"Grand Visions" for Post-Capitalist Human-Computer Interaction

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Author Keywords

Post-capitalist HCI; Post-capitalism; Post-barter; Grand visions; Late capitalism; Science fiction;

Introduction

The design, development and deployment of new technology is a form of intervention on the social, psychological and physical world. Whether explicitly intended or not, all digital technology is designed to support some vision of how work, leisure, education, healthcare, and so on, is organised in the future [11]. For example, most efforts to make commercial systems more usable, efficient and pleasurable, are ultimately about the vision of increased profits as part of a capitalist society. This workshop will bring together researchers, designers and practitioners to explore an alternative, post-capitalist, "grand vision" for HCI, asking what kind of futures the community sees itself as working towards. Are the futures we are building towards any different from those envisioned by Silicon Valley entrepreneurs, which are typically neoliberal, absent of strict labour laws, licensing fees, tax declarations and the necessity to deal with government bureaucracy?

Recently, Reeves et al. identify two types of future envisioning; 1) those based on extrapolation or

"projection" from the current state, where our vision of the future is based on detailed knowledge of the past, and 2) grand visions that serve as waypoints for us to work towards. Reeves et al., conclude that envisioning in Ubicomp and HCI research is almost entirely of the "projection" variety, and there are few grand visions presented [16].

With this workshop, "by announcing one or more grand visions of the future, we seek to direct present actions in such a way as to make it come to pass" [18]. We are specifically interested in exploring grand visions of post-capitalist computing, in explicit contrast to what we see as a prevailing implicit vision of neoliberalism in HCI. This workshop will:

- Explore the above assertion that the mainstream HCI community is oriented around neoliberal capitalist visions of a hi-tech future.
- Serve as an opportunity to present alternative world visions, towards which HCI researchers can orient their work.
- Facilitate the establishment of a supportive community of researchers, whose work is already (explicitly or implicitly) anti- or post-capitalist.
- Support new and existing scholars in considering the implicit values of research in HCI.

Background

Jameson [10] suggests that, *"It is easier to imagine the end of the world than it is to imagine the end of capitalism."* This statement rings true if we consider themes of popular modern films and television, which are much more likely to deal with zombies, plagues, volcanoes and earth shattering meteors, than utopian visions of egalitarian societies. It also resonates with the motivations behind much contemporary technology development. New technology is typically proposed as a way of cutting costs, removing or lowering the need for human work, increasing the reach of goods and services, disrupting inefficient industries. Even instances where technology is designed to bring joy, support or comfort, it is still justified as being good value for money, or intended to form part of a product ecosystem. For example, the SpaceX Mars colonisation vision[1] proposes it is a good opportunity for real estate investment. It is rare that technology is envisioned, without that vision being constrained and framed by how it will be paid for. This constraint to the capitalist system has potential to impact upon the most vulnerable of society, such as those reliant on state welfare, those who have limited financial resources, and those who have been forced to migrate. Moreover, it is very rare to see technology designed towards a future in which making money is not a key concern – it seems to be currently beyond our collective imagination. However, this was not always the case, and much energy and scholarship has previously been invested in considering how post-capitalist societies may function, and how technological infrastructures may support them.

Historical Context of Post-Capitalism
Post-capitalism is the proposal of a socio-economic model that completely replaces capital as the primary method of organising society. This idea is not new - Marx and Engels wrote at length about the destruction, replacement or evolution away from capitalism towards

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[1] http://www.spacex.com/mars

a society where humans are freed of labour by the technological advances of the time. This work, along with social experiments such as the Paris Commune [19] helped to progress and disseminate understanding of alternate socio-economic systems, such as socialism, communism and anarchism. Each of these represents a specific vision of a post-capitalist society, with their own histories of implementation and evaluation.

