**Towards Ethical Principles for Participatory Design Practice**

Janet Kelly

Product Design Department, Glasgow School of Art, Glasgow, United Kingdom

167 Renfrew Street, Glasgow G3 6RQ, [j.kelly@gsa.ac.uk](mailto:j.kelly@gsa.ac.uk), +44 (0)141 566 1134

Towards Ethical Principles for Participatory Design Practice

The aim of this paper is to identify what kinds of ethical issues practitioners have to consider in participatory design practice and use these to inform a set of ethical principles which can be used to guide practice. It begins by discussing the ways in which participatory design as a discipline has engaged with ethical issues in the past and looks at how other disciplines have identified ethical principles to support ethical practice. It then draws upon interviews with researchers who have experience of collaborative and participatory design projects in order to identify ethical considerations that they have encountered in their work, and uses these to propose a set of ethical principles. Finally, it ends with a discussion about how a principles approach can be combined with other approaches, such as the cultivation of virtues, in order to support ethical practice in Participatory Design.

Keywords: participatory design; ethics; design practice

**Introduction**

The topic of ethics, which has not in the past been formally included in many design educations, can be intimidating for practising designers and design researchers. It is a subject with many levels of abstraction and is also associated with bureaucratic ethical approval processes, which can be perceived as hurdles to overcome rather than ways to support the design process. However, ethics are intrinsically involved in engagement with the world, including participatory and collaborative design projects. In these projects, not only do designers have a responsibility to ensure ethically positive design outcomes, but they also take on a commitment to empowering the people who may be impacted by those outcomes in the design process, and a responsibility for the treatment of those people during their participation in the project. Therefore, as designers increasingly engage in these kinds of project, it is important that they are fully prepared to be able to recognise and address any ethical issues that may emerge.

The aim of this research has been to identify what kinds of ethical issues practitioners have to consider when doing participatory design (PD) and use these to inform a set of ethical principles which can be used to guide practice. In order to do this it examine what could be considered the ‘everyday ethics’ (Banks et al 2013) of implementing participatory design processes. This includes looking at how situations that may require an ethical judgement emerge in the pragmatic planning and implementation of projects, as well as exploring how practitioners navigate a range of considerations in these situations. It will do this by drawing on interviews with design research practitioners who have engaged in participatory and collaborative design practices.

# Ethics in Participatory Design

Participatory Design (PD) began as a politically motivated approach, which aimed to promote workers’ rights through processes of mutual learning, and to design technologies for the collective good (Kensing & Blomberg 1998, Floyd et al 1989). In the early projects, ethical concerns were intimately intertwined with political concerns, and issues with an ethical dimension such as ensuring projects made a difference were identified as important, alongside promoting workplace democracy by working with trade unions to prevent the deskilling of work (Ehn 1993). Furthermore, the core tenets of PD included the goal to improve the quality of work life, which has a clear moral dimension, as well as more practice-oriented principles such as having a collaborative orientation and an iterative process (Blomberg 1990).

Challenges implementing PD project outcomes in the face of existing power structures led to a debate about management involvement in PD projects. This centred on the issues of whether management involvement would be positive by increasing the likelihood of project outcomes being adopted, or whether it would negatively allow the voice of the workers to be overpowered (Kensing & Blomberg 1998), which can be seen to be both a political question in that it explored which structures would support the greater good, and an ethical one of where power should be distributed and how good could be created. Furthermore, Markussen (1994) highlighted that the ethical issues around power did not just concern management inclusion, but also related to the role of designers and the power delegated to them in projects, arguing that designers needed a more comprehensive dialogue to account for the dilemmas they faced in relation to this.

As PD has evolved there has been a move away from a distinctly political focus. This has happened for various reasons including both the waning power of trade unions and also an expansion of the application of the approach beyond the workplace. Although it no longer specifically focuses on workers, PD has retained the core principle that those who will be most affected by a design should be included in the design process (Segalowitz & Brereton 2009). Furthermore, over time the conviction that the participation of users and other stakeholders during the process is important to ethical and socially responsible design practices, has gained support in the wider design community (Melles et al 2011, Christiansen 2014, Salvo 2001, Keinonen 2010, Sanders and Stappers 2008). As a result, designers and design researchers who are concerned about the ethical validity of their practices, look to incorporate collaborative and participatory aspects into the design processes they are involved in (G. Melles et al 2011).

Steen (2012) has suggested that this shift from politics can be seen as a turn towards ethics and argues ‘currently the task of PD- to promote democracy and to empower people – seems to be each project- team member’s individual ethical responsibility’ (949). This can also be seen as a move away from collective action towards ethically motivated individual action and with this an increased responsibility has been placed on the ethics of the practitioner (Steen 2014). Furthermore, as PD has moved beyond the workplace, practitioners have begun working in contexts that can be regarded as more sensitive, in that they might involve participants who are vulnerable physically, mentally or emotionally, or may involve working with communities with complex social dynamics. These new contexts have provided new ethical challenges in terms of the design of project activities and methods, (Crabtree et al 2003, Dawe 2007, Kelly 2013) and in some cases, have even called into question the value of participation when weighed up against the potential harms (Marti and Bannon 2009).

