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Published version

CIOLFI, Luigina, DAMALA, A., HORNECKER, E., LECHNER, M., MAYE, L. and PETRELLI, Daniela (2015). Cultural heritage communities: Technologies and challenges. In: AVRAM, Gabriela, CINDIO, Fiorella de and PIPEK, Volkmar, (eds.) C&T '15: Proceedings of the 7th International Conference on Communities and Technologies. ACM Press, 149-152.

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Cultural Heritage Communities: Technologies and Challenges

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ABSTRACT

We propose a workshop to be held within “Communities and Technologies 2015”, that will explore the role of technology supporting and mediating cultural heritage practices for both professional communities (cultural heritage professionals, heritage institutions, etc.) and civic communities (citizen-led heritage initiatives, heritage volunteers, personal and community identified heritage, heritage crowdsourcing, etc.). The workshop will discuss challenges and future opportunities for technology use and for design and participatory processes in the context of various heritage communities, and the role of different stakeholders.

Author Keywords

Cultural heritage

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI):
Miscellaneous.

WORKSHOP THEME

Cultural heritage is an established domain of study for human-centred computing - from the design of technological interventions at heritage sites, to the analysis and evaluation of the role of shared and of personal technologies in heri-

tage settings (see for example vom Lehn et al., 2010; Grinter et al., 2002; Brown et al., 2003; Ferris et al., 2004; Damala et al., 2008; Hornecker, 2010; Ciolfi and McLoughlin, 2012). The main focus has been for a long time on a traditional view of heritage, where an official institution offers visitors certain content and interaction for interpretation and education purposes, whilst cultural heritage is a much more fragmented domain where different communities can play a significant role and where new socially inclusive and participative ideas of heritage have become widespread (Simon, 2010). Even within established institutions such as museums, different communities of stakeholders are involved in the preservation, communication and sharing of heritage holdings: from the community of professionals managing them, to the communities of volunteers, of special interest groups and of “friends” and supporters of the institution engaging with them. Technology can feature in a number of activities for all these groups, as well as a tool to support visitors in their experience of heritage (Giaccardi, 2011; Petrelli et al, 2013). Furthermore, there is an increasing attention on civic community-led heritage: tangible or intangible heritage holdings are identified, championed and often managed by civic communities where institutional support is not present through the use of easily available technologies such as social media (Giaccardi, 2012; Weilenmann et al., 2013).

The participation of these various communities takes multiple forms. Ciolfi (2013) identifies a set of open issues related to the “work” of communities in cultural heritage:

- The participation of external communities of interest in acquiring and documenting cultural heritage holdings for museums and other institutions;

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- The participation of various communities of interest in generating commentaries and discussions around heritage;
- The role of civic communities in identifying, preserving and communicating heritage.

Overall, communities of interest around heritage (with different degrees of formality and training) are increasingly defining and taking ownership of what is of value for them, thus defining and reconfiguring heritage. From cases where an established institution and a community of enthusiasts work together to consolidate and communicate heritage to a wider public – for example the successful “Saving Bletchley Park” campaign in the UK¹ where the work of the British codebreakers during the Second World War has been brought to public attention and recognition–, to examples where ordinary citizens create an informal group for the preservation of what they consider to be of value, no matter how local or small – such as the Cassiar community initiative in Canada² for the preservation of the history of a now abandoned asbestos mining town and its people –, we see that community work in heritage creates rich relationships between members and with other stakeholders. The European project “Europa Nostra” (www.europanostra.org) aims to involve citizens in the safeguarding of European cultural heritage. Conversely, established heritage institutions are increasingly open to community outreach (Maye et al., 2014).

In this workshop we aim to discuss examples of such multi-faceted community involvement in cultural heritage and of related technology design and use. Issues that we wish to explore further with the workshop participants include:

- The emergence of communities of interest and of practice in cultural heritage and how technology mediates this;
- Studies of communication and interaction within and among heritage communities;
- Practices of participation and cooperation by heritage communities in technology design;
- Crowdsourcing, participatory science initiatives and community engagement in cultural heritage
- Technology design and evaluation for heritage communities;
- Challenges and opportunities for community involvement in cultural heritage.

¹ <http://savingbletchleypark.org/>

² <http://www.cassiar.ca/>

IMPORTANT DATES

Subject to acceptance of the workshop proposal, a call for participation will be circulated during March 2015. Notification to accepted participants will be sent by early May 2015, in time to allow participants to organize travel to Ireland and to avail of the early registration rate. All the workshop submissions will be reviewed by the group of organisers.

