

---

# RepliCHI Workshop II – Cover Sheet

## Primary Workshop Contact

*Max L. Wilson*  
Mixed Reality Lab,  
University of Nottingham, UK  
[max.wilson@nottingham.ac.uk](mailto:max.wilson@nottingham.ac.uk)

RepliCHI has evolved each year that we have been discussing the topic of replication, or recreation, of HCI research. This year we seek to open up a workshop for a second year, to see how the community understanding has evolved.

## Co-Organisers

*Stuart Reeves*  
Mixed Reality Lab,  
University of Nottingham, UK  
[stuart@tropic.org.uk](mailto:stuart@tropic.org.uk)

*David Coyle*  
University of Bristol, UK  
[david.coyle@bristol.ac.uk](mailto:david.coyle@bristol.ac.uk)

*Ed H. Chi*  
Google, Inc.  
[chi@acm.org](mailto:chi@acm.org)

---

# RepliCHI – The Workshop II Proposal

**Max L. Wilson**

Mixed Reality Lab  
University of Nottingham, UK  
max.wilson@nottingham.ac.uk

**Stuart Reeves**

Mixed Reality Lab  
University of Nottingham, UK  
stuart@tropic.org.uk

**David Coyle**

Bristol Interaction Group  
University of Bristol, UK  
david.coyle@bristol.ac.uk

**Ed H. Chi**

Google, Inc.  
chi@acm.org

**RepliCHI Past, Present, and Future**

The RepliCHI workshop proposed here is the culmination of four years of focused interest in the topic of replicating HCI research within the CHI community. Originating from a late-night debate at CHI2010, and after a CHI2011 panel, a CHI2012 SIG and the first workshop at CHI2013, we here propose to include a follow-on two-day workshop focused on a) learning more about people's experiences and b) running working-groups on proposed/planned replications. Holding this second workshop is a critical step towards letting replication, or recreation, mature into a natural role within our community, rather than leaving the past events as a flash in the pan.

**Introduction**

The replication of research is a topic of growing interest that has seen debate and even controversy in communities, including Psychology and Medicine. For the last three years at CHI, we too have begun to debate the ramifications of replication in HCI research, which has led to both very positive and very critical discourses. In the HCI community, and in particular for authors aiming to publish research at CHI, we have to continuously battle with the fast-paced technology that we study, and the overwhelming drive to publish novel findings, from novel research, in novel spaces, at one of the most competitive ACM conferences. This drive means that there is often little or no desire, or motivation, to look back at HCI research and consider if it was correct, is still true, or has been made redundant by the evolution of technology. The aim of the RepliCHI

---

Copyright is held by the author/owner(s).

CHI'13, April 27 – May 2, 2013, Paris, France.

ACM 978-1-XXXX-XXXX-X/XX/XX.

Table 1: A temporal breakdown of the discussion of each co-presented case study.

Activity	Time
Replicating Author	20mins
Original Author	10mins
Both Authors' Questions	5mins
Audience Questions	15mins
<b>Total</b>	<b>45mins</b>

community has been to consider: how can we motivate and facilitate the reason and opportunity for people to revisit HCI research?

### Workshop Aims

The RepliCHI Workshop has 3 key aims:

- 1) To provide a structured space where people can discuss replication and its challenges.
- 2) To test new ideas about how replications should be presented and discussed in relation to original work and original authors.
- 3) New for 2014: To support people who plan to recreate other peoples work, with working-groups.

### Workshop Plan

#### *Papers and Reviewing*

We intend to invite a) Experience Reports that *describe experiences surrounding attempts to replicate HCI research* and b) Replication Plans that *describe serious plans to recreate prior work*. We believe that novel research findings should be published at venues equivalent to the magnitude of the results and their contribution. CHI2014, for example, has introduced a contribution type for validating/refuting prior findings<sup>1</sup>, which was an output from last year's workshop. Consequently, we do not intend to invite standard research papers with novel findings, but rather papers that elaborate on a) the challenges they faced, b) their successes, c) the limitations of their replication, d) whether the results confirmed or challenged original findings, and e) whether any differences in experimental protocols may have accounted for any differences in results. The aim of the papers, therefore, is to help document the nature of replicating HCI systems and research.

