"I've had it!" Group therapy for interdisciplinary researchers

Marko Jurmu, Johanna Ylipulli, Anna Luusua University of Oulu, Finland [firstname.lastname]@ee.oulu.fi

ABSTRACT

In this workshop, we reflect on and share the fun and frustrations of working in interdisciplinary research. We ask participants to openly reflect on their experiences of interdisciplinarity. What approaches have worked and what have failed? In addition to identifying phenomena, we aim to sketch out the next decade of interdisciplinary research in computing, especially in HCI. The third paradigm of Human-Computer Interaction focuses on the qualitative aspects of use experience and the situatedness of technologies. This new orientation has drawn in researchers from various other research and arts backgrounds and traditions, including the social sciences, architecture and industrial design among others. Therefore, we consider this third paradigm to be inherently interdisciplinary. Through workshop participants' reflection of their own experiences, we strive to identify the common problems and pitfalls of interdisciplinary research, and to celebrate successes, as well as share best practices.

Author Keywords

Multidisciplinarity; transdisciplinarity; collaboration; experience; methodology; epistemology; research practice.

ACM Classification Keywords

H.5.2. Information interfaces and presentation (e.g., HCI): Theory and methods; K.4.0. Computers and society: General.

INTRODUCTION

The field of HCI has strong post-positivist roots [1]. However, in the past decade, calls for real-world research [4] and experiential [3] computing research and practice have surfaced, calling into question the positivist tradition's sufficiency in tackling the problems that the situated, qualitative and holistic nature of this third paradigm inherently entails [5]. This third paradigm of Human-Computer Interaction [1] focuses on the qualitative aspects of use experience and the situatedness of technologies. This new orientation has drawn in researchers from various other research and arts backgrounds and traditions, including the social sciences, architecture and industrial design among

Copyright[®] 2015 is held by the author(s). Publication rights licensed to Aarhus University and ACM

5th Decennial Aarhus Conference on Critical Alternatives August 17 – 21, 2015, Aarhus Denmark

DOI: http://dx.doi.org/10.7146/aahcc.v1i1.21393

others. These other fields, in turn, necessarily bear their own philosophical underpinnings; ontological, epistemological, methodological, and ethical traditions and conceptions that inform the way research questions are formulated, and knowledge is produced, communicated and valued.

In our experience, if these fundamental aspects are not addressed, the day-to-day functioning of interdisciplinary work has little chance of succeeding. Thus, recognizing these diverse backgrounds is a fundamental premise for conducting any interdisciplinary research. However, we deem it important to reflect on not only the challenges but also the possibilities offered by interdisciplinarity: the novel viewpoints, useful methods, and personal revelations it can produce.

Through workshop participants' reflection of their own experiences, we strive to identify the common problems and pitfalls of interdisciplinary research, and to celebrate successes as well as share best practices. Specifically, we strive towards identifying different, sometimes opposing, disciplinary traditions and approaches within thirdparadigm HCI. These might include, but are not limited to:

- Pragmatists and theorists
- Design traditions and engineering traditions
- Fundamental research traditions and applied research traditions
- Different theoretical traditions

Secondly, we aim to foster fruitful conversations and connections between these. The content of these conversations is not preordained in any way, but suggested topics for exploration might include:

- What kind of practical obstacles have you faced in everyday interdisciplinary research discourse?
- What are the ontological and epistemological underpinnings of your research, and what kind of conflicting standpoints have you encountered or grappled with?
- Have differing epistemological conceptions caused problems on the level of everyday research work for example, have you been negotiating about different writing traditions?

- What kind of methodological approaches have you utilized in your research and why? Have you borrowed and/or appropriated methodologies from other fields and has it caused any conflicts or perhaps fruitful outcomes?
- What role do ethics play for your field's research and design practices or theoretical traditions?
- Are there any existing but underexplored disciplinary connections that might benefit the research of Human-Computer Interaction?
- Are there any intradisciplinary divides within your field of origin? How have you surmounted possible obstacles, or benefited from colleagues' expertise?

The immediate goal of this workshop is to begin charting out a roadmap for next decade of interdisciplinary explorations in third paradigm HCI. The larger aim is to launch a series of workshops in which a community of interdisciplinary researchers would regularly explore the past, present and future of interdisciplinary research in third paradigm HCI. Furthermore, we will strive towards negotiating a publishing agreement for a book or a special issue with a leading scientific publisher.

Within this workshop, we will focus on elaborating the themes connected to interdisciplinarity by working in small groups. The topics addressed by each group will be grounded on the interests of workshop participants and decided after we have received the papers. We encourage participants from any design or research background to apply in order to create a space for genuine interdisciplinary dialogue.

SCHEDULE OF PLANNED ACTIVITIES

We start with an informal meet-and-greet over refreshments before we settle into the first 'group therapy' session. These first groups or pairs are thematically formed by us on the basis of participant contributions, and they will receive an assignment suitable for the group's / pairs' mutual interests and experiences.

The groups' will present the results of their work an hour later, as well as introduce themselves to the rest of the workshop. Instructors will briefly discuss the results of the first group, and present the workshop with their lunch-time task: form new groups according to your own interests, and think of a topic that you would like to explore together. Groups can come up with their own topics, or use the ones we have pre-formulated.

Coming back from lunch, we will take stock of the new groups and their members. Groups will work for an hour, after which they will present, and we will have a closing discussion. All workshop participants are invited for dinner afterwards. Instructors will reserve the table, but all participants will pay for their own meals. Over dinner, we will discuss possible plans for the future - e.g. concerning the publication - that might have arisen over the course of the workshop.