AGENDA

The workshop will run over 1 day. The call will request the submission of short position papers including the authors’ bio sketch. The positions papers will be shared with the group ahead of the workshop. During the workshop, we will foster debate moving away from traditional paper presentations, and by facilitating discussions on shared artefacts. We will invite the participants to contribute to the workshop presenting either posters illustrating a concept/framework, or samples of data collected during fieldwork, or demos/prototypes, and these materials will be the main subject of the show and tell and of the discussion.

In the afternoon session, we will lead more focused small-group discussions on specific questions/issues, and practical brainstorming exercises if the number of participants allows. A workshop blog will be used during these exercises to aid and document the event, and to disseminate results to the wider Conference.

Agenda outline:

09:00-09:30 Welcome and introductions

09:30-10:30 Participants’ show and tell (20 mins each incl Q&A)

10:30-11:00 Break

11:00-12:00 Show and tell ctd.

12:00-12:45 Discussion on main issues emerged, setting agenda for afternoon

14:00-15:30 Hands-on work in small groups

15:30-16:00 Break

16:00-17:00 Groups report back; final discussion and future plans

MARKETING STRATEGY

A call for papers will be sent to the main distribution lists such as CHI Announcements and BCS HCI, and we will also address more recently established communities as for example the EUSSET list, relevant social media outlets (e.g. CHI and CSCW Facebook group, etc.) and our own institutional websites. We will also target cultural heritage forums and lists (such as the Museum Computer Group mailing list and the Museum 3.0 online community) in order to encourage participation from the cultural heritage domain. Furthermore, we will contact directly a number of researchers and designers who are working in this field and

encourage their participation. We will create a workshop website including a blog to share information and increase visibility.

We are aiming at having no more than 10 participants in order to make in-depth discussion possible.

We are planning to produce an edited publication as eventual workshop outcome, thus encouraging participants to join and subsequently submit a contribution for review towards the publication.

CONTRIBUTION TO C&T 2015

We hope to use materials that will be produced during the workshop, such as posters and a blog, to give the workshop visibility during the main conference, if space and facilities will allow it. The blog will also be created for the workshop as part of our website; pre-workshop, this blog will act as an online workspace for the workshop participants and as an initial discussion forum, also making preliminary materials available to conference delegates and other interested parties. Post-workshop, the blog and website will serve to disseminate themes discussed in the workshop, summarise its outcomes and act as a platform for future developments/dissemination.

ORGANISERS

The organising group brings together expertise in studying various aspects of cultural heritage technologies and of processes of community participation and engagement, both from the point of view of informing the design of heritage technologies through studies of community practices, and of developing novel interaction modalities for a variety of end users. The organisers are all members of the EU project meSch – Material Encounters with Digital Cultural Heritage (www.mesch-project.eu), which is investigating the use of tangible and embodied technologies for cultural heritage through a process of co-design with heritage communities. The work on the meSch project and the insights gained by the organisers through this will be valuable resources in coordinating the workshop discussion. Members of the organising group have also significant experience in organising, promoting and running workshops and other international events.

Luigina Ciolfi

Luigina is Reader in Communication in the Communication and Computing Research Centre, C3RI, Sheffield Hallam University (UK). Her main research interests focus on people's experience of technology in the physical world, notions of space and place and situated conduct, and practices of mobility in context. She has worked on several research projects exploring interaction with technology in public spaces, heritage settings, and practices of work and life on the move. Having studied cultural heritage technologies for almost 20 years, she is now interested in exploring practices of collaboration and co-design involving various cultural heritage stakeholders.

Areti Damala

Areti is Research Associate in Experience Design and User Studies in the Department of Computer and Information Sciences, University of Strathclyde, Glasgow, UK. She holds a BA Hons in History of Art and Archaeology, an MPhil in Cultural Informatics and a PhD in Human Computer Interaction. Her main research interests lie at the intersection of Experience Design, Interaction Design, museum learning, evaluation, and museum and visitor studies. Areti has collaborated and worked with museums, galleries, museum visitors, CH professionals and New Media Artists in Greece, Spain, France, Italy, the UK, the Netherlands and the USA.