We will invite a select panel of reviewers, including those who keenly engaged prior events. Experience Reports will be reviewed according to a) insights into the challenges of replicating HCI research, b) the objective nature with which they discuss the possible reasons for differences in results, and c) professional tone in which they discuss the original work. Replication Plans will be juried according to detail of the plans and the significance of the motivation driving them.

#### *The Structure of the Workshop*

We propose that RepliCHI-2014 be a 2-day workshop, with a whole day focused on case-studies of HCI replications, and new for 2014, the second day for running working-groups focused on peoples real plans for replication. This is especially important, given the risk of not producing publishable findings associated with revisiting prior work. The second day will also discuss what we have learned from the second event.

The first day is designed to illuminate the experiences and challenges of replication. This involves discussing both the replication attempt and the original study. As per last year, we propose to invite original authors of the replicated studies to the workshop, to discuss the replication attempts the their work. Several original authors accepted invitations last year, and the co-presentation of papers by both the original and replicating authors (see Table 1) was very successful. Having a full day for these activities, means we can discuss around 6 or 7 different case studies. We see the structure of this first day as both critical to the success of the workshop, and a novel element of our proposal.

The first half of day two will be allocated to dividing into working groups to discuss Replication Plans submitted to the workshop. These groups will actively work on the plans to discuss motivation, help people make more

<sup>1</sup> <http://chi2014.acm.org/authors/contribution-types>

rigorous plans, and to develop ideas. After lunch, each working group will feedback to the room, to present the issues identified and discussed. Finally, the last part of the afternoon will be used for a time of reflection. Discussing these issues on the second day will allow us to maximize the number of case studies that can be discussed on the first day, given the long co-presentation format.

#### *Intended Attendees and Size of Workshop*

Last year, we accepted 14 submissions and had around 30 participants actively engaging through the 2-day workshop. Like last year, we will invite key authors of original work that was replicated in our submissions. Finally, given the vision for the future, we would ideally invite at least one key member of CHI2015, who may be involved in RepliCHI's future. Consequently, like last year, we expect around 25-30 participants.

#### *Before and After the Workshop*

The workshop has the benefit of leveraging an existing community. The replichi.com website, although recently suffering from domain snoopers, will soon continue to be our online venue as per previous years. We intend to utilise this website, and the previously used #repliCHI hashtag on twitter, to promote engagement with the workshop.

Our aim for the future has changed since last year. Our vision is that replication and recreation become more natural elements of HCI research. Consequently, we no longer think that RepliCHI will become a venue, but that RepliCHI workshops maintain support for a cultural shift. It is for this reason, that we see follow-on workshops like this as crucial for facilitating the adoption and maturation of replication and recreation within HCI research. Aside from this larger vision of the HCI community adopting replication methods,

describing the event on repliCHI.com, and presenting a workshop poster at the workshop spotlight, we will publish the workshop papers on ceur-ws.org – an archival location of scientific workshops – as we did last year. Further, we will invite workshop authors and also the original authors replicated work to contribute articles to a special issue on Replication, e.g. TOCHI.

#### **Organisers' Backgrounds**

*Max L. Wilson:* Max has been a core part of RepliCHI for 3 years now. Originating the idea of RepliCHI with Wendy Mackay in 2010, Max has co-organised the prior RepliCHI events, bringing key members of future CHI committees to each. In both his research and teaching, Max has been investigating the challenges of replicating research, and its value in teaching. Max is a lecturer in the Mixed Reality Lab at the University of Nottingham.