9 am	Arrival and coffee/tea
9.30-10.30 am	Thematic group or pair work: Experiences of interdisciplinarity
10.30-12.00 am	Group presentations, lunch task: form new groups or pairs!
12.00-1 pm	Lunch
1 pm-2 pm	Future oriented group or pair work: Making interdisciplinarity work
2pm-3pm	Group presentations
Optional:	Dinner at nearby restaurant, plans for the future

WORKSHOP ORGANIZERS

Dr. Tech. Marko Jurmu received his M.Sc. (hons) and Ph.D. degrees of computer science from the University of Oulu in 2007 and 2014, respectively. Marko has over a decade of work experience from ubiquitous computing projects. During his Ph.D. research, Marko worked with UBI-displays - interactive, multipurpose public displays - in a real city center environment through a longitudinal deployment started in 2009. At the moment, Marko is also looking into the fields of digital health and so-called 'hybrid spaces', which are an evolutionary step from virtual worlds such as Second Life. Marko became involved in transdisciplinary research in 2013 through collaboration with Johanna Ylipulli and Anna Luusua. The first academic milestone of this collaboration is a full-length conference publication titled "Evaluation Probes", appearing in CHI 2015.

Dr., cultural anthropologist Johanna Ylipulli's major research interests focus on ICT, everyday life practices and "smart cities". She has had the ups and downs of interdisciplinary work, as for the last five years she has been involved in interdisciplinary research projects exploring ubiquitous computing technologies in Northern urban environments. Johanna has been scrutinizing the design process of new urban technology as well as its use and adoption in the light of empirical research material. Methodologically, Johanna's focus is on qualitative research; she has been using conventional ethnographic methods, such as thematic interviews, alongside visually oriented, creative methods, inspired by e.g. cultural probes. She is driven by the firm belief that ethnography and anthropology provide tools, which can help people to create more sustainable, versatile and socially inclusive futures. Furthermore, she is interested in investigating how critically oriented anthropological thinking, with its capability to challenge normative structures and self-evident "truths" can be combined and successfully utilized with applied research.

M.Sc. Architect Anna Luusua's work revolves around the theme of digital augmentation in public urban places from an experiential point of view, and what this means both for designing urban spaces and the systems that we use to augment them. Thus, her research interests span from the fields of architecture and urban design to urban computing and interaction design. Supplying designers with knowledge and tools for making people's voices heard in the design of the lived environment is Anna's major motivation for doing research. Thus, on the level of methodology, she is interested in both ethnographically inspired methods as well as methods originated in various design fields. She strives to both apply these methods to formulate design theory and to develop these methods further. She has collaborated with researchers from various disciplines within the projects she has been involved with in the past four years, including the close interdisciplinary collaboration with Marko and Johanna.

RECRUITMENT STRATEGY

We will construct a website and a Facebook page for the workshop, containing the call for participation as well as our personal profiles. Additionally, we will advertise the workshop through our networks of colleagues via email. Importantly, we will advertise this workshop at CHI'15 in Seoul, South Korea, on April 18-23, 2015, by producing brochures for distribution.

CALL FOR PARTICIPATION DRAFT

About the workshop

In this workshop, we reflect on and share the fun and frustrations of working in interdisciplinary research. We ask participants to openly reflect on their experiences of interdisciplinarity. What approaches have worked and what have failed? In addition to identifying phenomena, we aim to sketch out the next decade of interdisciplinary research in computing, especially in HCI.

The third paradigm of Human-Computer Interaction focuses on the qualitative aspects of use experience and the situatedness of technologies. This new orientation has drawn in researchers from various other research and arts backgrounds and traditions, including the social sciences, architecture and industrial design among others. Therefore, we consider this third paradigm to be inherently interdisciplinary.

Through workshop participants' reflection of their own experiences, we strive to identify the common problems and pitfalls of interdisciplinary research, and to celebrate successes as well as share best practices. We encourage participants from any design or research background to apply in order to create a space for genuine interdisciplinary dialogue.

Important dates Deadline for position papers: 15 May. Notification to workshop participants: 15 June (early registration 30 June).

Workshop Days: One-day session on 18 August, 2015.

Submissions

We invite interested authors to submit a 3-4-page position paper in the ACM SIGCHI Extended Abstract format, together with 50-word biography, а to interdisciplinary.ws2015@virtues.fi. The organizing committee will select up to 25 submissions based on relevance, quality, and diversity of inputs. Papers will be published online on the workshop site. Furthermore, we will strive towards negotiating a publishing agreement for a book or a special issue with a leading scientific publisher.

Workshop website:

http://interdisciplinary.ws2015.virtues.fi/

REFERENCES

- Jeffrey Bardzell and Shaowen Bardzell. 2014. "A great and troubling beauty": cognitive speculation and ubiquitous computing. *Personal Ubiquitous Comput.* 18, 4 (April 2014), 779-794. http://dx.doi.org/10.1007/s00779-013-0677-8
- Steve Harrison, Phoebe Sengers, and Deborah Tatar. 2011. Making epistemological trouble: Third-paradigm HCI as successor science. *Interacting with Computers* 23, 5 (September 2011), 385-392. http://dx.doi.org/10.1016/j.intcom.2011.03.005
- Yvonne Rogers. 2006. Moving on from weiser's vision of calm computing: Engaging ubicomp experiences. In *Proceedings of the 8th International Conference on Ubiquitous Computing* (UbiComp'06), 404-421. http://dx.doi.org/10.1007/11853565_24
- Yvonne Rogers. 2011. Interaction design gone wild: striving for wild theory. *Interactions* 18, 4 (July/August 2011), 58-62. http://dx.doi.org/10.1145/1978822.1978834
- Abigail Sellen, Yvonne Rogers, Richard Harper, and Tom Rodden. 2009. Reflecting human values in the digital age. *Communications of the ACM* 52, 3 (March 2009), 58-66. http://dx.doi.org/10.1145/1467247.1467265