

Högre seminarium

onsdag 7 oktober 2020

kl 15.15-17 i [Comenius](#) (Key-huset) eller via Zoom (se utskick)

Higher Seminar

Wednesday 7 October 2020

3.15-5 pm in [Comenius](#) (Key Building) or via Zoom (see email)

Robots in the Wild: An Interaction Analysis Perspective

Hannah Pelikan, SoK, IKOS

With increasing automation and digitalization, robots enter everyday settings such as roads, workplaces and homes. Certain challenges for such robots can only be identified by studying them in their real-life settings. Interaction is fundamentally social and it has no timeout (Atkinson & Heritage, 1984). We cannot “do nothing” since even inaction is treated as accountable, for instance when asked “what would you like to eat?”, our friends and partners will likely treat a non-response as a problem. As I will demonstrate, this also holds true for robots. Users make sense of a machine’s actions in the specific context that they occur in, rather than following idealized pre-programmed sequences (Suchman, 1987). A robot’s technological complexity is worth little, if it fails to follow basic human interactional patterns and thereby acts at odds with human expectations. I present an interaction analysis perspective on human-robot interaction, using video data to provide detailed insights into how humans and machines interact on a moment-by-moment basis. Specifically, I will present data from my field studies on a Cozmo robot in family homes and on autonomous buses in regular traffic. Instead of having users rely on manuals, design research strives for implicit (Ju & Leifer, 2008) and supple (Höök, 2018) interaction, which ideally would not require additional effort on the human side. In this talk, I will focus on how nonverbal and non-lexical resources can facilitate such smooth coordination of human and robotic bodies.

Atkinson, J. M., & Heritage, J. (1984). *Structures of social action: Studies in conversation analysis*. Cambridge University Press.

Höök, K. (2018). *Designing with the body: Somaesthetic interaction design*. The MIT Press.

Ju, W. & Leifer, L. (2008). The Design of Implicit Interactions: Making Interactive Systems Less Obnoxious. *Design Issues*, 24(3), 72.

Suchman, L. A. (1987). *Plans and situated actions: The problem of human-machine communication*. Cambridge University Press.