*Stuart Reeves:* Stuart has provided one of the most serious critiques of the notion of replication of HCI research. His insightful reflection on the topic, as well as his non-experimental research background, will help to keep RepliCHI in check. Stuart is a senior research fellow at the University of Nottingham and a welcome new member to the committee.

*David Coyle:* David is a lecturer with the Bristol Interaction and Graphics. His interest in replication is driven by his interdisciplinary research in healthcare and clinical neuroscience, areas where replication is considered vital in providing robust evidence for new medical interventions and technologies.

*Ed H. Chi:* Like Max, Ed has had a long involvement with RepliCHI. Through his roles in the RepliCHI Panel and SIG, and as CHI2012 Technical Program Co-Chair, Ed has helped to drive and understand the value of replication of HCI research. Ed is a Research Scientist at Google, after many years of working at PARC.

---

# RepliCHI – The Workshop II

**Max L. Wilson**

Mixed Reality Lab,  
University of Nottingham, UK  
max.wilson@nottingham.ac.uk

**Stuart Reeves**

Mixed Reality Lab,  
University of Nottingham, UK  
stuart@tropic.org.uk

**David Coyle**

Bristol Interaction Group  
University of Bristol, UK  
david.coyle@bristol.ac.uk

**Ed H. Chi**

Google, Inc.  
chi@acm.org

**Abstract**

The replication or recreation of research is a core part of many disciplines. Yet unlike many other disciplines, like medicine, physics, or mathematics, we have almost no drive and barely any reason to consider investigating the work of other HCI researchers. Our community is driven to publish novel results in novel spaces using novel designs, and to keep up with evolving technology. Further, our community contains a broad spectrum of research styles, from those that would aim to investigate cultural phenomenon observed with ethnographic techniques, to those who would validate or refute prior work with experimental methods. The aim of this workshop is to continue to facilitate a cultural shift towards our community naturally adopting replication techniques in situations that are considered worth investigating.

**Author Keywords**

Evaluation, Methodology, Replication

**ACM Classification Keywords**

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

**Introduction**

RepliCHI has, so far, invoked a range of highly positive and also critical responses [1,4], primarily because of the diverse range of research styles found within the HCI community. Original proposals for discussing the

---

Copyright is held by the author/owner(s).

CHI'13, April 27 – May 2, 2013, Paris, France.

ACM 978-1-XXXX-XXXX-X/XX/XX.

replication and recreation of HCI research (e.g. [9]) were written using scientific terminology naturally emerging from the experimental styles of the authors. Although they were not meant to prescribe a scientific emphasis onto HCI replication in terms of scientific proofs, validity, refutation, and so on, the terminology did imply this perspective. Greiffenhagen and Reeves [4] highlighted the limitations of discussing replication of HCI research in terms of naïve notions of science. Instead, the vision of RepliCHI has been to ask a) should we be (re)investigating prior work in HCI literature, b) what form should replication, or recreation, take in our community, and c) how could our community encourage it, given the well-established future-focused drive in HCI. The CSCW community, for example, has discussed how much and how often we should revisit ethnographic-style prior work [1,3]. Together, the developing discourse around RepliCHI highlights that we need to think a lot more about what “replication” means in the HCI community, not to force scientific replication into it.

### **A summary of last years workshop**

For the CHI2013 RepliCHI workshop, we proposed that replication might be in the forms of: Direct, Conceptual, Replicate+Extend, and Apply [10]. Direct would be to try and directly replicate, as closely as possible, the methods used by others to test their hypotheses and results. Conceptual might be to try and recreate a phenomenon, but perhaps using different methodologies. Replicate+Extend approaches would focus on first achieving the methods in prior work, and then investigating the results further. Finally, application concerns attempts to implement findings in deployed systems to see if they translate beyond research conditions. We also proposed that replication

may have benefits for: research, teaching, and practitioners. Beyond research findings, asking students to recreate studies is a good way for them to learn methods. For practitioners, existing corroboration of findings may help to decide how to implement ideas into deployed systems.

