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# Computing Professionals for Social Responsibility: The Past, Present and Future Values of Participatory Design

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## ABSTRACT

Values play a central role in technology design. But beyond acknowledging the politics of technology, questions remain around where those values are coming from, which values we need, and how they play out and shape the socio-technical systems we create. New challenges such as the climate crisis and societal polarization call for technologists to become part of the public and political arena. This results in a new sense of responsibility, but the closing of CPSR, the Computing Professionals for Social Responsibility, has left a gap. Today, across tech workers, academics and computing professionals, there is a renewed sense of urgency for engaging the public and politics to change course in how computing shapes society.

What should a CPSR for the 21st century look like? This interactive workshop aims to re-invigorate the debate around values and social responsibility in Participatory Design with special attention to the Latin American context.

## KEYWORDS

values, social responsibility, values in design, values-led participatory design, CPSR, professional responsibility

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## 1 INTRODUCTION

"*Values are the facts of the future*" [9]. Technology is always implicated in claims of values and creates technological artifacts with explicit or implicit moral intent [9, 13, 27, 32]. Drawing on Rokeach [22], Iversen et al. define human values as 'enduring beliefs that we hold concerning desirable modes of conduct or end-states of existence in different situations, societies and cultural contexts' [17]. Values are understood to transcend the moment, but they are subjects to shift over time, re-align in context, and are embedded into normative ethical frameworks of which individuals and societies may be more or less aware. Social psychology instruments measure the degree to which individuals and groups hold particular values based on universal theories and models of human values [25, 26]. Value-sensitive work in design takes a broader perspective on values [3, 13, 14, 17, 27]. The last decade has seen an increasing focus on values in computing within PD [15, 17, 18], HCI [14, 27, 28] and other areas [2, 12, 27, 31].

Participatory Design has always been driven by a commitment to concrete values, such as workplace democracy and empowerment, and a sensitivity to the nature of values in the design process [19]. Beyond that need to be sensitive to values articulated in approaches such as Value Sensitive Design [14, 20], PD recognizes values as a resource to draw from in the design process [15]. Some have even argued that 'values should be the engine that drives the design process' [17]. Iversen et al. suggest that it is precisely the attention to values that constitutes what counts as Participatory Design: "PD is about negotiating values - a 'moral proposition' [4] realized through participation" [17]. The CHI 2017 "Values in Computing" workshop resulted in a manifesto calling for the explicit and intentional consideration of the values that manifest themselves in every aspect of computing [10]. Data Feminism takes an intersectional approach to the question of who gets included in dominant forms of producing and communicating knowledge [7, 8]. Design Justice principles have been developed through a network

of designers and organizers in order to focus on the distribution of harm and benefits during design while also seeking their more equitable redistribution among various groups of people [5]. These actions align with similar movements, including the Tech Workers Coalition's consideration of labour politics [1], Platform Cooperativism's intervention on ownership models [23], and Decolonising Design's offering of non-western and pluralistic understandings of design politics [24]. It also connects to the agendas of organizations such as the long-standing Electronic Frontier Foundation and the recently established AI Now Institute.

It is clear that different value propositions lead to different designs [11]. In fact, the needs of communities marginalized through a lack of meaningful participation may find their way through explicit expressions of alternative sets of values that in turn provide a foundation for alternative participatory design efforts [9]. For many in computing and participatory design, a commitment to values then goes beyond acknowledging that values matter in the design of technological futures. What is needed is a way to debate and shape value propositions, and effective ways to materialise these propositions in the design of technology. Today, there is a renewed sense of urgency across tech workers, academics and computing professionals that beyond instilling mere awareness of values, the world needs a shift towards sustainable and just modes of living, with attendant impact on design and computing practice.

The moral intent of PD highlights that the PD community has also been closely attuned to the social responsibility of designers and computing professionals, with the conference series itself initiated by the Workplace Project of the Computing Professionals for Social Responsibility organization (CPSR) [29, 30]. Indeed, the loss of the CPSR [6] has left a gap. This has been partly filled by academic work on values, but without the outward-looking sensibilities of a professional organization. But the challenges of politics in PD are systemic effects that no single company, university or person can address as an entirety, even in substantial teams. Instead, the interactional effects of extractive capitalism and human domination are revealed as a global challenge to manage. PD's advantage in this recognition is that it has always seen itself as a collaborative project. We have the skills to bring the needed consortia together.

At a time when intersections in automation and AI agendas, social justice and climate emergency are inspiring researchers of all types and temperaments to write passionate appeals for change (see, for instance, World Scientists' Warning of a Climate Emergency [21]), is it time to revive the activist wing of PD with a new structure for public and political engagement? This interactive workshop aims to re-invigorate the debate around values and social responsibility across disciplinary boundaries in the Latin American context. Its opening questions address the intersection of values, PD and responsibility:

**Who has what responsibilities related to values in computing today?** Where are the boundaries, connections and overlaps in value responsibilities across designers, academic researchers, tech workers, community organizers and other stakeholders? Whose values are marginalized how? What can we learn from CPSR?

