
Standing on the Shoulders of Giants: Exploring the Intersection of Philosophy and HCI

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ABSTRACT

The aim of this one-day workshop is to provide a forum for HCI researchers to discuss a wide range of issues at the intersection of philosophy and HCI. The participants will reflect on how philosophy influenced the development of HCI in the past, how philosophical insights are being utilized in current

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HCI research, and how philosophy can help HCI identify and address the emerging challenges facing the field. The main objectives of the workshop are to bring together HCI researchers interested in philosophy and produce an agenda for future research bringing HCI and philosophy closer together.

CCS CONCEPTS

• **Human-centered computing** → **Human computer interaction (HCI)**.

KEYWORDS

HCI; philosophy; phenomenology; feminism, existentialism; philosophy of technology; authenticity; givens of existence

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Sidebar 1: Key topics

The key goals and topics of this workshop are:

- (1) Describing and reflecting on existing philosophically-informed HCI research.
- (2) Identifying emerging phenomena, issues, and challenges in HCI, addressing which would benefit from engaging with philosophy.
- (3) Considering how we can practically learn and “do” philosophy. For instance, how might we explicitly meld traditional HCI methodology stemming from disciplines like psychology with philosophy?
- (4) Asking what philosophy means for understanding stakeholders and for design of interactive systems.
- (5) Developing how can we make philosophy in HCI more accessible.
- (6) Outlining an agenda (or agendas) for philosophically informed HCI.

INTRODUCTION

Philosophy is a vital partner in HCI’s evolving research. Phenomenology and pragmatism [13, 28, 36] have been crucial perspectives on how we navigate, experience, understand, and judge the world around us and its artifacts. Increasingly, HCI scholars have sought to use philosophy’s program of answering what it means to live a “good” life [14] to investigate the ethical and moral implications of the technologies we design. As philosophy in its many forms continues to open up new influences and our relations with technology broaden, we believe it is timely to have a meta-discussion about what links philosophy and HCI. As we understand it, philosophy’s strength lies in its diversity, depth, and interpretive flexibility. This workshop will sustain this thread, bringing together HCI scholars—junior and experienced—who have been drawn to philosophy, by creating an inclusive space to discuss how to understand it, carry it forward, and tell it as part of HCI’s story. With activities around key topics (Sidebar 1), this workshop seeks to make philosophical approaches more accessible and demonstrate how they can be generative for the CHI community.

BACKGROUND

Phenomenology and pragmatism have figured prominently in HCI. For instance, Winograd and Flores [36] and Dourish [13] describe, in Heideggerian terms, our given attitudes towards artifacts in the world, “present-at-hand” and “ready-at-hand,” and Schön [31] uses it as the basis for his analysis of design and reflection. Merleau-Ponty’s phenomenology [29] for reflecting on how our bodies interact [34] with the world has inspired design for embodied perception [35]. In contrast, McCarthy

and Wright [28] draw from the models of action and meaning making of pragmatist philosophy of Dewey and Bakhtin to reflect on users' lived experiences.

HCI has become increasingly concerned with political, ethical, and metaphysical dimensions of research. With this shift, other fruitful stances are now informed explicitly and implicitly by critical theory and philosophy, such as aesthetics [2, 16], post-colonialism [18], feminism [6, 24, 30], and utopianism [7, 12, 27]. Some aspects of activity theory [22] have been influenced by Marxist philosophy. The EthComp conference series directly addresses ethical issues of technology, and work on the ethics of designing draw on a range of philosophical positions to critique ICT systems as a cultural phenomenon, from Heidegger [23] to Butler [24]. Philosophy and HCI have been successful allies in diverse domains—post-phenomenology and design [14], virtue ethics and health informatics [9], and ethics and ICTD [12]. This work has opened up opportunities for HCI to design interventions that tackle broader sociocultural issues.