At the workshop, 11 case studies of replication attempts were presented, along with three position papers [9]. Five experience reports were presented in tandem with the original authors. Chhabra for example co-presented a study of recreating a NewsCube study with original author Park [2]. This study highlighted the fact that some findings were not recreated, potentially through simple user interface differences. One paper, co-presented by Tractinsky and Kurosu, described a replication from almost 20 years ago, and thus both authors were able to reflect on the value it provided over time; both authors learned about their research areas from the additional insights gained [7]. Wilson highlighted 8 challenges [8] faced when asking masters students to replicate a study by Shah and Gonzalez-Ibanez, including decisions about log analysis, and cultural differences between continents. Shah reflected on the support that they were and were not able to give, as original authors, for these challenges as part of the co-presentation via skype.

One of the position papers, by Patil, noted that the majority of barriers for recreating or replicating work could be tied to three continuously changing factors: people, technology, and society [5]. Patil argued that these factors make it virtually, if not totally, impossible to completely replicate prior HCI work. Greiffenhagen & Reeves introduced further discussion in their position paper asking *why* we would revisit prior work, arguing

that it should not be for naïve scientific aspirations, but for learning more about prior work [4].

### **Evolved understanding of “Replication”**

The discussion at the CHI2013 RepliCHI workshop led us to draw several conclusions about replication, or recreation, of HCI work. First, revisiting prior work can help us to understand more about it, but that it is important to decide *why* prior work is worth revisiting. This emphasis is evident in the new contribution type that says first and foremost: a paper must make a significant contribution, when using replication methods. We first recommend that people identify clear motivations and reasons to investigate prior work, and to identify areas where contributions will be made. Recreating work only for interest, or simply for teaching, may only produce publishable work if results are surprising. Second, to develop prior work, we must first aim to recreate its findings. Thus it is almost impossible to extend work without recreating it, in order to *calibrate* your approach. Spiliotopoulos and Oakley embodied both of these points with their full CHI paper, that recreated a study of social networks, first finding the same phenomenon, and then using newer technologies to validate and extend the results [6]. Finally, because it is impossible to completely replicate research, we conclude that by revisiting work, we cannot prove that the original work was wrong or right, but only that we can or cannot find further evidence.

### **The aims of the 2014 workshop**

Given the outcomes of last years workshop, the aim of this workshop is to 1) continue to discuss real case studies that can shed light on issues surrounding replication, and 2) support people in learning how to

plan replications (new for 2014). Like last year, the first aim helps us to

- a) Proactively and considerately discuss “replication” of HCI research at CHI.
- b) Publish, in workshop format, insights from replicating or recreating HCI research.
- c) Create an archive of experience reports that, similar to the current attempt in psychology<sup>1</sup>, researchers can visit to see if findings have been reproduced. Such an archive also has the benefit of, over time, highlighting research that our community deems as important enough to replicate or of sufficient interest to investigate further.

Beyond discussing people’s attempts to replicate HCI research, a common issue discovered at least years workshop was in planning and preparing, so as to avoid the risk of not learning new insights. For this reason, our second aim is focused on helping people prepare by discussing submitted plans.

### **The issues to be addressed in the workshop**

Several key issues will be discussed in the workshop: 1) the challenges researchers face when replicating or recreating HCI research, 2) the issues of privacy and proprietary resources for studies, 3) the kinds of information that are typically not available in publications, 4) the common reasons for differing results, 5) the possible issues around not being able to confirm results, 6) the cost benefit ratio experienced, especially when simply confirming results, 7) the benefits people have experienced using replication as a teaching method, and perhaps most importantly 8) how

---

<sup>1</sup> <http://www.psychfiledrawer.org/>

replication manifests in different parts of the HCI community.

We expect all of these issues will arise through the examination of several case studies. Like last year, the format of the event is planned such that submitted case studies will be co-presented by both the original and replicating researchers, where original authors will be invited as guests to participate in the workshop. While the presentation of case studies helps us to understand the challenge and nature of replicating research, the co-presentation with original authors helps us to explore the broader community issues of challenging the work of others, or having your work examined by other researchers.