The move into medical and social care contexts has also meant many PD practitioners increasingly must work with the formal ethical approval processes of organisations such as the British National Health Service (NHS). While at the same time formal engagement with research ethics has become a greater priority at many of the academic institutions that PD researchers and practitioners are associated with. While these formal processes are put in place both to protect participants and support researchers, most are derived from very different disciplinary stances than that of PD and design, which means that participatory design practitioners can struggle to reconcile their approach with the structures these procedures impose, and also to articulate the ethical aspects of their work in relation to them. With the turn towards the individual practitioner's ethics, combined with increased engagement in formal ethical approval processes and the sensitivity of new PD project contexts, there is a need now more than ever not just for a more comprehensive dialogue around ethical dilemmas, but also to identify ways to support ethical practice.

# Supporting Ethical Practice

Normative ethics is the branch of philosophy which studies ethical action and the considerations around how one ought to act. There are three main branches of normative ethics, two of which, according to Sweeting (2015), are quite problematic to apply to the context of design. The first of these, 'deontological ethics', emphasises predefined duties or rules as a means to define moral action, but design problems according to Rittel and Webbers (1973) 'wicked problem' definition, do not have definitive solutions nor can they be right or wrong, and therefore are difficult to apply rules to. Similarly, every design problem and context for design is unique (Buchanan 1992) so practitioners will be frequently encountering novel ethical situations (Stahl 2014) for which it may not be clear in advance how to predefine rules for right and wrong behaviour. This is also part of what makes the second branch of normative ethics 'consequentialism' problematic to apply to PD, as consequentialism argues that morally just actions are those that have good outcomes. While the nature of design practice is to reflect on and explore potential the consequences of design decisions, the complexity of PD contexts and the extent of the possible outcomes, each of which will usually have both positive and negative consequences, impacting on different stakeholders in different ways, means that a purely consequentialist approach seems to offer little guidance to practitioners.

According to Steen (2012, 2014), the one branch of normative ethics which can offer a more useful lens through which to support practice in PD is ‘virtue ethics’. Virtue ethics puts emphasis on the relationship between an individual's character and their actions as being central to ethical reasoning (Warbuton 1992). Being virtuous can be understood as having a disposition to perform actions and have the feelings that are an appropriate response to a specific situation, being neither excessive nor inadequate (Annas 2014). Virtue ethics allows for creative exploration and personal growth, and puts emphasis on learning to live better through reflecting on your own actions and learning from the virtuous behaviour of others. For practitioners with a design background the cultivating virtues could also mean building upon their design expertise, including the imaginative thinking which is central to both design and moral reasoning (Fesmire 1999, Johnson 1985), and the practice of ethical reasoning which is intrinsically involved in design thinking (Lloyd 2008, Sweeting 2015).

According to the Stanford Encyclopaedia of Philosophy (2003), applying the lens of virtue ethics does not necessarily mean that all other normative ethical concepts must be reduced to the terms of virtues and vices. While many professional organizations look to virtue ethics to inform guidance put in place to support ethical practice, it is common to provide of a set of ethical principles as part of this guidance. These offer an analytical framework through which to explore ethical considerations and to support decision-making and should not be seen as a set of universal rules, but rather as tools to help practicing professionals reflect on the ethics of actions. According to the World Health Organisation (WHO 2009) the most commonly identified principles relate to individual autonomy, beneficence, non-maleficence and justice. However, many disciplinary organisations have their own principles tailored to the focus of the discipline’s practice. For example, the principles promoted by the British Psychological Society cover issues such as ensuring Scientific Value and Social Responsibility, as well as Respect for the Autonomy and Dignity of Persons, and Maximising Benefits and Minimising Harm (BPS 2014). While the UK Economic and Social Research Council has a total of six including two which relate to research integrity and research independence which are deemed of particular importance to that field (ESRC 2015).

The British Psychological Society argues that due the variety and complexity of approaches and contexts for human research, it is important to have these are left as higher level principles as opposed more to detailed rules as this.‘Locating the responsibility for developing adequate ethics protocols firmly and squarely with researchers themselves can be achieved by appealing to explicit, core principles at a sufficiently high level of abstraction that the likelihood of individual cases falling outside of them is minimal’ (BPS 2014). These kinds broad ethical principles give researchers the freedom and responsibly to develop ethical protocols and practices in response to specific contexts. A set of ethical principles for PD could help to broadly guide practitioners to identify what ethical issues are and how a virtuous practitioner might address them, while still relying on their experience and judgement to identify what is most appropriate in the unique contexts that they are working in.