Existentialism's moral agenda has had renewed interest in HCI. Research has examined the intersection of technology and the existential crisis in post-industrial societies [25] and points to Eastern philosophy as a source of design inspiration [1]. Since technology is a major factor shaping human existence, existential inquiry frameworks drawing from Yalom's "givens of existence" for HCI have been proposed to deal with key existential concerns [21]. Lastly, a design approach for authenticity was proposed that draws from Kierkegaard's existential philosophy and writing strategies detailing diverse, sometimes opposing, "spheres of existence," or ways of living to humanity's full potential [33].

Overall, this move towards melding philosophy with HCI is indicative of greater discussions around Humanistic HCI [3], post-modernism [10], and death [11]. Indeed, past workshops collectively speak to this—the workshop topics this proposal's co-organizers have been involved with include somaesthetics with movement-based interaction design [17]; feminism with identity [20] and interaction design [8]; humanities and HCI [5]; and quality, value, and ethics in design [26]. Moreover, philosophers like Peter-Paul Verbeek and Richard Shusterman now directly engage with HCI scholars and practitioners through keynotes, workshops, and joint publications [15, 32].

"Humanistic HCI" is a systematic and multi-faceted agenda of humanistic contributions informed by humanistic epistemologies and methodological rigor. Yet these contributions are not always as visible as they might be, and cooperation between the humanities and HCI research is often hindered by disciplinary language games. In an era of disciplinary realignments, workshops such as the one proposed assert our shared humanistic approaches and values in an open-ended and epistemologically pluralistic way [3, 4].

ORGANIZERS

The workshop organizers are experts in HCI and have engaged deeply with philosophy.

Norman Makoto Su is an Assistant Professor in the School of Informatics, Computing, and Engineering at Indiana University Bloomington. His research interests lie in HCI and CSCW. Integrating humanistic and empirical methods, his Authentic User Experience lab characterizes the relationship of technology with subcultures and designs systems to support their notion of authenticity. He has organized workshops at GROUP 2018 and CSCW 2018.

Victor Kaptelinin is Professor of HCI at Umeå University, Sweden. His research interests include HCI theory, activity-centric computing, and robotic telepresence. He has organized workshops at DIS 2014, CHI 2015, and ECCE 2017.

Jeffrey Bardzell is Professor of Informatics at Indiana University's School of Informatics, Computing, and Engineering. He is known for his work on interaction criticism, aesthetic interaction, critical design, and design creativity. He has organized workshops at CHI, DIS, CSCW, NordiCHI, Aarhus Conference, British HCI, PDC, EPIC, ACE, 2007-2017. He was also a panelist on the CHI2012 panel "The humanities and/in HCI."

Shaowen Bardzell is Professor of Informatics at Indiana University's School of Informatics, Computing, and Engineering. Bardzell's research explores the contributions of design, feminism, and social science to support technology's role in social change. She has organized workshops at CHI, DIS, CSCW, NordiCHI, Aarhus Conference, British HCI, PDC, EPIC, ACE, 2007-2017, including two workshops on feminism, gender, and interaction design at ACM CHI2011 and CHI2014. She was also a panelist on the CHI2012 panel "The humanities and/in HCI" and CHI2018 panel "Extending conversations about gender and HCI."

Jed R. Brubaker an Assistant Professor in Information Science at CU Boulder. As a social computing scholar, he runs the Identity Lab where he studies how identity is designed, represented, and experienced in socio-technical systems. He has co-organized workshops at CHI, CSCW, and ICWSM.

Ann Light is Professor of Design and Creative Technology at the University of Sussex. She specializes in the social impact and ethics of technology. Her design work concerns innovation in social process, social justice and sustainability, researched using participatory methods. She has been involved as organizer and participant in over 25 ACM workshops over her career.

Dag Svanæs is Professor of Interaction Design at the Norwegian University of Science and Technology. He has 20 years of experience applying phenomenology to HCI. His research interests include embodied interaction and design, exergames, participatory design, and HCI theory. He has organized workshops for NordiCHI, Nordes, Dagstuhl, and CHI.