Finally, RepliCHI 2014 is proposed as a two-day workshop, such that while the first day discusses real case studies as experienced by researchers, the second will focus on developing research plans that focus on learning new things about the research being replicated. The experience of discussing case studies for a day, should also help us in the second day to consider how well the notion of replication applies to different forms of research in the HCI community, whether it is scientific, artistic, or ethnographic, etc.

### **Conclusions**

While the replication or recreation of research is common practice in many disciplines, the concept of replication or looking back and re-appraising research feels almost an alien concept in the HCI community. The primary aim of this workshop is to continue to learn about the way replication manifests in different areas of our community, so that we know how best to support and facilitate replication within our common

research practices. The workshop, therefore, continues to encourage a culture-shift towards adopting replication as recognized and acceptable approach for examining findings from within our community.

### **References**

- [1] Anonymous Ref
- [2] Chhabra, S. and Resnick, P. NewsCube Replication: Experience Report. *In Proc. RepliCHI 2013*.
- [3] Crabtree, A., Tolmie, P. and Rouncefield, M. "How Many Bloody Examples Do You Want?" Fieldwork and Generalisation. *In Proc. ECSCW 2013*.
- [4] Greiffenhagen, C. and Reeves, S. Is Replication Important for HCI? *In Proc. RepliCHI 2013*.
- [5] Patil, S. RepliPRI: Challenges in Replicating Studies of Online Privacy. *In Proc. RepliCHI 2013*.
- [6] Spiliotopoulos, T., & Oakley, I. Understanding motivations for Facebook use: Usage metrics, network structure, and privacy. *In Proc. CHI2013*
- [7] Tractinsky, N. Replicating and Extending Research on Relations between Visual Aesthetics and Usability. *In Proc. RepliCHI 2013*.
- [8] Wilson, M. L. Teaching HCI Methods: Replicating a Study of Collaborative Search. *In Proc. RepliCHI 2013*
- [9] Wilson, M. L., Chi, E. H., Coyle, D. and Resnick, P. Proceedings of the CHI2013 Workshop on the Replication of HCI Research (RepliCHI 2013). Paris, FR
- [9] Wilson, M. L. and Mackay, W. RepliCHI - We do not value replication of HCI research: discuss. In Ext Abs. *CHI'11* (Panel)
- [10] Wilson, M. L., Resnick, P., Coyle, D. and Chi, E. H. RepliCHI - The Workshop. In Ext Abs. *CHI'13*.



## RepliCHI – The Workshop II – Call for Papers

RepliCHI is a workshop focused on the meta-issues of Replicating HCI research, while we leave official venues, like CHI, to publish novel results from revisiting prior work. In HCI, we strive to keep up with technology, while we have a strong pressure to break novel ground. Thus, it is not “the norm” to revisit work in our field. RepliCHI aims to encourage a culture shift towards embracing the replication or recreation of HCI research.

RepliCHI aims to be:

- a) A discussion venue, where we learn about when and where replication is important
- b) A learning venue that helps us to understand how to facilitate replication

### **What you should submit**

RepliCHI invites 2-4 page ACM format submissions describing a) Experiences Reports from HCI replications (challenges faced and lessons learned) and b) detailed Replication Plans. Experience reports may be about the replicated work in other publications, or from unpublished work. Experience Reports should include: 1) Motivation (and original study), 2) Methods (challenges/decisions), 3) Results (compared to original findings), and 4) Discussion (differences and possible reasons). Replication Plans should focus on Motivation and Methods.

RepliCHI submissions will be reviewed according to how they help us understand the nature and challenges of replication.

### **During the Workshop**

The first day will focus on presenting case studies from papers in tandem with the authors of the original work, where possible. Additional accepted papers will be presented as posters. New for 2014, day two will focus discussing submitted replication plans.