Eva Hornecker

Eva is a Professor of HCI in the Faculty of Media at the Bauhaus-Universität Weimar (Germany), and a lecturer at the University of Strathclyde. Her research investigates people's interaction with physical and embedded technologies, e.g. with tangible or UbiComp systems or gestural and embodied interaction. Her work often focuses on the social interactions that evolve around such systems, in particular in public settings, such as museums, heritage sites or in urban settings. She has worked with museums and heritage sites in Germany, England and Scotland on the development and evaluation of museum technologies and installations.

Monika Lechner

Monika is Quality Manager, Digital Cultural Heritage at the DEN Foundation (The Netherlands). She holds a BA in Dutch Studies and an MA in Books & Digital Media Studies. Her main expertise includes assuring quality and evaluation for digital heritage projects and disseminating the results to the heritage sector. She focuses on bridging the gap between technically detailed texts and easily understandable documentation of standards and emerging new technologies, such as 3D, social media or Internet of Things, that are relevant for the digital heritage sector, now or in the near future.

Laura Maye

Laura Maye is a Research Assistant and PhD Candidate at the Interaction Design Centre, University of Limerick. Her current research is concerned with co-design in cultural heritage and the use of interactive digital technologies and toolkits in cultural heritage sites. This is her main focus within the meSch project. Her thesis topic explores how digital technologies are used within museums during the process of creating and adapting museum activities.

Daniela Petrelli

Daniela is Professor of Interaction Design at the Art & Design Research Centre, C3RI, Sheffield Hallam University (UK). Her research interests have always stretched across boundaries and her publications contributed a human-centred perspective in novel research themes such as cross-language information retrieval, knowledge search and visu-

alization; personalization of cultural heritage, tangible and embedded interaction. She started working within the context of cultural heritage in 1996, specifically on personalisation of museum guides and mobile systems. She now coordinated the meSch EU project, that aims at enabling cultural heritage professionals to create tangible, personalised and interactive experiences for their audiences.

REFERENCES

1. Brown, B., MacColl, I., Chalmers, M., Galani, A., Randell, C. and Steed, A. Lessons from the Lighthouse: Collaboration in a shared mixed reality system”, *Proc. of CHI'03*, New York: ACM 2003.
2. Ciolfi, L. and McLoughlin, M. Designing for Meaningful Visitor Engagement at a Living History Museum. *Proc. of NordiCHI'12*, New York: ACM 2012, 69-78.
3. Damala, A., Cubaud, P., Bationo, A., Houlier, P. and Marchal, I. Bridging the gap between the digital and the physical: design and evaluation of a mobile augmented reality guide for the museum visit. *Proc. of DIMEA '08*. ACM, New York 2008, 120-127.
4. Ferris, K., Bannon, L., Ciolfi, L., Gallagher, P., Hall, T. and M. Lennon. Shaping Experiences in the Hunt Museum: A Design Case Study. *Proc of DIS04*, 205-214.
5. Giaccardi, E. Things we value. *Interactions*, Vol 18, Issue 1, New York: ACM 2011. 17-21.
6. Giaccardi, E. (Ed.) *Heritage and Social Media*. London: Routledge 2012.
7. Grinter, R.E., Aoki, P.M., Hurst, A., Symanski, M.H., Thornton, J.D. & Woodruff, A. Revisiting the Visit: Understanding How Technology Can Shape the Museum Visit. *Proc. of CSCW'02*, ACM:NY 2002, 146-155.
8. Hornecker, E. Interactions around a contextually embedded system. *Proc of TEI 2010*, ACM: NY. 169-176.
9. Maye, L., McDermott, F., Ciolfi, L. and Avram, G. Interactive Exhibitions Design – What Can We Learn from Cultural Heritage Professionals? *Proceedings of NordiCHI'14*, ACM: NY 2014, 598-607.
10. Petrelli, D., Ciolfi, L., van Dijk, D., Hornecker, E., Not, E. and Schmidt, A. (2013), “Integrating Material and Digital: A New Way for Cultural Heritage”, *ACM Interactions*, July + August 2013, 58-63
11. Simon, N. *The Participatory Museum*, Museums 2.0. (2010) (Also available online under: <http://www.participatorymuseum.org/>)
12. vom Lehn, D. Examining “Response”: Video-based Studies in Museums and Galleries. *International Journal of Culture, Tourism and Hospitality Research*, Vol. 4(1) 2010, 33-43.
13. Weilenmann, A., Hillman, T. and Jungselius, B. Instagram at the Museum: Communicating the Museum Experience through Social Photo Sharing. *Proc. of CHI'13*, New York: ACM 2013.