
Power, Obligation, Design

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Abstract

Recent years have magnified the importance of thinking about power with respect to the design of technology, and provided us with new intellectual tools for doing so, but vitiated some of the force of associated rhetoric behind notions of participation. Two examples illustrate the need to think about both power over and power to when conceptualizing modern participatory design, both within projects and across their larger context.

Power, Obligation, Design

People are drawn to computing, as designers and as users because computing is powerful. As computing and high-technology devices more generally have become not just integrated with life but also with human identity and the fabric of sociality, the powers that they exert and the powers that swirl around them have become more and more prominent as a subtext in research about systems design.

Power is a deeply contested topic, not only in its precedents, manifestations and consequences but also in the conceptualization of its very nature. It was already complex when philosophers were primarily focused on *power over*, or domination, but since the rise of second-wave feminism in the 1960's the notion has been extended (or at least arguments have been made to extend it) to include the examination of *power to*.

The participatory design movement in computation perceived issues of power from the beginning, but was centered largely in Europe and therefore drew more significantly on the European Trade Union movement than on the American participatory design roots in urban planning (c.f. Jane Jacobs and Saul Alinsky). The European participatory design movement was aligned with the concerns of factory workers and even office workers and oriented towards issues of *power over*. It argued for the inclusion of workers in the design of technology. This jibed with the seminal need in the study of computer-human interaction to assert that the human, contrary to the beliefs of engineers, was actually important, so that it was easy for PD to become an accepted thread in computer-human and computer-supported collaborative research and practices.

However, as trade unionism faded, there was less clarity to the direction of struggle or even to the notion of struggle at all in PD. Computers became more

widespread economic propositions and the notion of the “knowledge worker” gained purchase. The notion of participation remained but principled or theory-led participation sometimes dropped out of the picture. Of course, many researchers--primarily European--- and the Participatory Design conference itself continued to struggle with issues of power. But these researchers have not in recent years been in a position even to insist that the term “participatory design” be used as a term of art. Instead, it is often used to mean little more than a synonym for involving users in some capacity. Furthermore, while post-structuralism brings many wonderful components to design and design-thinking, it is not a stance that prioritizes or even recognizes power relations.

More recently, changes in corporate monetization practices have made the consideration of power even more complex. Extensive data gathering and information mining mean that the significance of the information that the user reveals to a system may not be understood by the users or even by the designers themselves.

Having said this, how does the participatory designer position him/herself?

Some PD researchers, at Aarhus, have recently advocated “values-led” participatory design, which proposes explicit agreement on values as the key feature in establishing equity [1]. They promote the method that does this and tout its advantages. I appreciate their position. I applaud their methods and their successes. They do not use the word “power” explicitly in their writing, but this approach is part of a shift towards the consideration of *power to* (in contrast with *power over*). Power to, for example, create technologies that embody values that transcend the vision of people as entirely driven by monetary concerns or such engineering values as efficiency, optimization and so forth.

But I am quite concerned that the claim of generalization, the claim that leading with emergent values is *the* key to participatory design, is too confining. It puts participatory design in the small overlap between the fact of participation and those particular values that are jointly articulated in the limited context of the project. This is too narrow -- it should be in the larger circle that includes multiple forms of participation and people’s deeper lived values. At the very least, an analysis of *power to* needs to acknowledge and confront *power over*.

But this, of course, leads to “uncomfortable” participation. Let me illustrate this with two examples from my research on participatory design of educational technology in the United States¹:

First, I recall a teacher who told me that she knew that the mathematics teaching methods that we were advocating would be better and more successful for children struggling to learn than what she was doing. However, she could not try something different with children until the approach she was currently using worked, even if it did not work as well as the one we were asking her to try. She could not take a “risk” — it didn’t matter if all of her students failed, or even if the “risk” was one her own school had promoted and said that they wanted. Her first (incomensurate) priority was to the pre-existing, officially proscribed approach. In fact, the school wanted both things at once from her. Explicit agreement, so helpful in acknowledging and promoting *power to*, would render her vulnerable to *power over*.

Here’s another more fraught case: A number of years ago, I glanced at a headline in local newspaper just as I was about to talk with a school district administrator. The story was about a 12-year old who was being charged with murder because of a school fight. Perhaps my face fell a bit because it was such a sad thing and so compounded, but I attempted to get down to our more direct business, and just said in what I hoped were normal, friendly tones, “Good morning. How are you?” She stared at me balefully for a bit and replied, almost shouting, “You’re just a northern white liberal, aren’t you? You don’t understand. You’re not from around here. This is a *bad* kid, a *bad* kid.” So while I was there looking for that small overlap between the fact of participation and those particular values that are jointly articulated in the limited context of the project, I was obliged to acknowledge the larger context. And, of course, this larger context was not entirely independent of our goals either at the level of co-participation or at the level of the meaning of the systems we were building since promoting science inquiry -- the particular educational project we were working on -- promotes a deep understanding of

¹ I myself was drawn into computing because I perceived its potential to democratize public education in the United States, to rectify some of the inequity in a notably unequal and indeed unjust system. I have engaged in numerous co-design and participatory design projects with teachers and in classrooms over 25 years.

systems. For me, someone who understands systems deeply is unlikely to characterize a 12-year old as fully responsible for his actions apart from the system that he finds himself within, and thus this drew the circle well beyond the narrow overlap of participation with respect to one educational experiment in classroom science enquiry.

Yet, I have always believed that participatory design could take place even under such conditions and such fundamental differences. These experiences and others led me to propose what I call the design tensions framework a few years ago [2]. The framework puts principles and values in the bucket with other factors and provides a gentle structure that allows the designer to explain the position that s/he is taking with respect to issues of power, culture, and even alienation. The nature and kind of participation is itself a value among other values. This framework could be used with participants, but it is not intended for participants. It is intended for the designer him/herself to think out what his/her power is and what his/her obligation is.

The attraction of computing in some sense lies in its inherent power, both over and to. When I came up with the design tensions framework, I was thinking about how to navigate meaningful participation towards design action even when there are conditions of deep conflict and little power. The question was what could we devise that *satisficed*, to use Herb Simon's term, satisfied each goal enough for something to happen. I thought that it was consistent with participatory design, and I still hope that it is.

Acknowledgements

To be provided

References

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