On the Importance of Meta Research for HCI

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Abstract

In this brief position paper, I describe why meta-research is an importart endeavour to pursue in the realm of HCI. First, it helps us establish best practices: essential in a field as interdisciplinary as HCI. Second, it helps us collectively overcome challenges. Finally, meta research will help us save HCI from the dangers of overpublishing that threaten to ruin the integrity and sustainability of science.

Keywords

Meta research, science of science, overpublishing, HCI, Meta-HCI

1. Introduction

Meta research, or in other words, scientists studying how others do science, is a topic near and dear to my heart. I have pursued various studies in this area, including a project looking at the challenges researchers face when studying privacy policies [1] as well as an ongoing project examining how researchers utilize scenario construction in their work. I have also published an opinion piece on the dangers of overwork in academic settings, and how overwork and overpublishing is detrimental to both scientists and science as a whole [2].

Thus, I was excited to hear about the meta-HCI workshop being organized at CHI, and could not wait to participate. Whilst meta research and papers studying science of science do occur within the HCI literature, such efforts seem to be isolated, disconnected, and feel more like one-offs than part of a jiont community. This workshop, with its promise to bring in like-minded individuals, promises to herald a new era of meta research in HCI – an era that is sorely needed.

As such, I write this position paper to outline why I think meta research is important. In particular, I believe meta research for HCI is of paramount importance for three key reasons: (1) developing understanding of shared practices (2) overcoming shared research problems and (3) saving HCI research from itself.

2. Establish Best Practices

First, meta research is important so as to develop a shared understanding of best practices. As a field, HCI is relatively young, especially when compared to more established fields like chemistry, sociology, psychology, or physics. The youth of HCI has meant that not enough time has elapsed for us to fully learn from each other as to what are best practices, approaches, and what are

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definitions of rigor and valid science. This problem is exacerbated by the interdisciplinary nature of our field. In HCI, we have scholars ranging from traditional computer science, to psychology, sociology, passing through law, and even a touch or two of philosophy. This is one of the greatest strengths of our field: the diversity in approaches means we have a wide array of perspectives and approaches to solving probolems, each one with unique strengths. However, this diversity also means that we lack a shared understanding of what methods are appropiate to use and not in certain contexts. Methods that are established in one field may be considered pseudo-science and not rigurous in others, such as how some fields look down on more qualitative methods such as auto-ethnography. Past meta research has helped us catalogue and document best practices – for example, understanding in what circumstances to use single coding vs multiple coders for qualitative data analysis [3]. However, many challenges remain. By carefully documenting and understanding what methods our field is conducting, and what are the range of approaches that are being used, meta research will help us distill the various research methods that are used within the umbrella of HCI research, as well as formulating best practices for us to follow.

3. Collectively overcome challenges

A second reason meta research is important is that it helps us understand the pain points of our field. The novelty and uniqueness of HCI means we face challenges that other fields have not yet encountered, and for which no 'correct' answer exists yet. Challenges like:

- How to gather privacy policies at scale from online websites
- The ethics of harvesting publicly available from social media platforms for research purposes
- What are systematic and rigorous ways for designing future speculative scenarios on how technology may be used
- How can we easily recruit software developers to participate in interview studies

Currently, it feels like each researcher is locked inside their own silo and struggling to overcome these challenges individually. Meta research can shed insights into how others in the field solve these problems, helping share knowledge and avoid needing to reinvent the wheel – particularly useful for young and junior researchers at the start of their careers who do not have the experience to face these challenges.

4. Save us from ourselves

Finally, and arguably most importantly, meta-research can help save HCI research from itself. Ok, this part is a bit melodramatic, but the point is as follows. HCI, and academia at large, is facing a crisis of overwork and overpublishing [2]. We see an ever-increasing number of publications [4] (at CHI, for example, there was a 24% increase in submissions from 2024 to 2025 [5]). While growth can be beneficial, what we are seeing is uncontrolled and unsustainable growth, with papers being published seemingly for the sake of being published and improving one's CV rather than meaningfully contributing to science. As a result, we see shoddy, sub-par

science, leading to many problems in our field (such as the replication crisis or the reviewer crisis).

This problem is particularly acute in light of the rise of AI agents and LLMs. AI agents and LLMs have potential to assist researchers in their work, whether it is by automating analysis of data, conducting literature reviews, paper writing, or even carrying out whole research studies[6, 7]. While there is promise for these tools to assist researchers, there is the danger that these tools end up committing critical mistakes in that they prioritize output over research quality. If not regulated correctly, AI agents could engage in plagiarism, hallucinations, falsifying data, and more.

So how does this tie in to meta research? Meta research can intervene by helping us understand and audit our own field. Meta research can answer questions such as: what are the publication practices of our field? For example, what is the average rate of publications of scientists, and how is it changing over time. How sustainable are our publication practices? Is the overpublishing of our field leading to a decline in science? How are LLMs being used in research? What motivates scientists to publish papers, and how can we orient ourselves to publish in ways to improve science and not just selfishly promote our own careers? Thus, meta research is critical for safeguarding HCI as a research field.

5. Conclusion

In this position paper, I briefly outlined why I believe meta research is important. Given its importance, I am extremely delighted to see this workshop happening, and I hope to be able to contribute to it. On one hand, I wish to network with others who are working in this field. But more importantly, I want contribute to the exciting agenda and roadmap proposed by the workshop in terms of developing an ambitious research roadmap for HCI. I believe my past work in meta level studies, as well as my passion for the project, mean I can contribute meaningfully to the discussions and setting up of a meta research community.

Declaration on Generative AI

The author has not employed any Generative AI tools in the preparation of this paper.

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