WORKSHOP STRUCTURE

The main objective of the workshop is to facilitate a collaborative effort directed at identifying key issues at the intersection of philosophy and HCI, revealing the diversity of perspectives on these issues, and outlining a tentative agenda (or agendas) for future research. We also hope that the

Activity Timing

9:00–10:00	Opening presentation and ice breaker
10:00–10:30	Coffee Break
10:30–11:30	Position papers discussion
11:30–12:30	Working groups: Position statements and abstracts
12:30–1:30	Lunch
1:30–2:30	Working groups: Provocations
2:30–3:00	Coffee break
3:00–4:30	Guest speaker dialogue
4:30–5:30	Concluding session and follow up planning
6:30–8:00	Off-site dinner

Sidebar 2: Working group topics

- (1) Identifying specific emerging challenges in HCI that are particularly well-suited for philosophical insights. This will also involve identifying particular schools of philosophy or philosophers.
- (2) Describing the epistemological concerns in pairing philosophy with traditional HCI methods. How does one do philosophy and HCI without devolving into piecemealism [3]? How can the humanities/philosophy and HCI “walk alongside” each other?
- (3) Outlining ways that philosophy can help us better “understand users.” Philosophy can be seen as a lens into how humans act and think but does this make it useful for elucidating “users?”
- (4) In what ways can philosophy help us with design? Philosophy may be appropriated by researchers/designers—how might this productively inform design?

networking and connection opportunities the workshop provides will help build a community of scholars interested in HCI and philosophy. Past HCI workshops have sympathy with philosophy but few, to our knowledge, have made the diverse ways HCI and philosophy intersect a central and *explicit* topic. The workshop will be a one-day event comprising various types of participants’ activities, such as small-group and general discussions, not a “mini-conference.” Participants will be selected on the basis of their position papers (2-4 pages). A website (<https://authentic.sice.indiana.edu/philosophy-hci-workshop>) will host detailed information about the content and organization of the workshop. Below is the plan:

Pre-workshop Plans

In advance of the workshop, we will deploy a short (~5 mins) survey to map out participants’ perspectives, preferences, and challenges with HCI and philosophy. This will also enable participants to shape the topics that will form the basis of group activities in the workshop. The survey will be administered individually, e.g., via Google Forms or Qualtrics, before the workshop. All position papers will be made available on the workshop website.

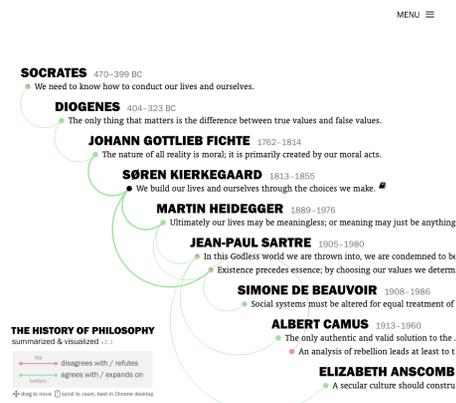
Workshop Activities

In addition to groupwork and discussions, we intend to invite a guest speaker whose expertise lies in philosophy and can comment on a broad range of understandings (e.g., continental vs analytic philosophy). The organizers have past experience inviting outside scholars (e.g., Shusterman) to HCI workshops. The workshop will have the following structure (see left-side for timings):

Opening morning presentation by organizers and an ice breaker activity. After a few opening words by the organizers and a round of brief self-introductions, we will discuss participants’ responses to the survey. The aim of discussing the results of the survey in the beginning of the workshop is threefold: (1) it will provide a general frame of reference for the activities that will follow; (2) by making explicit the diversity of positions in the general area of “philosophy and HCI,” we want to facilitate participants’ engagement in dialogue with people having different opinions; (3) it will help the participants identify likely minded people and thus support small-group and general discussions during the workshop.

Presentation and discussion of position papers. Based on the position papers and survey responses, organizers will pre-identify cross-cutting themes of interest and thematically schedule short presentations (~5 mins) by participants that outline their perspectives. The time allocated for presentation and discussion of position papers is deliberately limited to place more emphasis on discussions as well as group work.