# Practitioner Interviews

In the next part of this paper I will attempt to identify what ethical principles for PD practice might look like by examining some of the ethical considerations that practitioners have when doing participatory design. I will draw on the situated experiences of PD practitioners to ensure that these principles focus on the kinds of situations and issues that are actually encountered in PD projects. In order to do this interviews were conducted with eight researchers who have experience working on PD projects in areas such as healthcare, social care and embedded community projects. Each interviewee had a design background and between two to over ten years’ experience in participatory or collaborative projects.

Of the eight interviewees, at least half had some kind of formal education about ethics, but this was generally restricted to a one or two-day long course on ethics as part of either their Masters or PhD, with the exception of researcher T who had also taken part in training on ethics provided by the NHS. Other ways of learning about ethics that were mentioned included literature, primarily from social sciences rather than design, and working with more experienced colleagues. Nevertheless, most indicated that the majority of their understanding of ethical practice came from personal experience as well as what they had learnt from engaging with formal ethical processes. All the interviewees had experienced applying for research ethics approval at an academic institution, and a further five had some experience of applying for ethical approval from the NHS. In order to maintain the anonymity of the project participants that may have been mentioned or described in the interviews, the researchers names are also being kept anonymous here and they will be referred to by a single initial from their name in the following text, these are C,N,G,R,M, S, L and H.

The interviews were semi-structured and were intended to create a discussion around the researchers understanding of, and opinions about, ethical practice in Participatory Design, as well as having them describe examples of specific situations in their work when they had to think about ethics or make decisions based on ethics. These examples are what could be considered to be ‘ethically important moments’ (Gillam & Guillemin 2004) which are moments which do not necessarily involve ethical dilemmas, as often the right course of action to take is clear, but are rather points when ‘where the approach taken or the decision made has important ethical ramifications,’(p.265) and there is a possibility that it could be done wrong. The interviews were audio recorded and transcribed, and then these transcriptions were coded for phrases that articulated either the researcher's opinion about ethical practice, or examples of specific situations in their work when they had to think about ethics or made decisions based on ethics. From this themes were drawn out.

## Themes from the Interviews

In the following sections four main themes regarding ethical principles and practice which emerged from the interviews are outlined. These themes are framed around the main ethical issues that interviewees discussed and relate loosely to the four ethical principles that the WHO (2009) suggests are most commonly found in ethical guidelines.

### Participation and Consent

Enabling participation was highlighted as one important ethical concern the interviewees had, expressed with the caveat that it should be willing participation. Although all of the researchers explained how they worked with formal processes to obtain informed consent from participants they also recognised that context of the project or other stakeholders could make people feel pressurised into participating. In a case described by M, when working with young people in a classroom context, even though formal consent had been obtained both from the young people and their parents there was one boy who only wanted to participate some of the time.

I remember once going over to him and asking if him if he was ok, and it turned out he didn’t want to participate that day which I said was fine, but then the teacher came over and seemed to take not participating as him being badly behaved.

In this situation the participant had no choice about being in the classroom environment. Even though a consent form had been signed for him the researcher wanted him to be free to choose when to participate in the design activities but there was pressure from other stakeholders that he should participate. Here M ended up having to negotiate with the teacher in order to allow him not to participate. H also argued it is not just pressure from other stakeholders that can force people to participate unwillingly, ‘I’m very good at persuading people, but then I tell myself you can’t do that, you can’t go and try and persuade them. if they don’t want to they don’t want to’. She felt it was her responsibility to recognise and accept when people were not willing to take part and respect it, as she could otherwise end up coercing them.

In addition to ensuring participants were not pressured or coerced, concerns about being able to ensure the quality of consent were also highlighted in the interviews. Informed consent is generally regarded to be consent given based ‘upon a clear appreciation and understanding of the facts, implications, and consequences of an action’ (<https://en.wikipedia.org/wiki/Informed_consent)>. However, in some cases, as the interviewees explained, although it can appear at the project outset that people are willing to participate freely and that they understand the facts and implications of what they are participating in, this is not always the case. For example, L described one project that she had worked on that brought to together business people and designers to use design to incubate new business ideas but some of the business people had a misconception of what ‘design’ meant in the project and so when they became aware that their ideas were not being developed in the way they wanted, they began to disengage. L also explained that she thought that, in novel and emotionally complex contexts, greater attention had to be paid to clarifying the potential implication of participation as participants might not be able to imagine fully how it might impact on them. For instance, she had worked on a project with participants who had experienced perinatal depression, and another with participants who had experienced a miscarriage, in these projects she had put a lot of time into making the participants aware what the project might involve and that it could be a more distressing experience than they might have realised.

### Minimising harm

Another consideration identified in the interviews was preventing harm to project participants. In most of the projects the interviewees had worked on causing physical harm was not identified as a major risk but almost all of them indicated that preventing emotional harm and distress had at some point been a big concern for them. In general, ensuring people were comfortable was a big part of what the interviewees described that they did to minimise the risk of harm. This could mean ensuring participants physical comfort, such as providing accessible facilities to participants with disabilities, or as in an incident described by N, pausing a workshop so that a participant who felt ill could get some fresh air. It could also mean ensuring people did not feel socially disadvantaged or judged in the design of activities, such as a decision G made not to bring women who had not breastfed together with women who had, as she thought this might make the former group feel judged.