During boom periods of capitalism, post-capitalist visions often slip into the background and out of general public discussion. Following economic crises in the global capitalist system, such as the Wall Street Crash of 1929, and the "Great Recession" of 2008, there is increased thought and discussion of how to replace capitalism with alternative socio-economic systems [16]. This reflection of socio-economic systems in popular culture is detailed, as Boyle [3] posits that many recent films that employ the end of the world as a major plot device are exploiting the discourse that the Great Recession was a "once-in-a-century credit tsunami". This discourse was created to portray the boom-bust nature of capitalism as natural and unavoidable, attempting to deter thoughts of post-capitalism [3].

Post-Capitalism in Fiction
Imaginations of a post-capitalist world are prevalent amongst science fiction. For example, *The Culture* series of books by Iain M. Banks describe a utopian society, free from money and reliant only on voluntary labour, with citizens able to indulge in leisure, fluidly switch gender, take drugs and do whatever they wish – all scaffolded by advanced AI systems, massive sentient spaceships and myriad other advanced technologies [1, 5]. Furthermore, *Star Trek: The Next Generation* depicts a post-scarcity utopian socialist society, as Captain Picard describes: *"This is the 24th century, material needs no longer exist […] the challenge, is to improve yourself, enrich yourself, in your eyes"* [20]. Their society is shown in stark contrast to the caricature of hypercapitalism in the cruel and uncivilised Ferengi society. The futures envisioned in works of fiction like The Culture and Star Trek have demonstrably inspired technology researchers to work towards the implementation of individual devices. For example, the hand-held communicator in Star Trek is acknowledged as a major design influence on early mobile phones [22]. It is curious, however, that the egalitarian high tech societies portrayed in science fiction are rarely cited as inspirations for changes in how society should be organised, or for social movements. It appears that, as Jameson [10] implied, these fictional societies may be so different from our current experience that we simply cannot imagine them. Or, perhaps, we have not yet tried hard enough. As pioneering feminist science fiction author Ursula Le Guin reminds us, capitalism's "power seems inescapable; so did the divine right of Kings" [13]. Just as she describes a need of "writers who can see alternatives to how we live now" [ibid] we argue the same is true in our own community.

Post-Capitalism in HCI
Utilising speculation, envisioning and fiction is becoming an important theme in the HCI community, and researchers increasingly contribute speculations on the future of interaction design [4, 15, 23]. Indeed, there is much work that can be described as anti-capitalist, such as much work related to the maker and DIY movements, empowerment of people to encourage grassroots activism, increasing and facilitating civic

participation through technology, and so forth [7, 12, 9]. Importantly these works often imagine how such interventions may fit into the present, or near future, and have a grassroots centred, rather than corporate centred approach. In addition, work such as Light's (et al.) powerful critique of HCI's "bovine design" at CHI 2017 [14] highlight a pressing need for the community to address these questions.

Towards a Post-Capitalist HCI?

The projects mentioned in the previous section are quite subtle. Their values can be read as anti-capitalist, but they often lack a systemic view of the future world in which they see the technology existing and working. In other words, they fall into the 'projection' form of envisioning. There is little systemic consideration of how to hasten the end of capitalism [21, 24], or how technology might support a post-capitalist world in a more holistic way [16]. These are two example types of contributions we are seeking in this workshop.

This workshop will bring together researchers, designers and practitioners in order to undertake speculative design work both for a post-capitalist future, and also in critique of this idea. Much in the tradition of design fiction [15] or experiential futures [6] we aim to design and prototype diegetic objects that help us suspend our disbelief about a future society.

At the same time, the prototypes generated during the workshop will embody each other's ideas and, in turn, facilitate presentation and discussion. Importantly the focus is on things not words – it is not a space to debate philosophies of post-capitalism and HCI, but a space to speculatively design technology which demonstrate these ideas.

Workshop goals and themes

This workshop follows on from the successful "Alternate Endings" workshop at CHI 2014 [15], which explored design fiction as a way to consider implications of HCI work, but raises the stakes to consider visions at societal scale.

