charge over the design process (Siu, 2003; Arce, 2004; Lee, 2008). This view of the role of designers is connected with the history of PD: PD evolved as a design approach in the early 1970s in Scandinavia when computer professionals and union leaders strove to enable workers to have more influence on computer systems in the workplace (Winograd, 1996). Democratization in the workspace was one of the ultimate goals of Scandinavian PD, and in the spirits of democratization designers were encouraged not to act as experts but treat participants as equal design partners: “Participation stands in contrast to the cult of the specialist. In the specialist model, an expert is sought out. The question is presented to the Expert who will eventually produce the Answer. With this approach, those most affected by the conclusion must sit idly by, waiting patiently for enlightenment. PD, of course, demands active participation. PD, however, is not against expertise. There is no reason or motivation to belittle the role of expertise. Specialized training and experience becomes yet another resource to be drawn on – not a source of unchallenged power and authority. A partnership between implementers and users must be formed and both must take responsibility for the success of the project” (Schuler & Namioka, 1993, pp. xi-xii). The strong tradition for promoting democratization and opposing against the hegemony of experts may be the reason for why the aspect of leadership is rarely dealt with in literature about PD. Although designers should treat participants as equal design

partners and not act as authorities, leadership is still required. Even in democratic countries, leaders are elected but they are not given the right to make decisions in isolation without support from society. Similar, PD processes need leaders that co-design with participants and listen to them in addition to taking the overall responsibility for the quality of design methods and deliverables.

Being a facilitator entails to foster creative and productive collaboration but what if potential participants do not have the motivation for undertaking projects that promote change and social equality? If, for example, a project aims at teaching illiterate women living in slums to read, local governmental authorities should ideally be included so that the work is continued after the project duration and that also political changes are made. However, if the authorities do not see the point of educating adult women, should the project not be realized? Being just a facilitator is not always enough when aiming for change. Manzini and Rozzi (2011) note that although the role of facilitator is the most widely recognized in traditional PD, PD practitioners striving for social innovation need to also take on the role of triggers and design activists: “[...] not only because it uses at its best the designer's specific set of capabilities and sensitivity, but also because it can be very effective in sparking off new initiatives and dynamic social conversations about what to do and how. In other words, using creativity ‘to make things happen’ seems to be the most concise way to express what could be the most effective specific designer's role” (Manzini & Rossi, 2011, p. 211). Ethical leadership is to pursue ethical goals and to influence others in ethical manners (Eisenbeiss, 2012). Being ethical leaders, therefore, also encompasses to act as triggers and design activists – while being aware of ethical responsibilities. Yet, the role of ethical leaders does not exclude designers from also being facilitators and equal co-designers. It does not call for an authoritative approach. It simply opens up the dimension of being a designer by incorporating new roles and responsibilities.

3. Lessons Learnt from Designing for and with Marginalized People in Developing Countries

From 2008 to 2011, I undertook a research study in collaboration with the International Committee of the Red Cross in which prosthetic feet for children in Cambodia were redesigned. This study built on two former research and design studies conducted in India and Nepal (Hussain & Keitsch, 2011). Even though the aim of the study was to use PD methods to learn about the participant's perspectives and to empower them, it was not possible to facilitate participation in a “traditional Scandinavian way” (Hussain, Sanders & Steinert, 2012). The underlying assumptions in PD literature emerging from a Western perspective, are usually that workspaces, or other communities, are democratic, that they have high literacy rates, and that there is a reasonable technological infrastructure present (Puri, Byrne, Nhampossa, & Quraishi, 2004). Although these assumptions can also be questioned in several Western projects, it is unrealistic to take such preconditions for granted in a developing country context (Puri et al., 2004).

The project consisted of five field studies done in Cambodia. Altogether about 10 months were spent in the country (Hussain, 2011b). During the first two field trips, I investigated and analyzed user needs and cultural health beliefs concerning disability in Cambodia. This was done through undertaking participatory research activities with children using prosthetic legs. Additionally, interviews were conducted with children without disabilities, the parents of children using prosthetic legs, health professionals, government officials, traditional medicine men, and Buddhist monks (Hussain, 2010; Hussain, 2011). In the third and fourth field study, children's experiences of living with prosthetic legs were further investigated through using contextual design tools