For those interviewees who were working on topics that could be considered very sensitive, such as experiences of miscarriage, perinatal depression, or surviving a stroke, there was also an awareness that participants could become distressed during the participatory design activities as it might cause them to relive unpleasant experiences. Here there was a general consensus that it was important when facilitating these activities, to be observant and responsive to the participants’ behaviour. Researcher C described an incident when working with volunteers at a hospice which provided end of life care. ‘There was one woman in particular who I thought, I just got this feeling, she was quite quiet and I just thought I’m not going to ask you that question at this point, then later on as twe had had more of a discussion I felt like ok now I can ask her and she told me she had had cancer herself’. In this case if the researcher had not been cautious she could have put the participant in a situation where she felt very uncomfortable, but she also did not need to avoid the topic, just to wait until the participant was comfortable with her.

On the other hand, some of the researchers were also cautious about a relying too much on their personal experience and instincts in unfamiliar situations. L described a project that she had worked on with women who had suffered from perinatal depression when for the very first workshop they held with the group, they had planned to start with a story-sharing exercise about perinatal depression.

When I look back that was a ridiculous thing to start with because you were completely just jumping straight in, and during that session we didn’t plan to have any councillors or any health care professionals there, it was just to be the women. But as it happened two of the councillors came along because they were in the building and part of the wider project and I am so glad that they did because actually, the women were exploring really difficult, challenging experiences which we weren’t prepared for, or had the experience of dealing with that, or being able to talk to them.

L explained that she felt she learnt a lot from this experience, that now she is much more cautious about reflecting on what is the worst that could happen, and also tries to draw on the expertise and experiences of others before entering a new context.

Interviewees M and H also emphasised the importance of having time to get to know participants in order to build trust and reduce the risk of harm, as this time allowed them to understand the participants and their needs. However, both researchers expressed that taking this time was also very tiring for them. As M described about working in a classroom context with young people:

Trying to reach that level of being relaxed and organic around them but also just being really mindful of how I was speaking to them and trying to adjust for particular participants who needed just a little bit more. For me there was a real kind of performative aspect to that, and actually it was exhausting, it was exhausting and it was really intense.

She felt she had to constantly be aware of what she was doing and saying, responding to the people she was working with and considering in each moment what was the right thing to do.

Other the interviewees also emphasised the importance of having the appropriate support in place for situations where there is a risk that participation could be distressing. For example, S discussed a project she was currently working on with women who have experienced a miscarriage. As part of this project, they have arranged for counselling to be available to the participants both during and after the design events.

The gap that we have identified in the project is that there isn’t enough emotional support in the formal healthcare system. So, one thing we are aware of is that we are inviting people into this process, making them share their experiences then they go out, and if they feel they need support there isn’t any.

S explained how this project had made her aware also that it was important to think about how to negate any harm from the potential long-term impacts as well as what was happening in the workshops.

This was a view that was also shared by R who described potential future harm was why she had chosen to keep participants in a project she worked on with young people in social care anonymous, even though they may have been willing to be photographed.

Yes, we are all in the project and we are all enjoying it hopefully, but if I was a care leaver or I was homeless and in four years’ time I don’t want to identify with that, all that stuff is on the internet. So, if my new employer Google’s me, they are going to find out something about my history I’m not ready to share with them, or actually I don’t want to share with them at all.

Here G recognised that there were potentially long-term harms if she used the young people's images and it was not worth the risk, particularly as she was able to visualise the project in other ways.

### Beneficence

As well as minimising harm for the participants, the researchers also said they felt it was important that participation should benefit them. In many cases the projects they worked were instigated in order to solve an identified need or problem, so potential benefits were clear and participants understood this. However, in some projects the participants would not actually the people who would be the beneficiaries of the outcome, as their contribution is based on past experience, for example the cases of the projects with people who had experienced perinatal depression or a miscarriage. In these cases, the researchers thought that the benefit for these people was that it was an opportunity for them to be altruistic and help others, and therefore it was particularly important to be able to show them how their contribution had made an impact.

There were also cases described in the interviews when the findings and proposals from PD projects were not fully developed and produced. For instance, G worked on a project developing a concept for a system to improve mealtime experiences in hospitals. Although the system was partially developed and had been very positively received, it was not produced for the market as the project ran out of funding and time. In cases like these several interviewees expressed they felt unhappiness and even guilt about the situation, particularly if they believed the proposed outcome could have a positive impact. In most of these cases the researchers were still trying to get the outcomes developed, while keeping participants informed about anything else positive coming out of the project, such as publications. These situations occurred for a variety of reasons in addition to funding or project time running out, such as responsibility for the development being passed on to someone else. Additionally, in one case described by S, it was not possible to produce an outcome because it fell out with the scope of what they had ethical approval for. Another researcher, N, who had been working on a project with NHS ethical approval, further noted how the constraints of working within formal ethical approval processes could prevent practitioners from maximising the potential benefits of the work, ‘if you are working and develop spontaneously an idea you cannot develop it as you don’t have the time to develop things, as the plan has already been pre-approved by ethics’.

