The user in flux: bringing HCI and digital arts together to interrogate shifting roles in interactive media

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Abstract

With the advent of interactive digital media, people are no longer simply 'users'. They actively shift between various roles: author, collaborator, and even performer. We coin the term "user in flux" to problematize static definitions of "the user" and highlight how people's roles and practices switch and evolve when engaged in such interactions. Drawing on participatory practices and seeking inspiration from interactive artists, this workshop explores the "user in flux" with an aim to establish directions and approaches that can revitalize the HCI community's understanding of the user and inform the design of technologies used for interacting with digital media, and promote a new research agenda.

Keywords

User in flux, digital media, participatory art, HCI, user, participatory practice, design

ACM Classification Keywords

H.1.2 User/Machine Systems

Shifting notions of the user

The concept of the 'user', and how we understand, develop and evaluate technology and environments for this user within HCI has been questioned [1]. This concept is particularly problematic when we observe people's interactions with digital media (both offline and online). Besides engaging (traditionally) in acts of passive media consumption, digital media allow people to engage actively in various roles such as those of author, collaborator and even performer. Thus we coin the term "user in flux" to describe people's shifting roles (and practices) during such interactions.

In the world of Web 2.0, for example, through channels/platforms such as Youtube, Flickr, and blogs, people can create "user generated content" individually or in collaboration with others, or collectively transcending geographical boundaries. Furthermore, people can be performers with the ability to reach broad audiences through self-publishing, or via aggregators, reviewers, and recommenders of other similar content. Some can even attain celebrity status through various viral reputation and sharing channels. Yet despite the obvious challenges these phenomena pose to conventional conceptions of the user, there has been little attention paid in the CHI community to understanding, and designing for the user in flux (but see [8, 9]).

But many creative media artists are exploring how different roles, forms of engagement and modes of participation can be facilitated by careful interaction design. For example, they deliberately encourage bystanders to cross the traditional boundaries separating the artist from the audience and the producer from the consumer [4, 8].

Aims & Goals

This two-day workshop takes an innovative approach by bringing together a radically interdisciplinary group of researchers, designers and artist/performers to explore directions and approaches that can lead to a better understanding of this kind of active, engaged user. The aim is to inform both HCI and Arts practice to explore approaches and directions that can lead to a better understanding of this user. In addition, this workshop hopes to promote a new HCI-Arts research agenda centered upon the user in flux.

Researching the user in flux

We argue the need for three inter-related strands of design-led research: (i) empirical investigations of this user in flux, (ii) a broadening of concepts to help articulate the dynamics of the user in flux, and (iii) to understand how interaction designers could better support this user in flux.

Firstly, while there have been investigations focused upon people's practices with digital media, such as photos, music and video [2, 5, 6], and explications of people's use of various media channels and social network platforms [7], we also need to examine how people's practices shift and evolve over their interactions with multiple channels/platforms For example, there is a need to undertake deep and contextualized ethnography-led studies that examine:

- The nature, range, mechanics and dynamics of people's practices

- Motivations that influence people's practices

- User experiences including why and what compels people to traverse different roles

- The influences that support, inhibit, shape people's capacity to shift roles seamlessly

- The nature and extent of emergent social and/or collaborative interactions, and,

- The range and extent of the technology ecosystem involved user-interactions.

Secondly, we need to develop a broader range of concepts to articulate the practices and roles of a user in flux, such as, identity (management, performance), consumption (nature, dynamics), participation (extent, agency), collaboration (with strangers, across channels, multiple media), creativity (what it means to be creative vs the ability to create).

Thirdly, we need to address technology design questions that could better support such users:

- How can we design for more seamful interactions [3] with digital media?

- What are the considerations when people's interactions are multi-modal/media, involving an ecosystem of different devices, channels and services

- How can we support and encourage emergent social and collaborative interactions

The approach of the workshop
In this workshop, we are responding to the need for a broader range of concepts by engaging in discussion with artists such as performers, composers, filmmakers, and DJs who work in advanced ways with digital media. Such practitioners have led the way in leveraging the potential of interactive media technologies to challenge traditional roles of performer/spectator and push the boundaries of authorship and collaboration [4, 8].

Given this, a hands-on workshop format is ideal to introduce the medium of interactive art as a platform to investigate the role of the user in the participatory digital realm. Conducted over two days, it will be an opportunity to engage participants who bring expertise from various domains to encourage dialogue across these disciplines. Thus we bring together (a) members of the CHI design, and user experience communities, (b) performers and artists who craft participatory content, (c) media theorists exploring the role of the user in the digital world, and (d) hardware and software engineers who develop the technologies that facilitate nuanced and intuitive interaction. Through this multi-perspective dialogue we hope to conduct a holistic exploration of how the concept of 'user' can be defined, considered, and targeted when designing for a participatory medium.

Creating a transdisciplinary dialogue
While we will work with participants in the various domains, including interaction design, media art, music, performance, DIY practice, we will specifically target individuals who are active in creative practices or in design research studying participatory dynamics. We will combine methods from the domains of HCI, design,

ethnography and media theory with a practice based approach whereby artists and performers will share works devised to provoke discussion and interrogate the shifting role of the user in digital media. The performances will be presented in a dedicated performance open to the CHI conference on the middle evening of the two-day workshop.

Participatory technology as a tool for discussion and dissemination
Hashtagged 'live tweets' will be collected via dedicated Twitter streams during the workshop sessions and during the evening performance event. The tweets will be codified and revisited at the conclusion of the workshop, allowing our group to work more rigorously on a thematic analysis of the concept of "user in flux" which will be published online at the conclusion of the event.

The use of Web 2.0 technologies allows each participant to register their contributions and make their voice heard, documenting their observations *in situ* during the experience of observing, discussing, and interacting with the artworks being presented as a stimulus for critical thought. The use of Twitter hashtags as a data collection/collation tool, and of the web as a dissemination medium will make the workshop's results available to the CHI community with a high degree of immediacy and accessibility. Using participatory media

to negotiate and refine our findings also permits external community members to comment and contribute, exemplifying how users of content may also take an authorial or collaborative role.

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