(Hussain & Sanders, 2012). Additionally, ideas for devices assisting children using prosthetic legs with walking in mud were explored (Hussain, Sanders & Steinert, 2012). The need for enabling child prosthesis users to walk in mud was uncovered in the first phase of the project. Children in rural Cambodia are expected to contribute to the family household by helping out with farming, taking care of animals, looking after siblings, getting water from the well, etc. Cultivation of rice is an essential part of economic life in rural areas, and to be able to help with work in irrigated paddy fields is, therefore, important (Hussain & Sanders, 2012). Most roads in rural areas are unpaved and become muddy during the rainy season (from May to October). Prosthetic legs get easily stuck in mud. While both adult and child prosthesis users face this problem, adults usually develop walking techniques that prevent their prostheses from getting stuck. This requires more experience and physical strength than what children may have. I organized two workshops with eight local prosthetists and two mechanical engineer students. In the first workshop, ideas for solutions enabling prosthesis users to walk in mud were generated. In the second workshop, the participants built mock-ups to develop their ideas further. These mock-ups were used to design three early stage prototypes. Three end-users and eight Khmer prosthetists were included in the design by asking them for feedback on the prototypes (Hussain, Sanders, & Steinert, 2012). Ideas for how to improve the prosthetic feet produced by the International Committee of the Red Cross were also sought. During the fifth and final trip, new prosthetic feet were produced and tested.

Table 1. Aspects that can lead to challenges in PD projects (Hussain, Sanders & Steinert, 2012, p. 104)

Category	Factors
Human aspects	<ul style="list-style-type: none"> • Designer's relationship to participants • Access to users and other stakeholders • Participant's capacity to participate • Language barriers • Appropriate ways of rewarding participants
Social, cultural, and religious aspects	<ul style="list-style-type: none"> • Social and cultural structures that can make it difficult for participants to collaborate at an equal level • Customs and religious beliefs that can impact participants' willingness to share opinions
Financial aspects and timeframe	<ul style="list-style-type: none"> • Financial resources available for transport, rent of workshop premises, hiring translators, training participants, etc. • Time available for training participants and gaining their trust
Organizational aspects	<ul style="list-style-type: none"> • The recognition for the importance of user participation in the organization • The willingness to allocate resources for participatory design processes • The hierarchy within the organization that produces or provides the product • The tradition for using participatory design processes in the organization

Several users were included in the project, but only three children were involved in all stages of the study and considered as participants: an 11-year-old girl a 13-year-old boy, and a 16-year-old boy. They were visited in their homes several times during the whole project duration. Several barriers for participation were identified across four categories as shown in table 1. These barriers and the PD methods used are explained in detail in (Hussain,

Sanders & Steinert, 2012.) In article, the emphasis is on the ethical challenges related to PD experienced in the case study. Ethical dilemmas are investigated by deploying the four orientations outlined by Eisenbeiss (2012):

The Humane Orientation

The Humane Orientation means to treat others with dignity and respect. It also implies that people should be treated as ends as opposed to means (Eisenbeiss, 2012). Even though this may seem evident, extra awareness is needed when working with marginalized people. The children that took part in the study all belonged to underprivileged families. In spite of their disability, they were expected to contribute to household chores. Ideally, we would have liked to gather them in workshops and include them much more in the design process. However, since they all lived in different villages, this would have meant taking them away from school and their families. It would have given a higher degree of end-user participation, but since the children already had quite limited access to education and their families were dependent on them helping out with chores, it would not have been an ethical decision. Therefore, child participants were visited in their homes when they were not at school and each visit was limited to 1-2 hours.

Also, the adult participants had limited opportunities for participation. They had full-time jobs and family responsibilities. Consequently, workshops had to be organized during evenings and in the weekends and be kept as short as possible.

To reimburse participants rightfully for the time they set aside for participation is important. Designers cannot assume that people who are living in extreme poverty and working hard for survival will prioritize their time to participate in design projects. However, one should avoid giving compensations that triggers wrong motives for participation. In this project, it was chosen to reward adult participants with organizing dinners after the workshops. Child participants were reimbursed with a small amount of money and school materials. I did my very best not to give unrealistic expectations of how participation would affect the individual child, but there is always a risk of parents encouraging their children to participate in projects thinking that there will be financial benefits involved.