We envision this workshop as a gathering of HCI academics interested in design, computer science or the humanities once capitalism is over. Our goals are:

- Create a forum and space to explore the idea and practice of anti-capitalist or post-capitalist work within the HCI community.
- Discuss the challenges and complexity of imagining such alternative futures and the value of this to the community.
- Experience a rapid cycle of generating and prototyping imagined interactive technologies for alternative futures.
- Appreciate and critique a plurality of material outcomes that embody diverse social, political and ethical futures.

In this workshop, we predominantly explore design for and around the concept of post-capitalist futures. This may entail, for example, the design of tools, platforms and approaches to enable or hasten a post-capitalist future, or indeed critical perspectives on the potential dangers of such a future.

Organisers

The organising committee is formed of members with a broad range of experience and expertise, such as investigations of politics, civic engagement, design fiction and interaction design. A number of members have prior experience organising successful workshops at CHI and other venues.

Tom Feltwell is a research assistant and PhD student at Northumbria University, and his research aims to use technology design to counter, critique and expose these issues.

Shaun Lawson is Head of Computer and Information Sciences and Professor of Social Computing at Northumbria University.

Ben Kirman is a postdisciplinary critical and speculative designer embedded within the University of York, UK, "pioneering" design fictioner, and co-chair of the first Fictional Conference on Design Fiction's Futures.

Debbie Maxwell is a lecturer in Interactive Media within the Department for Theatre Film and TV at the University of York.

Conor Linehan is a lecturer in Applied Psychology at University College Cork.

Enrique Encinas is an interaction design fictioner and PhD researcher at Northumbria University. He sometimes acts as Kurt Vonnegut's cyranoid.

Tom Jenkins is a PhD candidate in Digital Media at the Georgia Institute of Technology. His work focuses on the use of research through design to produce technologies that support commoning, particularly in cohousing communities.

Stacey Kuznetsov is an Assistant Professor at the School of Arts, Media, and Engineering (AME). She is interested in how technology can be used to construct shared myths that serve as alternatives to capitalism.

Website:

A website for the workshop is hosted at http://hci.post-capitalist.com, which hosts the call for participation, organiser information, and the workshop outputs.

Pre-Workshop Plans

The workshop intends to solicit 15-20 participants, drawn from the HCI community and other relevant disciplines to explore the workshop's themes. Specifically we intend to appeal to those willing to produce diegetic prototypes (of some form), rather than those who wish to purely discuss these topics. Participants will be invited to choose one of the following submission formats: 1) A standard 2 page ACM Extended Abstract format position paper, where the authors outline their motivations, ideas and potential designs for the workshop. 2) A short video submission (2-4 minutes) describing the authors' motivations, ideas and potential designs around the workshop theme, along with a 1-2 paragraph expression of interest. We don't impose any creative restrictions on the format or content of the video and actively encourage potential attendees to choose according to preference. Furthermore, in supporting both written and video submissions, we hope to welcome those who are confident and comfortable in the use of words or images. The Call for Participation will be published on the website, along with

A Zine of Design Fictions

Artefacts produced during the workshop will be collated in manner similar to the TBD Catalog [17] **(top)**, the Disobedient Electronics zine [9], and The 3D Additivist Cookbook [1] **(bottom)**.
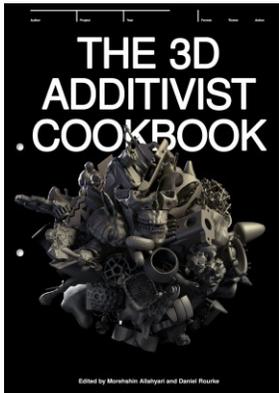
dissemination through relevant mailing lists. It will also be publicised by the organisers through their institutions and professional networks. The submissions will be curated by the workshop organisers.