**How do we handle values critically in PD research and practice?** Beyond a call to be sensitive, and methods to support sensitivity, PD must also face how marginalization, coercion and false consensus play out on the level of values. How do existing

approaches to PD account for this? Does this present a challenge to PD practice and research? How can computing professionals and academics support those affected by computing in emancipating themselves from the values embedded in computing?

**What should a CPSR for the 21st century look like?** The CPSR wound down over a decade ago. Today, it appears more needed than ever. What could such an organization achieve? What should it be like? How could it come to be?

The workshop discusses collective action and professional activism; the history of CPSR and PD; representation, participation, and organization; narratives of values; legitimization and marginalization of values; the greening of values; values conflicts in PD; decolonisation and plurality of values, social and ecological justice values in PD; PD and the politics of knowledge [16]; and specific projects, especially within a Latin American context.

## 2 WORKSHOP FORMAT

This full-day workshop is built on three principles:

**Situated, local & inclusive.** The location of PDC in Latin America provides an unprecedented opportunity. We situate the discussion in the Latin American context and conduct a multi-lingual workshop. The organizing team includes fluent speakers of English, Spanish and Portuguese who support this process. In addition, we bring in a Latin American speaker to talk about social responsibility. In line with the efforts of PDC making the conference pluricultural and plurilingual, the workshop will follow a plurilingual model, and participants receive support in this effort. We may speak different languages during the workshop, but the outcomes will be joint. Facilitators support the process of knowledge integration and translation.

**Interactive.** We keep presentations to a minimum; ensure all participants have time to review the materials upfront; and organize most of the workshop into interactive sessions with concrete prompts and goals.

**Tangible outcomes.** In particular, the workshop aims to establish a set of principles, stakeholders and concrete action items for community organizing, potentially leading to founding an organization that could become a CPSR for the 21st century, or to better coordination among existing initiatives if that is preferred.

Before the workshop, we will reach out to related community organizations to include their voices where desired via sharing materials and statements and remotely linking participants. We will ask prospective participants to submit a 2-page position paper in English or Spanish that outlines a concrete case that speaks to responsibilities and values; a historical view on CPSR; a reflection or critique of current positions or practices; or a personal interest statement.

In the morning, we discuss the position statements in subgroups to arrive at small-group synthesis reports presented back to the workshop. In the afternoon, we begin with two invited talks - one specifically from a Latin American perspective, and one that gives a historical perspective on professional responsibility and the CPSR. These talks set the scene for a focused period of working groups centered on two types of tangible outcomes. One will focus on producing a values mural. The other will focus on producing a vision, draft principles, stakeholders and concrete action items for

community organizing. This group will split into sub-groups to discuss principles, stakeholders, existing communities and voices, and outreach strategies, and will produce as output a vision document and action strategy.

### 3 BEYOND THE WORKSHOP

We consider it vital that the workshop is a stepping stone towards a continued, sustainable engagement. With whom, and how, is open for debate. We come prepared to take the outcome forward. The forming of an organization is only one possible outcome. Aside from the vision and actions for professional responsibility, we will organize a special issue starting from position papers and morning discussions.

### 4 ORGANIZERS

*Christoph Becker* is an Associate Professor at the Faculty of Information, University of Toronto. His research examines the role of human values in computing, the politics of systems design, and the social and cognitive processes of judgment and decision making in systems design.

*Ann Light* is Professor of Design and Creative Technology at the University of Sussex and Professor of Interaction Design at Malmo University. She has been working at the intersection of values, participatory design, future-making and technology in various combinations for over 20 years.

*Christopher Frauenberger* is senior researcher at the HCI Group, TU Wien, Vienna, Austria. His research focuses on designing digital artefacts in participatory ways. Drawing on philosophy and other fields he investigates the complex, real-world relationships between humans and technology.

*Dawn Walker* is a doctoral student at the Faculty of Information, University of Toronto. Her research focuses on values and social transformation in the design of web decentralization projects.

*Victoria Palacin Silva* is a doctoral student at LUT University, Finland and a research affiliate at University of Helsinki. She co-creates technologies and physical data experiences with and for communities, using technology to amplify people's agency and voices.

*Syed Ishtiaque Ahmed* is an Assistant Professor of Computer Science at the University of Toronto. He conducts research in the intersection of HCI and ICTD. His research focuses on the challenges around 'voice' which he defines through access, autonomy, and accountability.

*Rachel Charlotte Smith* is Associate Professor at the Dept. of Digital Design and Information Studies at Aarhus University. Her research focuses on relations between people, design and digital technology in participatory processes of social transformation and future making.

*Pedro Reynolds-Cuéllar* is a doctoral student at the MIT Media Lab. His work focuses on participatory technology design, the development of new design frameworks, and the study of ancestral technologies in Latin America.

*David Nemer* is an Assistant Professor of Media Studies at the University of Virginia. He is a Brazilian ethnographer who conducts research at the intersection of STS, HCI, and ICTD. His fieldwork covers Brazil, Cuba, and Mexico.

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