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Hybrid Events: Mediating Collocated Participation

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Abstract

This workshop invites the CSCW community to explore hybrid events – large collocated events where technology is used to support audience participation. We argue that the technology landscape has changed since the early studies in CSCW towards this context. Therefore, the research foci must similarly change and focus on studying the practices or propose alternative and novel interfaces. This workshop helps the CSCW community to consider the research agenda for the next generation of hybrid event studies. We do this by discussing the open conceptual, empirical and constructive research problems in this domain. Together with the organizers and participants, we seek to develop a research agenda and seek opportunities for further collaboration on the topic of hybrid events.

Author Keywords

hybrid event; collocated large event; event augmentation; mediated communication; collocated computing

Introduction

For years, the CSCW community has sought to improve collocated large events – such as conferences, seminars, classes, festivals – through allowing spectators to participate in the creation of content for the event [3, 6, 9, 14]. These tools, often called “backchannels” or “audience interaction systems”, have provided the audience a

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mediated channel to support their participation. Previous work has shown that these technologies redistribute agency and power in events [3, 6] and allow for new forms of communication to emerge [5, 14, 16, 22]. However, the focus in the research of these tools has often been only in mediated communication only [6, 16] or researchers have exhibited a separation of physical and digital interaction [22]. This workshop invites researchers to revisit this distinction. Instead of analyzing mediated communication separate from the event, we call for analysis of hybrid events, highlighting changes in the communication channels, user roles and event design brought by the technology.

Beyond a scientific motive to improve conceptual tools to study this phenomena, this workshop addresses changes in the technology landscape that has made audience participation easier. Compared with the previous research, today the pervasiveness of smart devices have made it simple and easy to integrate audience participation tools into events, and therefore, allow audience participation. As a result, several commercial services¹ now exist allowing event organizers to rapidly and easily take these kind of tools into use. This development demands a change in the research focus: instead of showing that this can be done, the research can now study emerging uses of these technologies not aided by the researchers. This means that the research should be moving from research prototypes to research product [18]. To support academics in this transition, we believe that future research on this area must reflect aspects such as the emerging social practices or it should focus on improving socio-technical designs of existing systems. To direct the research towards these areas, this workshop seeks to develop a research agenda

¹For example, MentiMeter (<https://www.mentimeter.com/>), Slido (<https://www.sli.do>), Screen.io (<https://screen.io/en/>) and PollEverywhere (<https://www.polleverywhere.com/>).

with conceptual frameworks and research strategies which together will direct academic studies further.

Therefore, this workshop addresses the challenge of technical landscape transformation (i.e., availability of commercial services) through exploring what are the best concepts and theoretical tools available to study social practices and socio-technical designs in hybrid events. Understanding these forms of events is critical as they are a prime example of “same time and place” – quadrant. This become increasingly popular in use, but has seen limited work in the CSCW scholarship [25]. The scarcity of the research further highlights the need for this kind of work and we hope, will drive forward other work in same time and place quadrant.

Previous work

Beyond meetings, seminars, workshops and conferences [9, 14, 15] and classrooms [6, 5, 4, 8, 24, 23], technological augmentation of participation have been proposed to other contexts, including artistic performances [2, 10] and sports events [10, 21]. This shows that these ideas can be used in various contexts, which can only loosely be defined as events. The overall aim in this increasing body of literature is to support live collocated events through technologies which mediated communication and examine the emergence of hybrid events, where both mediated and non-mediated interaction is used to support the event organization and create a venue for development of mutual understanding. This workshop limits its attention to large events, as they provide a specific social context where the interaction occurs and clearer social roles for participants in terms of maintaining the events [7]. Examples of such events include conferences, seminars, classes, festivals. This decisions makes the scope of workshop different from generic collocated situations – already addressed [12, 13].

One aspect in emerging from the particular social context of large events – currently dominant also on the literature on this topic – is distinction of the audience and performers. However, this distinction has been challenged in the studies of interaction as performance, which has focused blended roles, such as audience members who also are actors; spect-actors [11]. This type of changes in events have implications to the social dynamics and must be revisited in the system design.

The distinction of audience and performers is not the only distinction used in the research; researchers still consider mediated event participation through two separated communication channels: digital and physical [6, 14, 22]. However, what if these channels are considered intertwined manner? Remote collaborative work in small groups can become blended interaction if necessarily effort is put into the configuration of the equipment and spaces [1, 19]. Similarly, performers can through their actions seek to integrate both channels to establish one shared performance [15]. These changes may require further facilitation from technologies.

Finally, the previous work of these systems and events does not often have a clear aim for system deployment. However, more recent scholarship has argued that systems can have scaffolding to invite different aims during an event and even focused on changing the use case for the systems during an event [15, 23]. Through these stages, it becomes clear that attempts to participate using mediated technology are value-driven [17] and the values present should be further discussed.