A part of treating people with dignity is also to take their needs seriously and not impose own beliefs about what their needs should be. It is easy to think that aesthetical needs are not important for underprivileged people living in developing countries. However, as noted by (Zollars & Ruppelt, 1999), a positive self-image and sense of personal attractiveness are important for everyone all over the world, regardless of whether they are rich or poor. In the research project, it was discovered that children were very concerned about the appearance of their prosthetic legs. They wanted prosthetic feet that looked more natural and to have more options for the color of the upper part of the prosthetic leg (Hussain, 2011a; Hussain & Sanders, 2012). Improving the appearance of prosthesis may add to production costs, but it can also have great positive impact on children's self-esteem and how they are treated in their local communities. Balancing conflicting needs and requirements is an inherent challenge of designing and ethical considerations should indeed play a significant role in finding the right balance.

The Justice Orientation

The Justice Orientation is geared towards making fair and consistent decisions and not to discriminate against others (Eisenbeiss, 2012). When designing with people belonging to other cultures and religions, this is crucial for enabling rewarding participation. In the Cambodian study it was uncovered that, among other things, karma, vicious spirits, and black magic were believed to influence the physical state of a person. Although beliefs in

spirits and black spells may seem strange from a Western perspective, it is important to show respect and not to ridicule such views. There are certain ethical challenges though; when people told me that children who are born with a physical disability must have done something bad in previous lives and brought this upon themselves, I chose to listen without judging or confronting them. This was done to allow people to share their perspectives in an unhampered way. In hindsight though, it can be argued that silence can be interpreted as acceptance towards discriminating views of disability.

The Responsibility and Sustainability Orientation

The Responsibility and Sustainability Orientation refers to concern for the welfare of society and the environment (Eisenbeiss, 2012). An important part of the project was to help the International Red Cross (ICRC) reduce the environmental impact of their prosthesis production and disposal. I gave advice on reusing polypropylene and finding new ways of depositing rubber and gypsum. When redesigning prosthetic feet for children, the aim was obviously to avoid increasing the environmental burden through making changes in the design. Yet, this aim had to be balanced with the goal of improving the lives of underprivileged, disabled children. A better prosthetic leg can enable amputees to walk and function better. Previous trends in design of assistive devices for developing countries focused on using indigenously available raw materials such as bamboo and leather, and reusing disposed items such as old car tires and water bottles. There can be many environmental and financial benefits of using such materials, but the material selection should not compromise the biomechanical and aesthetical properties of assistive devices - even if they are made for poor people (United Nations, 1997).

Ethics in design is often linked exclusively to environmental sustainability. However, this is only one of many various aspects to consider when it comes to ethical decisions in design. By placing too much emphasis on one isolated aspect – even if it is a very important one – puts us at risk of neglecting the bigger picture. We can, for example, not refuse to produce prosthetic legs for underprivileged children even if the production of any device - regardless of the choice of materials and production methods - will to some extent have an environmental impact. The social aspect of sustainability must also be considered.

The Moderation Orientation

The Moderation Orientation refers to temperance, humility, and balance in the conduct of the leader. “It may be expressed as leaders’ self control, their ability to restrain emotions and personal desires, humility, as well as careful and wise attempts to find a balance between (ethically neutral or positive) organizational objectives and stakeholder interests (e.g., between financial profit and socially responsible investment, between short-term and long-term objectives, between organizational and team interests). ” (Eisenbeiss, 2012, p. 797). The conditions for doing PD in Cambodia imposed great challenges. The project had though time constraints and a tight budget. In addition to language barriers, cultural difference had to be understood and dealt with (Hussain, Sanders & Steinert, 2012). Khmer culture has a strong social hierarchy and it was necessary to find ways of adapting to this system while also leading the project and making sure that all participants were able to participate. Staying balanced and being patient in this context was very important. In Cambodia, showing anger or annoyance is disliked. You should not lose your own face or make others lose theirs. Hinton (1998) defines face as “[...] a sociocentric self-image that is based on the evaluations of others and shifts along an axis of honor and shame” (p.101). As a PD practitioner, it was my responsibility to allow all participants’ voices to be heard. I was also responsible for not letting the voices of marginalized children to be ignored. Staying dedicated to this mission while also respecting

the hierarchy related to age and gender, required being careful when challenging the views of people further up in the hierarchy without offending them. Notions of temperance, humility and balance may vary across cultures. The Moderation Orientation must therefore always be evaluated within the cultural context of the design project.

4. Recognizing and enabling designers as ethical leaders

The case study shows that PD requires much more ethical awareness than to simply get informed consent from participants. Even though I was working in close collaboration with participants, I was the one that had to ensure that all ethical aspects were considered. There is a need for a leader that takes charge over the design process, makes sure that each member of the team is given opportunity to contribute with his or her knowledge and skills, finds the right pace for the progress of the project, ensures that user needs are fully researched and considered, and that all facets of ethical issues are dealt with in the entire process. This is the core responsibility of a designer and should not uncritically be delegated away to participants or left to chance.

