

Fictional, Speculative and Critical Futures in Human-Computer Interaction

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With recent rapid developments in human-computer interaction, we are now facing emerging technologies which will have major impacts on humanity, potentially dramatically altering our ways of living. Technologies that once were the domain of science fiction, such as brain-machine interfaces, body augmentations, mind upload and robotic companions, are now here, or on the immediate horizon. These emerging technologies promise exciting opportunities for humankind, but they come with many challenges and might lead to massive societal, cultural and individual paradigm shifts. Understanding the impacts of these emerging technologies is remarkably challenging with conventional HCI methods such as user tests, interviews or quantitative analysis. Because these technologies are still emerging it is not possible to directly observe their impacts on society.

Design Fiction, Speculative Design or Critical Design have emerged as methods to grapple with the possible futures inherent in emerging technologies. These methods create fictional and speculative worlds oriented around proximate futures of technology allowing researchers to contemplate the consequences and possibilities of new technologies. Speculative methods allow us to better understand the opportunities, pitfalls, and dangers of new technologies. Speculative and critical methods help us to think rigorously and systematically about the future, but also playfully. Therefore, our aim with this track is to create a venue for research projects which adopt less conventional methods including design fiction, pastiche scenarios, speculative research or critical design and in the long term become a frontier publication avenue for such research projects.

All papers that will be submitted to this track should have relevance to methods such as design fiction, speculative or critical design. Thus, although submissions may include a variety of methods, they **MUST** include a section which critically engages with the related research by using tools such as *fictional abstracts, fictional prototypes, speculative design proposals or pastiche scenarios*. Accordingly, we do not have a clear boundary on the topics we accept, however, to give an example, some of the topics that are of relevance to this track include:

- Body-integrated Technologies
- Brain-Computer Interfaces
- Techno-Spiritual Studies
- Altered States of Consciousness
- Transhuman and Posthuman Technologies

- Robotic Agents
- Artificial Intelligence
- Solarpunk, Steampunk, Cyberpunk, and Afrofuturism
- Dystopia and Utopia Studies

If you are unfamiliar with the methods mentioned in this track but still would like to submit your research, we recommend a few readings that can lead to a successful submission to this track. We believe that research methods which do not require the collocated participation of human subjects are especially important and relevant to current times due to COVID-19 regulations. Moreover, these methods can help researchers to form novel perspectives to engage with their topics. Therefore, we expect submissions from all fields and encourage authors to engage with the fictitious, speculative and critical design methods.

If you have questions, please contact oguz.buruk@tuni.fi

READINGS:

Blythe, M. (2014, April). Research through design fiction: narrative in real and imaginary abstracts. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 703-712).

Baumer, E. P., Blythe, M., & Tanenbaum, T. J. (2020, July). Evaluating Design Fiction: The Right Tool for the Job. In *Proceedings of the 2020 ACM Designing Interactive Systems Conference* (pp. 1901-1913).

Tanenbaum, T. J., Tanenbaum, K., & Wakkary, R. (2012, May). Steampunk as design fiction. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1583-1592).

Noortman, R., Schulte, B. F., Marshall, P., Bakker, S., & Cox, A. L. (2019, May). HawkEye-Deploying a Design Fiction Probe. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems* (pp. 1-14).

Baumer, E. P., Ahn, J., Bie, M., Bonsignore, E. M., Börütecene, A., Buruk, O. T., ... & Guha, M. L. (2014). CHI 2039: speculative research visions. In *CHI'14 Extended Abstracts on Human Factors in Computing Systems* (pp. 761-770).

Buruk, O. O., Özcan, O., Baykal, G. E., Göksun, T., Acar, S., Akduman, G., ... & Genç, H. U. (2020, April). Children in 2077: Designing Children's Technologies in the Age of Transhumanism. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1-14).

Börütecene, A., & Buruk, O. (2019, November). Otherworld: Ouija Board as a Resource for Design. In *Proceedings of the Halfway to the Future Symposium 2019* (pp. 1-4). (pp. 1-12).

Thibault, M., Buruk, O. O., Buruk, S. S., & Hamari, J. (2020, July). Transurbanism: Smart Cities for Transhumans. In *Proceedings of the 2020 ACM Designing Interactive Systems Conference* (pp. 1915-1928).

Dunne, A., & Raby, F. (2013). *Speculative everything: design, fiction, and social dreaming*. MIT press.