Workshop Structure

The workshop will be structured over one day as follows:

09:00 – 09:15	Introduction by organisers
09:15 – 10:15	Short presentations by participants
10:15 – 10:50	Form groups, design ideation
10:50 – 11:00	Coffee break
11:00 – 12:00	Making session
12:00 – 12:30	Presentations of initial designs
12:30 – 13:30	Lunch break
13:30 – 15:00	Making session
15:00 – 15:15	Coffee break
15:15 – 16:00	Production of demo-ready prototypes for inclusion in zine
16:00 - 17:00	Final presentations, synthesis and closing

The making sessions throughout the workshop will be group based. We will use an adapted version of Friedman et al's *Envisioning Cards* as a starting point from which to carry out values-centred ideation [8]. The specific approaches and tools used by participant groups will vary depending on the disciplines of the attendees – everything from short stories, to videos, to working technology prototypes fit within the overall idea of diegetic prototypes. To support the design activities throughout the workshop, a number of physical resources will be supplied, such as modelling clay, pawnshop trinkets, sheet metal and plastic bags, as well as electronic prototyping platforms such as Arduino and Raspberry Pi. Overall, the intention of the making sessions is to produce diegetic prototypes (working or not) that embody desired values in post-capitalist computing.

Following the workshop, all participants will be invited to a dinner at a local worker-owned cooperative.

Post-Workshop Plans

The artefacts produced by participants will be collated into a zine, inspired by the TBD Catalogue [17] the 3D Additivist Cookbook [1] and the Disobedient Electronics zine [9] in order to document the design fictions from the workshop. This will be disseminated to each participant's institution, as well as a limited number available to order from the website. The website will also be used to document the designs created, through photographs and narrative pieces by participants. Immediately following the workshop, we will find a suitable space to display the objects, accompanied by author commentary and an overview of the workshop.

The insights gained from this workshop will be used to inform the design of a follow-up workshop, or series of workshops, at other venues and conferences. This will allow us to draw from different groups of people interested in post-capitalism, allowing a broader perspective on post-capitalism and HCI. The artefacts will also be treated as a collection, will be submitted to gallery spaces, presenting the physicality of the objects, as well as opening up the workshop topic to the general public. Furthermore, we intend the collection of produced artefacts to be displayed within the CHI conference, possibly as part of the CHI Art exhibition or another poster/demo session. This would help directly disseminate the results of the workshop to the attendees.

Call for Participation

It is acknowledged that all digital technology is designed, whether knowingly or not, to fit a specific worldview or political stance. For example "sharing economy" services such as Uber or AirBnB, support a Silicon Valley-centric future devoid of state regulation and anti-monopoly legislation. As a community, we must question to what end are we improving the efficiency, efficacy and satisfaction of interactions. Are our goals any different to that of entrepreneurs?

New technology is typically proposed as a way of cutting costs, removing or lowering the need for human work. Yet it is rare to see technology designed towards a future in which making money is not a key concern – it seems to be currently beyond our collective imagination. In this workshop we wish to counteract this. We wish to convene academics, artists, designers, and developers to explore the interstices of HCI and post-capitalism, and design to support and facilitate a post-capitalist future.

We welcome one of two formats of submission: 1) A two-page ACM Extended Abstract format position paper 2) A short video submission (2-4 minutes) along with a 1-2 paragraph expression of interest. Both submission formats should outline the authors' motivations, ideas and potential designs for the workshop. Examples of topics include: tools to enable greater civic participation, technologies and systems to remove corporate/financial influence, how fully automated luxury communism might work, tools to suppress the rise of capitalism, disrupting the marginalisation of vulnerable populations, approaches to encourage communism and the emancipation of big data.

We ask the authors to indicate how many authors will attend the workshop as places are limited. Further details can be found at: hci.post-capitalist.com

Format: Either 2 page ACM Extended Abstract or 2-4 minute video with 1-2 paragraph expression of interest
Submit to: tom.feltwell@northumbria.ac.uk
Deadline: 2nd February 2018
Notification: 22nd February 2018
Workshop: 21st/22nd April 2018, Montréal, Canada.

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