Topics of the workshop

The workshop papers are invited to consider topics of hybrid events through empirical or experimental case

studies, design research or literature reviews and other theoretical approaches. Topics of the workshop include:

- How should we research and understand hybrid events?
 - How do we study multichannel events where interaction takes place across channels?
 - What kind of analytic orientations can be successfully applied to understand participant interactions?
- How we evaluate the success of events?
 - How can we support the creation of hybrid events?
 - How do we generate an understanding of the practices to be supported with hybrid interaction technology?
 - How do we design “the right system(s)” to support hybrid interaction appropriately?
- What kind of technologies (e.g., input modalities and systems) can be used to address these topics?
 - How can novel technologies like machine learning, autonomous agents, voice interfaces, and the Internet of Things help in the creation of hybrid events?
 - How do the emerging practices inform the design of these systems?
 - What kind of novel roles emerge in the hybrid events?
 - How do people organize and manage the complexities of hybrid events?
 - What challenges and benefits hybrid events have for participants?

Workshop activities

This one day workshop will have both pre-workshop and post-workshop plans and a structured collaborative program for the one day activity. We request two projectors to facilitate the use of audience participation tools during the workshop; we will bring other equipment needed to the conference.

Pre-Workshop Activities

Each participant writes a short position paper outlining their work on this topic. We would suggest that each paper makes a contribution to at least two problem types within human-computer interaction [20]: empirical problems, conceptual problems and constructive problems. Therefore, the workshop papers address not only problems but highlight also relationships between problem types. The papers are shared among the participants before the workshop. Before the workshop the organizing committee will identify papers' problem types for further addressing them in the workshop and structure the workshop activities of these workshops.

Workshop Schedule

9am – 11:30am We will introduce the schedule of the workshop and overall topic and approaches. Each participant presents their paper and any issues requiring clarification are addressed. This part of the workshop will be a hybrid event: an audience participation tool is used to further collect articulations of empirical, conceptual and constructive problems in a collaborative way.

11.30am – 1pm Lunch break

1pm – 3.30pm Elaborating the research problems and design space in small groups using the World Café method². Small groups are organized in accordance to the research problem types and each small group discusses the topics and aims to categorize and extend the research problems presented. The group work is facilitated by organizing committee and per world café process, the groups are changed so that each participant contributes to every research problem type.

3.30pm – 5pm Each research problem type is discussed together, summarized and main observations and challenges are outlined. Based on these, a research agenda starts to emerge. Finally, the next steps are discussed and agreed together with the workshop participants.

Post-Workshop Plans

Depending on participants' interest, an opportunity to co-author a research agenda paper and develop a special issue on this topic are potential venues to continue working on this topic.

²<http://www.theworldcafe.com/key-concepts-resources/world-cafe-method/>

Participants

We will allow a maximum of 25 participants. We will select the workshop participants based on the participants' position papers.

The workshop call will be shared in major email distribution lists for both HCI community (such as chi-announcements) and to email lists on fields closely related to this topic (such as AoIR). Furthermore, we will contact authors of recent papers in ACM SIGCHI sponsored conferences relevant to the workshop themes will be contacted.

Organizers

Matti Nelimarkka is a researcher at Aalto University, Finland. His research interests include supporting participation and democracy via technology and interaction of politics and technology. He combines social research with digital, computational and design methods. In the context of this workshop, his previous work have focused to understand the social practices of hybrid events.

Antti Salovaara is an adjunct professor at University of Helsinki, Finland. He studies repurposive appropriation – the processes by which users discover new purposes of use for technologies. This research theme is relevant to also this workshop, since by being interactive open-ended tools, participation technologies offer many opportunities for appropriation.

Giulio Jacucci is Professor at the Department of Computer Science and University of Helsinki. He has been Professor at the Aalto University, Department of Design 2009-2010. His research field and competencies are in human computer interaction including: mediated social interaction, information

seeking and discovery, multimodal and implicit interaction, haptics and tangible computing, mixed reality, and persuasive technologies. He is also co-founder and member of the board of directors of MultiTaction.com Ltd. providing visual collaboration environments through modular screens.

Steven Dow is an Assistant Professor in the Department of Cognitive Science at UC San Diego where he researches human-computer interaction, social computing, and creativity. He received the National Science Foundation CAREER Award in 2015 for research on “advancing collective innovation.” He was co-PI on three other National Science Foundation grants, a Google Faculty Grant, Stanford's Postdoctoral Research Award, and the Hasso Plattner Design Thinking Research Grant. Before UCSD, he was an Assistant Professor of Human-Computer Interaction at Carnegie Mellon University and a postdoctoral scholar in Computer Science at Stanford University.

Joel Fischer is an Assistant Professor at the School of Computer Science, University of Nottingham, UK, and a member of the Mixed Reality Lab. His research interest is in computational methods to support human activities and reasoning in collaborative settings. He is particularly interested in how interactive technology can be designed to support, (or disrupt) collocated people interacting face-to-face. His research approach is multidisciplinary, drawing on ethnomethodology, participatory design, prototyping, and studies of technology deployments.

Louise Barkhuus is an Associate Professor at the IT University of Copenhagen, Denmark. Her research focuses on location-based technology-mediated

experiences, particularly interactive performance experiences. Her area of research also spans issues around social media, such as how social media can support off-line socialization and how location can be used as material for designing social experiences with attention to issues of privacy. Before joining ITU in 2016, she was a visiting professor at Cornell Tech University in NY and before that she held research and faculty positions at Stockholm University and University of California, San Diego.

Kenton O'Hara works in the Human Experience and Design Group at Microsoft Research Cambridge and is also a Visiting Professor in the Computer Science Department at the University of Bristol. His research explores everyday social and collaborative practices with technology with a view to informing design and innovation.

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