Being very transparent about the likelihood of being able to develop outcomes from the outset was one way suggested to negate this problem in the interviews, and another was putting emphasis on maximising the benefits of the experience of participation for those involved. These benefits of the experience of participation included some non-planned for ones such as people making new friends or learning about new ways to manage a medical condition, but many of the interviewees also described how they tried to ensure participants benefited from taking part no matter what resulted as an output. For example, G explained how she used an asset-based approach (Rowland 2008) to ensure that participation was positive. This approach uses methods like asset mapping, which might involve asking people to map things the that keep them healthy and well, and then using these to build ideas on. According to G ‘it’s a good way of framing things so, at the end of the interview or experience, people still feel positive. People do still tell you negative things, but it is in a positive way.’ G felt strongly that this was a way to ensure that participants benefited from the experience of participation whatever the outcome was.

### Power

The final main theme that the researchers discussed involved considerations about power. Most of the researchers expressed that they felt it was their job to empower people who did not have a voice. Therefore, they planned projects right down to the details of the design of tools and materials, in order to give participants control over the situation, and to enable them to communicate and put them in a position where they were treated as experts. The interviewees also described how they had to negotiate different power relationships when working with different groups of stakeholders and identified that facilitation was often key to this, from ensuring different stakeholders had equal chances to speak, to considering how different groups of people were combined to work on a task.

There were also situations described when researchers had chosen not to bring groups together, as they did not believe they could facilitate this effectively and it was better to work with them separately so one group's voice would not dominate. However researcher N described an instance when she was working with people who were recovering from strokes in which, despite a potential power misbalance, she felt it was important to bring in another group.

When I first had the thought to involve the nurses, I had a concern that they would overpower the patients’ voices. So I made sure I said to the nurses that I just wanted them to assist the patients in verbalising, because the thing is patients after strokes they have trouble communicating and it is difficult to understand them, but because the nurses know their patients they know them and what they are trying to say.

Although there was a chance the nurses’ presence would prevent the participants from being critical of the health service, N felt this could be negated by briefing the nurses well, and that this negative was outweighed by the positive of having them there to help the participants communicate more easily.

Additionally, there were times when interviewees felt their own lack of power was ethically problematic. These included situations when they were not able to get the funding to develop a project further, or when working on projects where they were not in control of the set-up and structure and which had aspects they did not agree with. For instance, L described working on one project where it had been pre-arranged in the funding agreement that some participants would get paid and others would not.

Some of the interviewees also argued that when they were in a position of power in projects, it could be just as problematic. For example, R described a project in which at one point she chose to pursue developing a design intervention, even though the project participants had not believed it would work. In the end, R felt the intervention had been a success but was still left conflicted about having done this, ‘I’m saying I’ve done a participatory piece of work, but I’ve made a fundamental decision on my own about how it’s going to work’. In this situation, R made a decision that she felt was in the best interest of the project but felt it was not true to a participatory approach. However, according to researcher S, sometimes the PD practitioner has a responsibility to make decisions for the project.

The researcher is in a unique position where they have an understanding of views from these multiple points and at that stage, if you feel you are able to contribute your own assessment or interpretation of the situation I think you should, there is a responsibility but there should also be space to do that.

According to S, the practitioner is sometimes best able to make the fairest decisions in a project, even if they are making them alone, because they are able to represent a broad range of views and perhaps see possibilities others cannot.

# Towards Ethical Principles for Participatory Design

The previous section outlines four themes that cover a wide range of ethical concerns and considerations that the researchers interviewed encountered in PD practice. From these themes, I will now attempt to develop a related set of ethical principles that could be used to inform ethical practice in PD. I will pay particular attention to the wording of these principles in order to tailor them to the particular considerations that PD practitioners may encounter.

## Principle 1: Free and informed participation

Free and informed consent is an issue that is central to most guidelines for ethical research practice in other disciplines, but it is not something that has been discussed in great detail in PD research. This may be because PD has come from a tradition of supporting people in trying to achieve their own clearly defined goals, often in projects which are at least in part instigated by those participants. However, when participants are not the instigators of a PD project, and also when the goals of the project are not so clearly defined, people’s willingness to take part and their understanding of what participation entails cannot be presumed. Furthermore, the traditions and ethos of PD mean that it is important that practitioners do not just seek passive consent from people, but active *participation,* where participants are enabled and willing to take some ownership in PD projects.

As the interviewees highlighted, in some contexts people may feel pressured by the set-up of the situation or coerced by other stakeholders and authority figures to participate, and even the researchers themselves may, as experts or academics, also represent some kind of authority which may put pressure on the participants. In order to ensure participation is *free* practitioners must try to protect people from these pressures and ensure participation happens in situations and spaces where people are able to opt in and out as they choose, because if participants feel trapped in a situation they can no longer be considered to be there freely.

