

Editorial for the workshop “Toward a Typology of Participation in Crowd Work”

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Introduction

The present collection of papers forms the proceedings of a full day workshop on the topic “Toward a Typology of Participation in Crowd Work”. The workshop took place in conjunction with CSCW 2016 on February 28, 2016, in San Francisco, California, USA.

Participants were invited to examine different types of participation within crowdwork, levels of interaction, and to formulate a typology of participation in crowdwork described in terms of power and relations. The workshop was motivated in a need to understand power relations within crowd production and to examine how different tools handle participatory processes in the crowd. Modern technologies such as social media foster new kinds of collaborative information

production and crowd activities. Those kinds of production offer new potentials for transformative developments in government, work life, science, and emergency response. But nevertheless, current platforms for participation have not solved many of the typical problems regarding participation, such as lack of representativeness and flawed deliberative processes. The goal of the workshop was therefore to better understand the complex relations within crowd production and to examine how technology can foster or limit participatory processes in the crowd.

Contributions and influences of (types of) crowds

We begin with a focus on the workshop contributions that emphasized the contributions of crowds, and the influences of crowds.

Collective action

Hansson et al. (2016) applied Marxist theory (Marx, 1844) to analyze four potential types of alienation in six large-scale internet-mediated crowdsourcing websites: alienation between producer and consumer; between producer and product of the producer's work; between crowdworker and self; and between crowdworker and other crowdworkers. In crowdwork, Hansson et al. found four types of relationships that may operate in unitary or overlapping configurations: crowd capitalizing (in which individuals work in isolation); crowd instrumentalizing (in which individuals work with awareness of the work of other individuals); crowd deliberation (in which individuals are seen as experts and work with governing bodies); and relational crowd (in which individuals work in mutual knowledge and communication in a public sphere). Future work will examine how these different configurations interact with democratic ideals, such as transparency, inclusiveness and accountability.

Davidson (2016) also examined relationships between individuals and groups in the context of crowdfunding. He provided an example of how relations in the crowdfunding context take place in overlapping configurations, from a one-off opportunity for exchange of monetary support to an opportunity for stronger relations between a founder and a committed crowd allowing users to participate more actively in the production process. Similarly, Xia and Huang (2016) explored the question of why people participate in crowdwork in the set of cases in which there is no monetary incentives. They proposed that non-funded forms of crowdwork partake of components of both collective intelligence and collective action. Ljungberg (2016) took up similar questions in health-related crowd activities, describing collective action for social good. JafariNaimi (2016) used design criticism to ask similar questions of civic participation, focusing on the physical space and geographic social ties.

Aitamurto (2016) examined the definition, promise and challenges of crowdsourced democratic deliberation in open policymaking (Aitamurto and

Landemore, 2016). Crowdsourced democratic deliberation combines the fundamental features of both crowdsourcing and democratic deliberation, that is, self-selection, knowledge search and the ideals of democratic deliberation. Aitamurto found that while crowdsourced democratic deliberation holds the promise to scale deliberation to the masses, there are several challenges, including the lack of legitimacy of the self-selected, biased crowd.

Types of Crowds

Some of the preceding studies could be understood to refer to particular types of crowds. Others seemed to apply quite broadly. In this section, we focus on the workshop contributions that moved toward analytical decompositions of different types of crowds.

Kelty and Erickson (2016) analyzed 102 websites designed for internet-enabled participation using a prior dimensional analysis of participation (Kelty et al., 2014) that described seven dimensions of participation: Education (provision of knowledge); Goals (direct democracy); Resources (co-construction of resource(s)); Exit (voluntary action); Voice (making "one's voice heard"); Metrics (measure impact of one's activity); Communication ("subjective, affective connection to a collective"). They concluded that there were two major modes at work in these organizations: Radical-direct mode, which emphasizes goal-setting, voice and autonomy of participants; and Experiential-affective mode, which emphasizes experience, affect, education and belonging.

In earlier work, Thom-Santelli et al. (2009) tried to distinguish between the wisdom of a poorly specified and generic "crowd," vs. the wisdom of each person's personal crowd or crowds, using a framework of partitioned crowds in organizations. Moncur has also considered distinct crowds for particular persons, using a concentric containment framework for internet notifications. In the workshop, Muller et al. (2016) continued this thinking about distinct personal crowds by distinguishing among different types of person-centered micro-crowds (social-network friends, managers, and people who report to the same manager) in a large-scale social network analysis of employee engagement in IBM.

Cities and Publics

Public or civic crowds pose new challenges to developing taxonomies of crowds, in part because of the diversity among people.

Poblet and Fitzpatrick (2016) compared crowd-work cases of isolated, hierarchically structured micro-tasking vs. the more collective, less structured domains of collective innovation, emergency response, and multiplayer online gaming. They propose further study of the leadership and management issues in these contrasting attributes of diverse task-oriented crowdwork.

Clark and Brudney (2016) studied risks of overuse of citizen-services coproduction capabilities by a self-selected subgroup of citizens called "frequent

flyers"-- i.e., people who contribute to civic discussions much more frequently than the majority of their peers (Sharrock 2010). They found that this subcrowd of frequent participants is generally representative of their communities, and that the practices of frequent flyers may be socially (i.e., communally) shared, thus further breaking down barriers and distinctions between frequent fliers and other groups of citizens.

Penadés et al. (2016) took up an old PD question of effective citizen participation in government decision-making -- now with a focus on emergency-planning. Emergency management is often analyzed in terms of four cyclic phases: planning, responding, recovering, and preventing. Most CSCW and CHI work has focused using citizen information during the phase of responding during the emergency (Palen et al., 2007; Poblet and Fitzpatrick, 2016; Starbird; Sutton et al., 2008), or issues of two-way communication during the responding phase (Hughes). Penadés et al. turned to crowd and sub-crowd phenomena in the more deliberative and potentially more democratic phase of planning.

Finally, Shaffer (2016) extended questions of public participation directly into policy-making, focusing on the case of effective and on-going citizen participation in open data policies.

Online activities

Østerlund et al. (2016) explored the seeming lack-of-fit between situated learning in communities of practice (e.g., Lave and Wenger, 1991), and the very limited opportunities to observe other people's activities in distributed groups of citizen scientists (Wiggins and Crowston, 2012). Using Sørensen's analysis of types of presence in learning (2009), they uncover diverse forms of learning in the crowds that are configured by online spaces of citizen science.

Conclusion

To conclude, the workshop papers examines different types of participatory process, in crowd work such as crowdfunding, crowdsourced policymaking, crisis management, citizen science and paid crowd work. The scope of the papers span from workshop contributions that emphasize the contributions of crowds, and the influences of crowds; their relations, and incentives such as social ties and shared physical space, towards a more analytical decompositions of different types of crowds. Diversity, as a promise or a challenge, was another important aspect of the crowd especially in the context of citizen science, e-government and public policy-making.

Overall, these articles contribute to giving us a better vocabulary when examining and developing different types of participatory process in crowd work, especially relations and power dynamics within and beyond the crowds.

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