Creative Practice on Film

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Biography

I am a Lecturer in Interactive Media at the University of York. I previously completed a Ph.D. and held post-doctoral research positions at Newcastle University's interdisciplinary research center Culture Lab. My research is situated in the field of Human-Computer Interaction and explores the design and development of novel interactive digital technologies for creativity. This work addresses a broad range of topics in the area of digital creativity, ranging from the design of tools for digital creative practice, to providing access to creativity amongst excluded groups and human-centered interaction design methods for creative contexts. I am an investigator on the EPSRC, AHRC and Innovate UK funded Digital Creativity Hub [10], which is an impact-driven research center that explores themes relevant to the workshop, including the convergence of television, film and social interaction.

Relevant Previous Work and Interest in the Workshop Topic

The use of video and film as the basis of interactive technologies and techniques that enable, explore, represent and communicate aspects of digital creativity is a key theme in my work. Past projects have explored the development of interaction design methods that use documentary films to foster conversations about tacit aspects of creative identity [5]; lightweight video capture and re-presentation tools that enable reflection on, and communication of, personal creative practice in the contexts of design [6] and participatory arts [4]; gestural interaction techniques for *more expressive* search of video and motion capture data [8]; and tools that support new forms of video performance [7]. My most recent work investigates the use of interactive video to facilitate and document contemporary music and theatre rehearsal practices. Central to this research is the exploration of how automatically and semi-automatically generated filmic renderings of rehearsal room and performance material can be used to support the interpretation and development of ongoing creative processes, and the curation of archives of practice for personal, educational and research purposes. By attending the workshop I hope to learn from participants' multidisciplinary perspectives on creating such filmic renderings of personal data and share my experiences of exploring this challenge in a creative practice context.

What is the impact of film as a medium for understanding and communicating digital data?

The proliferation of high quality cameras in mobile devices and new social media platforms has made capturing and sharing digital materials about our lives ordinary. Many artists and creative practitioners have embraced this emergent custom of chronicling activity with digital materials, to log and share aspects of their work. Using digital materials from past and on-going work in this way has enriched creative practices by forming portfolios that support curation and communication of artistic identity [2, 3]; supporting reflection and understanding of personal practice [6]; and inspiring ideas and directions during collaborative creative dialogues [9].

We are in the early stages of exploring how the multi-layered creative process of theatre rehearsal might be supported and enhanced by similar uses of digital materials. Initial experiments during a production of Dostoyevsky's Demons have revealed a number of ways that digital materials, in particular videos captured in rehearsals, could impact the facilitation, communication and understanding of theatre making. These include enhancing group review and critique of moments from a day's rehearsal; raising awareness of creative developments amongst absent or peripheral company members; and enabling the exploration and pre-visualization of compositional ideas through the lightweight editing and rearrangement of digital material.

This initial research has, however, highlighted a number of design challenges that may problematize such uses of video materials in theatre rehearsal. Most notably, the intensive and lengthy nature of professional theatre making, which can involve weeks of consecutive full-day rehearsals, may lead to hours of video material, while leaving little time for it to be reviewed and made sense of. Video materials were also found to have the potential to fall short as a means for representing and communicating people's experiences of rehearsals, with the meaning and significance of recordings often only being evident to those who had been in attendance for the majority of the creative process.

The development of automatically rendered films that present video materials from rehearsals has the potential to address these challenges and, consequently, impact the way that rehearsal and other similar creative processes are conducted and understood. For instance, such filmic renderings could address challenges of data overload by presenting a concise selection of key moments from a rehearsal day, which could be used by the director to review how a performance is developing. We are particularly interested in exploring how these renderings might leverage qualities and conventions of film to best present rehearsal material for different people and purposes; for example, by using juxtaposition to convey changes that have been made to a scene to an absent company member.

The compositional decisions that must be made to create such filmic renderings will depend on the availability of a rich set of meta-data including: actors featured, relationship with script or thematic elements of a play, and significance of moments depicted. Capturing this meta-data in a practical and efficient manner, and without disrupting the creative process in the rehearsal room, is a core technical and design challenge that will underpin the success of our work. To this end, we are designing lightweight tools that can be used to capture meta-data without significantly disrupting rehearsal room workflows. We are also exploring the semi-automatic generation of meta-data, using tools such as RedTag [1] to record actors featured and simple recommender algorithms to suggest possible thematic tags for clips based on context.

References

1. Bartindale, T., Jackson, D., Ladha, K., Mellor, S., Olivier, P. & Wright, P. RedTag: automatic content metadata capture for cameras. In *Proc. TVX '14*, ACM, 19-22.
2. Format.com - Your online portfolio. http://format.com
3. Hook, J., Briggs, J., Blythe, M., Walsh, N. & Olivier, P. Repentir: Digital Exploration Beneath the Surface of an Oil Painting. In *Ext. Abs. of CHI '13*, ACM, 2947-2950.
4. Hook, J., Clarke, R., McCarthy, J., Anderson, K., Dudman, J. & Wright P. Making the Invisible Visible: Design to Support the Documentation of Participatory Arts Experiences. In *Proc. of CHI '15*, ACM, 2583-2592.
5. Hook, J., Green, D., McCarthy, J., Taylor, S., Wright, P. & Olivier, P. A VJ Centered Exploration of Expressive Interaction. In *Proc. of CHI '11*, ACM, 1265-1274.
6. Hook, J., Hjermitslev, T., Iversen, O. & Olivier, P. The ReflecTable: Bridging the Gap between Theory and Practice in Design Education. In *Proc. of INTERACT '13*, Springer, 624-641.
7. Hook, J., McCarthy, J., Wright P. & Olivier, P. Waves: Exploring Idiographic Design for Live Performance. In *Proc. of CHI '13*, ACM, 2969-2978.
8. Norman, S., Lawson, S., Olivier, P., Watson, P., Chan, A., Dade-Robertson, M., Dunphy, P., Green, D., Hiden, H., Hook, J. & Jackson, D. AMUC: Associated Motion capture User Categories. *Phil. Trans. R. Soc. A*, 367, 1898 (2009), Royal Society, 2771-2780.
9. Swan, L., Tanase, D. & Taylor, A. Design's processional character. In *Proc. of DIS '10*. ACM, 65-74.
10. The Digital Creativity Hub. Details available at: http://gow.epsrc.ac.uk/NGBOViewGrant.aspx?GrantRef=EP/M023265/1