Also for participation to be *informed* it means making sure people are fully aware of what they are agreeing to and what the potential implications of the project could be, as well as how likely outcomes are to be implemented. This means recognising that design is not a universally understood practice, and participatory design, in particular, is not a term most people out-with the field are likely to be familiar with. Practitioners need to be able to communicate the project details clearly and also may need to take the time to ensure people understand what it will involve before they participate, by asking them to describe it in their own words for example. Furthermore, they also need to do their best to convey any aspects of participation that people might be unaware of, such as foreseeable risks and implications.

## Principle 2: Balancing participation with minimising risk of harm

Although the possibility of physical harm may not be a significant factor in most PD projects, in many cases there may be a *risk* of emotional, psychological or social *harm* to participants, usually due to the nature of participation as a social activity. This harm, as the interviews suggested, can occur both during and as a consequence of a project, and practitioners need to try to recognise how people might be feeling as well as trying to imagine how they might be impacted on by the project. Part of this means practitioners also being aware of the limitations of their own understanding, and drawing on other expertise in unfamiliar and delicate situations. Then, when a potential harm has been identified, projects should be designed to *minimise* this, but it also must be accepted that it will not always be possible to remove risk completely.

Also, while participation can provide many benefits to those taking part, it is important that any potential benefits do *balance* out risk. Practitioners should recognise that the actions that may be best for enabling participation and for the project, may not be appropriate when weighed up against the risk of harm to participants. Sometimes projects must be designed firstly to protect participants and secondly to further the design and participatory aspects, and there may even be times when it is appropriate to step back from participation when the risks of participation outweigh the benefits.

## Principle 3: Maximising the Benefits of the Experience and Outcomes of Participation

There are many potential *benefits* to the participants of PD projects, however one thing that was made evident in the interviews is that it is not always possible to guarantee that the outcomes of PD projects will be produced. It is the nature of design processes that we usually cannot be sure what will result from them, or that what does result will be able to be produced and implemented. Although contingency plans for producing and delivering possible design outcomes of PD projects, can and should be considered by practitioners in the planning stages, the production of design outcomes on any significant scale is usually very complex and often beyond the work of one person. This does not mean that individual practitioners should not take on the responsibility of trying to ensure that successful outcomes of PD projects get produced or implemented, but it is also important that they make it clear to participants from the outset if it is not guaranteed that they will be able to get anything produced.

*Outcomes* also do not just need to be limited to design outcomes. and knowledge generated and relationships formed could also be considered beneficial outcomes. Furthermore, the interviews also showed that the benefits of the actual experience of participation can be significant. Mutual learning through participation has always been central to the approach of PD, and the interviewees indicated that there were also other ways people could benefit from their experience, including developing a greater sense of confidence or well-being, and even just having an enjoyable time. The benefits of both the *experience* and the *outcome*’ of participation are important and practitioners should not necessarily prioritise one over the other but should aim to *maximise* both.

## Principle 4: Supporting Fair and Appropriate Empowerment

Empowering people through the design process is an issue that has always been central to PD and can be seen to form the basis of its validity as an ethical practice. *Empowerment* in PD projects can involve helping stakeholders develop knowledge and skills that place them in a stronger position, but it usually also involves practitioners sharing their own power in the design process by inviting stakeholders to participate. This does not mean that PD practitioners must relinquish all decision making to other participants, and there may be situations where it is *appropriate* for them to make choices themselves, particularly if they are in a better position to see multiple perspectives or development possibilities. As Steen (2012) suggests when considering empowerment as a virtue it means aiming:

For a middle between the deficiency of being passive and hesitant, for example, by abandoning people and ineffectively hoping that they will find out things for themselves, and the excess of being patronizing and directive, for example, by privileging one’s own vision and ways of working and forcing others to comply. (957)

PD practitioners also do not usually hold all of the power in a project and supporting *fair* empowerment can also involve trying to find ways to distribute power more equally amongst stakeholders. This could mean encouraging those who do hold power to relinquish some or creating situations and activities that redefine power relationships, as these are generally situationally dependant. Furthermore, there may even be situations where ensuring stakeholders are fairly empowered might mean that practitioners have to stand up to and challenge people or institutions who hold greater power than they do themselves, such as senior colleagues or funding bodies.

# Cultivating Virtues and Other Ways to Support Ethical Practice in Participatory Design

Having formulated these initial principles, it is relevant to consider again the approach of virtue ethics, as practitioners need to possess certain personal dispositions or ‘virtues’ in order to uphold principles like these. Steen (2012) argues that PD practitioners need to cultivate the virtues of cooperation, curiosity, creativity, empowerment and reflexivity. These virtues can enable practitioners to carry out both successful and ethical PD projects by helping them to engage and empathise with others, share power and crucially to learn from experiences, but the results of this research suggest there may be several other virtues that practitioners also need. For example, in order to ensure informed participation, good communication is an important virtue to possess, so that you can make it clear what participation may entail. Being observant is also important in order to minimise emotional harm, so that you can recognise when someone may be becoming distressed, and determination could be a useful quality when trying to maximise the benefits of participation, in order to push to get outcomes produced. Finally, the virtue of courage may be critical when trying to support empowerment, as practitioners may sometimes need to challenge people who are more powerful and senior than themselves.