Participants will break up into working small groups centered broadly around the topics in Sidebar 2 derived from the set of key topics listed earlier in Sidebar 1. Note that these topics will be iterated upon once position papers and survey responses have been received.



Possible tool to visually facilitate conversations regarding connections between philosophers of interest to HCI during the workshop:
<https://www.denizcemonduygu.com/philo/browse/>

Lunch in small groups

To ensure continuity but to also add some levity to the activities, small groups will continue discussion based on the questions and problems outlined in the morning session. Participants will be encouraged to talk about their experiences with philosophy and how their research intersects with it.

Dinner together off-site

Participants will be encouraged to network and socialize in an off-site dinner with organizers and the guest speaker.

Each group will develop a set of *position statement(s)* to address the topics at hand. Position statements will take the form of a possible *journal paper abstract*. These position statements will make progress towards the workshop's goal of outlining a future agenda for philosophy and HCI.

We anticipate that participants will be able to flexibly switch between groups to ensure they can engage with more than one of the topics listed in Sidebar 2.

Working groups to develop a set of provocations for guest speaker dialogue. Participants will also break up into small groups to develop a set of *provocations* for the guest speaker, a philosophy expert versed in bridging disciplines. These provocations will be presented to the guest speaker (see next section). Provocations are meant to provoke dialogue, introduce controversial statements, teach philosophy, and envision the future of philosophy and HCI. Participants will continue discussions during lunch.

Afternoon guest speaker dialogue. To encourage a lively discussion and provide everyone exposure to the guest speaker, a dialogue event will be held in the afternoon. Organizers will identify common themes across position statements and provocations. The guest speaker will have an opportunity to examine these common themes before the dialogue to prepare responses.

Select participants will *present* provocations and position statement to the guest speaker. An organizer (a different one for each provocation/position statement) will facilitate the discussion between the guest speaker, presenter, and all participants. Measures will be taken to ensure that junior participants are encouraged to speak and engage in the workshop.

WORKSHOP CONCLUSION & POST-WORKSHOP PLANS

A wrap up session will integrate the guest speaker dialogue, position statements, and provocations to initiate a SIG on "Philosophy and HCI" and put together a special issue of an HCI journal (e.g., *TOCHI* or *Interacting with Computers*). The expected output of the workshop will be a set of hypothetical abstracts from each participant of an article they might submit to the journal and a statement regarding the scope and goals of the special issue. The special issue will be widely announced, so that researchers who cannot attend the workshop will be able to submit their papers, as well.

CALL FOR PARTICIPATION

Philosophy has provided a vital perspective for HCI on how we navigate, experience, understand, and judge the world around us and its artifacts. Lately, HCI scholars have also sought to use philosophy's program of answering what it means to live a "good" life to investigate the ethical and moral implications of the technologies we design. As philosophy in its many forms continues to open up new influences and our relations with technology broaden, we believe it is timely to have a meta-discussion about what links philosophy and HCI. As we understand it, philosophy's strength lies in its diversity, depth, and interpretive flexibility. The goal of this one-day workshop will be to sustain

this thread by bringing together HCI scholars who have been drawn to philosophy to develop a shared agenda on how to understand it and carry it forward. Attendees will discuss their experiences with philosophically-informed research, epistemological and practical concerns when pairing philosophy with traditional HCI methods, and how philosophy can help us understand and design for users.

We invite interested researchers to submit a 2–4 page (excluding references) position paper in the CHI Extended Abstracts format that addresses the key topic(s) of the workshop, listed on the workshop website: <https://authentic.sice.indiana.edu/philosophy-hci-workshop/>. The paper should also include a short author biography that includes current research or potential goals of research. Submissions (PDF format) should be sent to normsu@indiana.edu and will be reviewed based on relevancy to the workshop. At least one co-author of each accepted submission should attend the workshop.

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