From HCI to Media Experience: Methodological Implications

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ABSTRACT

The landscape of interactive technology design and evaluation is expanding. In the past, usability and task efficiency were the main focus for research in human computer interaction; evaluation methods worked from single user data over constrained tasks. This kind of work remains central to our discipline. However, new issues are complicating this scenario. For example, how do we design for quintessentially elusive concepts like “experience”? Especially when that experience is not singular, but social, where data are spread across many people, potentially many platforms and devices, and many settings. Where the lab test cannot shed light on ways that experience unfolds over time. The units of analysis and the data to be gathered are contested. In this workshop we invite discussion of interactive media experience and how to design for and evaluate it.

Categories and Subject Descriptors

A.1 [Introductory Survey]

General Terms

Design, measurement, theory

Keywords

Workshop; design; social media; experience; engagement; methods; evaluation; measurement; amateur multimedia; games

1. INTRODUCTION: FROM INTERACTION TO EXPERIENCE

HCI as a discipline has tended to focus on designing to increase efficiency and reduce frustration at the single user, single interface, or task and session level. However, the advent of internet-based social media, and increasing complexity in digital information itself (conversational interface agents, collaboratively editable video, massively multiplayer online games and self-referential animations and videos at sites such as Newgrounds and YouTube) has signaled a gap in design in and evaluation thinking. Use of rich social media content is not instrumental to another task, as use of a word processor is instrumental to the composition of a legal brief; instead, its

“use” is the social experience it affords, and its ostensible content is often almost incidental. This dynamic can be seen, for example, in the spectacular success of certain viral videos, which can have downloads in the tens of millions, international news coverage, and production and distribution costs approaching zero. The meaning of a viral video is not the information it transmits, but rather how different social networks position themselves relative to it, disseminate it, and iteratively build on its expressive language.

From digital marketing to interactive media, there appears to be a deep shift from interaction with information to experience. Epistemologically, experience is harder to understand, represent, and search than information; these difficulties are affecting most if not all of the information sciences and have wide-ranging implications for IT businesses.

2. ADDRESSING EXPERIENCE

Understanding experience transforms not just research methods, but also the units into which we divide the phenomena we set out to study.

Addressing this shift, in this workshop we address the increasing focus on designing “experiences” – which includes of course characterizing, perhaps measuring, and certainly offering guidelines for crafting compelling and memorable experiences. This shift is reflected in recent publications [3] and in conferences (for example, ACM’s DUX, Designing the User Experience, conference), as well as in conversations and presentations. Recent memes include “experience prototyping”, “experience mining” and “experience analysis”.

Critiques of established HCI practice for addressing this broader notion of experience acknowledge that usability studies have established goals and tried and tested methods for gathering and analyzing data on important issues such as time to task completion, error rates, time to select a target on screen, usability surveys, think-aloud use protocols, etc. However, these methods and measures are not geared to evaluating, reflecting or representing people’s lived *experience* [5]. And we need to account for socially constructed experiences, not for individual reactions to presentations of information; we need to glean a sense of experiences as it occurs across platforms (from desktop to mobile to public spaces), and across physical locations. Video and pervasive game design is one place where the issue of experience design is actively discussed, but even here we see little evidence of systematic game design research, which would include the elaboration of new methodologies and evaluative measures (but see[1][4]).

3. CROSS-DISCIPLINARY EXPLORATIONS

The humanities offer mature critical vocabularies to describe experiences, from the philosophical pragmatism of John Dewey

to the literary theory of Mikhail Bakhtin and Wolfgang Iser as well as the film theory of Christian Metz and Laura Mulvey (see [2]). Common to these approaches is an interpretive examination of the intersections between experiences and aesthetics, often as they originate in complex cultural expressions. Interactive media have become cultural expressions, and our responses to them are often aesthetic. Yet useful as these humanist vocabularies are as tools of criticism, they do not, at least directly, provide means of measurement, scientific evaluation, or prediction.

A major issue, then, is *how to operationalize critical categories into nuanced yet verifiable scientific methods*.

And, on the other hand, we need to *ask how do we make sense of data that are gathered into meaningful reflections of people's experience?* We see use of detailed data from sensors, audio and video recordings, psycho-physiological readings combined with survey, interview and eye gaze data in attempts to characterize common and individual responses to events.

4. WORKSHOP DETAILS

4.1 Workshop questions

In this workshop we invite participants to address:

What is an experience? Where does an experience begin and where does it end? And how do such bounded, singular experiences contribute to *experience as culturally embedded knowing* – which is what people bring to the events and setting we, as designers, are creating and evaluating. As posed above, how can we operationalize critical categories into nuanced yet verifiable scientific methods?

What are the ways in which qualitative and quantitative measures can weave together? What are the challenges we face in mapping data from multiple data sources into a coherent understanding of the user's experience? How do we aggregate disparate data into meaningful units of analysis? And further, what language do we have for sharing our findings about experience?

What skills are needed if one is to be an “experience designer”? It is clear that the kinds of skills required to be an experience designer are not those typically taught in HCI classes where the emphasis is often on (negative) experience prevention, and in the absence of irritation we assume there will be a positive experience. What are required skills as they would be listed on job sites?

4.2 Workshop solicitation and application

Workshop participants will be invited to submit a four-page proposal or position paper outlining their current research areas, and approach to media experience research and design. We will ask submitters to outline their aims and goals, their currently used methods and any limitations of their current methodologies. We encourage submission of novel and innovative methods with some consideration of the underlying inspirations and potential for further development. We will actively solicit cross-disciplinary perspectives. We are particularly looking for artful conceptualizations of methods that yield data that can be gathered to offer cross-setting comparisons.

Submissions will be actively solicited by emailing members of the HCI, CSCW, Pervasive Gaming and WWW communities; by the creation of a workshop specific website for information sharing; and by emails sent to related conference lists.

4.3 Workshop outline

Workshop participants will be introduced to each other before the workshop itself, and position papers made available for pre-workshop reading. Each participant will be asked to summarize the central points of the position paper at the workshop rather than give a long presentation. In addition, workshop participants will be asked to bring some data from an ongoing study, or simulated data reflecting a proposed study. These data will be shared and discussed in terms of the issues that are raised in terms of the project goals, the data collection methods, the data organization and analysis methods and the final outcome of the representation or reflection of experience in the context of the project goals.

We anticipate the workshop morning session to be an introduction and data sharing session, and the workshop afternoon to be a set of methods sharing exercises around a previously agreed upon set of design exercises.

Our intended outcome from this will be to create a repertoire of methods and data analysis techniques that are currently in use and that are being created to address issues in media experience analysis, as well as a list of issues and gaps that need to be addressed in the field. Given our approach is a tool-box of methods approach, we will attempt to also lay out the limitations as well as the benefits of methods. Finally, we will explore the ways in which these newly evolving methods challenge contemporary teaching and data gathering methods within university curricula and within traditional usability laboratory set-ups.

4.4 Workshop outcomes

We propose inviting the best submissions to extend based on workshop conversations for a special issue of a journal. Potential journals include the Journal of Computer Mediated Communication and the Journal of Human Computer Studies. Journal editors will be approached if the workshop proposal is successful.

4.5 A/V requirements.

We require a projector, and extension chords for laptops. Workshop participants will be asked to bring their own laptops for presentations. We would like a set of speakers for showing video clips with audio (these can also be provided by the workshop organizers if necessary). In addition, we would also like 3 or 4 flipcharts and some post-its with markers if possible (again these can also be provided by the workshop organizers if necessary).

5. REFERENCES

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