Virtues like these are something that need to be developed and cultivated within practitioners and here design education should play an important role. We need to consider how these ethical skills and virtues can be better developed as part of design education and how we can embed ethical issues more explicitly within design curriculums, where ethics is still sometimes neglected currently. Developing educational activities where virtues can be acquired through personal experience is an important part of this, but we can also use examples to help novice practitioners learn from the experiences of others. Slegers et al (2014) suggest that the sharing of ethical stories is a good means through which we can learn about ethics in PD and engaging with such stories would also help inexperienced practitioners begin to develop some of these qualities, without taking too many ethical risks in practice.

Learning from other practitioners’ experiences also aligns well with the casuistic approach that is promoted by the WHO (2009) where case studies are used to identify potential ethical issues at the planning stage of a similar project. This is an approach that can be used alongside a principle based framework, like the one presented here, to help practitioners prepare in advance for the ethical aspects of project work, and could help them engage more easily with formal ethical processes. However, in order to support both the use of ethical stories to develop virtues and to apply a caustic approach in the planning stages of PD projects, we need an extensive body of case studies. The interviews conducted for this paper offered an insight into the distinct characteristics and ethical issues of unique project contexts, as well as how these might be addressed, and I believe the PD research community has a responsibility to produce more accounts where examples of ethical issues that are encountered in PD practice are examined.

# Conclusion

The set of principles I have presented here are put forward very tentatively as a starting point to be tested and further developed. As they are drawn from a relatively limited pool of experiences it is not expected that they will cover every ethical consideration that may be encountered in participatory practice. However, my hope is that they can offer a foundation to be built upon and are able to serve in their current form as a basic analytical framework to help practitioners start to reflect on the ethical implications of their own work, as well as to help them to be as prepared as possible for any ethical issues that may emerge.

When embarking on a PD project, practitioners should be able to identify what ethical issues need to be considered and how to address them. Ethical principles are one way to provide to support in doing this, and may also help when engaging with formal ethical approval processes. However, there is a need for a combination of approaches to support ethical practice in PD and importantly we need to help practitioners to cultivate those virtues which are relevant to ethical PD practice. Here there is an important role both for design education and for the PD research community, who can further support this by providing examples of ethical stories for practitioners to learn from. Having more guidance and support will not only help to improve the quality of practitioners’ decision making but also make them feel more confident and comfortable with handling the ethical issues they encounter.

Acknowledgements, I would like to acknowledge Dr Alison Hay and Angela Tulloch for their input and support during the writing of this paper, and in particular I would like to acknowledge the contribution of the design researchers who shared their experiences with me for this research.

# References

Annas, Julia 2014 Available from <http://philosophybites.com/2014/12/julia-annas-on-what-is-virtue-ethics-for.html> [accessed 10.07 GMT 3rd November 2017]

Banks, Sarah, Andrea Armstrong, Kathleen Carter, Helen Graham, Peter Hayward, Alex Henry, Tessa Holland et al. "Everyday ethics in community-based participatory research." Contemporary Social Science 8, no. 3 (2013): 263-277.

Blomberg, Jeanette L., and Austin Henderson. "Reflections on participatory design: lessons from the trillium experience." In Proceedings of the SIGCHI conference on Human Factors in Computing Systems, pp. 353-360. ACM, 1990.

BPS (British Psychological Society) 2014. Code of Human Research Ethics

http://www.bps.org.uk/system/files/Public%20files/code\_of\_human\_research\_ethics\_dec\_2014\_inf180\_web.pdf

Buchanan, Richard. "Wicked problems in design thinking." Design issues 8, no. 2 (1992): 5-21.

Christiansen, Ellen. "From “ethics of the eye” to “ethics of the hand” by collaborative prototyping." Journal of Information, Communication and Ethics in Society 12, no. 1 (2014): 3-9.

Crabtree, Andy, Terry Hemmings, Tom Rodden, Keith Cheverst, Karen Clarke, Guy Dewsbury, John Hughes, and Mark Rouncefield. "Designing with care: Adapting cultural probes to inform design in sensitive settings." In Proceedings of the 2004 Australasian Conference on Computer-Human Interaction (OZCHI2004), pp. 4-13. 2003.

Dawe, Melissa. "Let me show you what I want: engaging individuals with cognitive disabilities and their families in design." In CHI'07 extended abstracts on Human factors in computing systems, pp. 2177-2182. ACM, 2007.

Ehn, Pelle. 1993 “Scandinavian Design: On Participation and Skill”. In Participatory Design: Principles and Practices Edited by D. Schuler and A. Namioka. 41–78 N.J.: Lawrence Erlbaum.