It can be argued that this responsibility can be administered by a facilitator and does not require a leader. However, the word facilitator does not capture the overall responsibility over the design process and its outcome that PD practitioners have. In earlier work, the importance of empowering participants has been highlighted (Hussain, 2010; Hussain, Sanders & Steinert, 2012). However, also designers need to be empowered to overcome hazards in complex design projects and to fight for social innovation. Titles and choice of words are not insignificant. By recognizing designers as ethical leaders, we contribute to empowering them to take leadership and ensuring that informed ethical decisions are made.

To address some of the misconceptions about leadership in design, four basic guidelines for ethical leadership in the context of design processes are specified:

1. Being an ethical leader is not contradictory to being part of an interdisciplinary design team where also end-users participate.
2. Being an ethical leader does not imply that one should act as an authority or an expert in all domains. Users are experts about their needs and lives. The skills and knowledge of other stakeholders participating should also be recognized.
3. Being an ethical leader does not mean that designers have the exclusive right to make decisions. Involving end-users and other stakeholders makes no sense if participants are not given real opportunities for influencing the design project.
4. It is the designers' ultimate responsibility to ensure that ethically informed decisions are made in all phases of a design project. Hence, designers should act as ethical leaders and evaluate decisions from the viewpoint of the Humane Orientation, the Justice Orientation, the Responsibility and Sustainability Orientation, and the Moderation Orientation (Table 2).

Table 2. Ethical leadership in design. Note that the table does not present an exhaustive list of questions that can be asked.

Orientation	Relevance for design	Questions promoting ethical reflexivity
Humane	To treat participants with respect and dignity.	<ul style="list-style-type: none"> • What will be the most rewarding ways of organizing participation both from the perspective of participants and designers? • Is the welfare of participants compromised for the sake of participation? • How should participants be reimbursed for their participation? • Are the participatory methods used in line with the skills and competencies of the participants?
Justice	To not discriminate against people.	<ul style="list-style-type: none"> • Are social, cultural, and religious needs taken into account in addition to the financial and functional ones? • Are user needs uncovered and analyzed without prejudice?
Responsibility and Sustainability	To not design for only immediate benefits but to also analyze and reflect upon the long-term consequences of a design project and its outcome.	<ul style="list-style-type: none"> • Is environmental, financial, and social sustainably evaluated holistically? • Do the decisions made benefit users without unjustly compromising the rights of others?
Moderation	To practice ethical leadership in a balanced manner and to be humble and patient.	<ul style="list-style-type: none"> • Are designers acting in manners that make project participants perceive them as humble and balanced? • Are project participants and other experts listened to? • Are conflicting interests dealt with in a balanced way?

For enabling designers to become ethical leaders, proper training is needed. Bucciarelli (2008) argues that educational institutions must prepare engineer students for the social, organizational, and political complexities of practice. Adding a course about ethics to the curriculum is not enough. Rather, there is a need for a fundamental shift in how technology development is taught. Design education should prepare future designers for dealing with ethical dilemmas. For further research it is, therefore, important to conduct more case studies that identify common ethical dilemmas in PD and analyze their influences on the design process. Based on the findings, methods for ethical decision making in PD should be developed. Such methods should incorporate the orientations for ethical leadership framed by Eisenbeiss (2012). Furthermore, they should promote reflectivity and be applicable throughout the design process and not just be indented as evaluation methods to be used after project completion.

5. Conclusions

Greater user involvement in design also entails greater responsibility for having ethical awareness and to make sure that participants are treated rightfully. In this paper, it is argued that the role of designers in PD projects should be extended to also encompass ethical leadership. When working for social innovation, PD practitioners cannot only be facilitators. They also have to act as leaders working towards ethical goals and influencing others in ethical manners. Based on this argumentation, we have presented a first approach to developing a framework for ethical leadership in PD. The proposed approach builds on Eisenbeiss's (2012) outline of ethical leadership with division into four categories: (1) the human orientation, (2) the justice orientation, (3) the responsibility and sustainability orientation, and (4) the moderation orientation. The framework is a useful starting point for developing a methodology for ethical leadership in design. Such methodology is required in design education for preparing future designers to deal with the challenges of the real world.

6. References

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