ESRC (Economic and Social Reseach Council) 2015 ESRC Framework for Research Ethics. [www.esrc.ac.uk/files/funding/guidance-for-applicants /esrc-framework-for-research-ethics-2015/](http://www.esrc.ac.uk/files/funding/guidance-for-applicants%20/esrc-framework-for-research-ethics-2015/)

Fesmire, Steven. "Morality as art: Dewey, metaphor, and moral imagination." Transactions of the Charles S. Peirce Society 35, no. 3 (1999): 527-550.

Floyd, Christiane, Wolf-Michael Mehl, Fanny-Michaela Reisin, Gerhard Schmidt, and Gregor Wolf. "Out of Scandinavia: Alternative approaches to software design and system development." Human-Computer Interaction 4, no. 4 (1989): 253-350.

Guillemin, Marilys, and Lynn Gillam. 2004. “Ethics, Reflexivity, and ‘Ethically Important Moments’ in Research.” Qualitative Inquiry 10 (2): 261–80. doi:10.1177/1077800403262360.

Jackson, Mark. Ethics of Design. In procceding of 2009 ANZAAE conference, Otago Polytechnic, Dunedin. 2009-04-20 - 2009-04-23, pp. 55. 4, http://hdl.handle.net/10292/3903

Johnson, Mark. "Imagination in Moral Judgment." Philosophy and Phenomenological Research 46, no. 2 (1985): 265-80. doi:10.2307/2107356.

Keinonen, Turkka. "Protect and appreciate-notes on the justification of user-centered design." International Journal of Design 4, no. 1 (2010).

Kelly, Janet. (2013) Designing Artefacts that Enquire with Sensitivity. In Proceedings ofIASDR2013, Tokyo.

Kensing, Finn, and Jeanette Blomberg. "Participatory design: Issues and concerns." Computer Supported Cooperative Work (CSCW) 7, no. 3-4 (1998): 167-185.).

Lloyd, Peter “Ethical Imagination and Design.” Design Studies, Values in the Design Process, 30 no.2 (2009).: 154–68.

Markussen, Randi. "Dilemmas in Coopertive Design." In Proceedings of the PDC, pp. 59-66. 1994.

Marti, Patrizia, and Liam J. Bannon. "Exploring user-centred design in practice: Some caveats." Knowledge, technology & policy 22, no. 1 (2009): 7-15.

Melles, Gavin, Ian de Vere, and Vanja Misic. "Socially responsible design: thinking beyond the triple bottom line to socially responsive and sustainable product design." CoDesign 7, no. 3-4 (2011): 143-154.

Rittel, Horst WJ, and Melvin M. Webber. "Dilemmas in a general theory of planning." Policy sciences 4, no. 2 (1973): 155-169.

Rowland, Stan (26 April 2008). "What is Asset Based Community Development (ABCD)" (PDF). Collaborative of Neighborhood Transformation. Retrieved 26 November 2016.

Salvo, Michael J. "Ethics of engagement: User-centered design and rhetorical methodology." Technical communication quarterly 10, no. 3 (2001): 273-290.

Sanders, Elizabeth B-N., and Pieter Jan Stappers. "Co-creation and the new landscapes of design." Co-design 4, no. 1 (2008): 5-18.

Segalowitz, Miri, and Margot Brereton. "An examination of the knowledge barriers in participatory design and the prospects for embedded research." In Proceedings of the 21st Annual Conference of the Australian Computer-Human Interaction Special Interest Group: Design: Open 24/7, pp. 337-340. ACM, 2009.

Slegers, Karin, Pieter Duysburgh, and Niels Hendriks. "Participatory design with people living with cognitive or sensory impairments." In CHI'14 Extended Abstracts on Human Factors in Computing Systems, pp. 49-52. ACM, 2014.

Stanford Encyclopedia of Philosophy. Virtue Ethics 2003 (Revised 2016). “Virtue Ethics “ Available from <https://plato.stanford.edu/entries/ethics-virtue/> [accessed 14.32 GMT 3rd November 2017]

Steen, Marc. 2012 "Virtues in participatory design: Cooperation, curiosity, creativity, empowerment and reflexivity." Science and engineering ethics 19 (3) 945-962.

Steen, Marc. 2014. “Upon Opening the Black Box and Finding It Full Exploring the Ethics in Design Practices.” Science, Technology & Human Values 40 (3): 389–420.

Sweeting, Ben. "The implicit ethics of designing." Relating Systems Thinking and Design 4 Working Paper, Banff, Canada, 2015.

Warburton, Nigel. Philosophy: the basics. Routledge, 2004.

WHO (World Health Organisation) 2009 Research ethics committees: Basic concepts for capacity-building. [www.who.int/ethics/publications/9789241598002/en/](http://www.who.int/ethics/publications/9789241598002/en/)

Wikipedia ‘Informed Consent’ <https://en.wikipedia.org/wiki/Informed_consent> [accessed 16:00 GMT 3rd November 2017]