**Technical supported competence.**

**The construction and resemiotization of competence during the development of a reminder robot.**

*Antonia L. Krummheuer, Aalborg University, Denmark*

Assistive technologies aim to support people’s autonomy in everyday activities. For example, a scheduling and reminder robot aims to support a person who has problems in remembering. As such, these technologies aim to assist people in (re)gaining agency and competences in the performance of certain activities that pose challenges.

This talk approaches the construction of competence across different contexts by following the construction of human and technical agency during the development of a reminder robot for and in collaboration with a person living with severe memory loss. Therefore, I will combine Actor-Network Theory’s concept of human and non-human agency (Latour, 2005; Winance, 2006) and Iedemas (2001) concept of resemiotization with an ethnomethodological and conversation analytical approach to the situated construction of competence in interaction (Clarke & Wilkinson, 2013; Garfinkel, 1967; Goodwin, 2004).

My insights are based on a multimodal interaction analysis (Heath, 2011) of three video sequences that derive from a co-creation process in which researchers build a reminder robot for and together with a person living with severe memory problems. The project was undertaken in collaboration with a Danish residential home for people living with acquired brain injury and was build up as an iterative workshop series with residents and staff.

As central aim for the project was to find out how the robot could support the resident’s autonomy by promoting his/her agency to participate more competently in activities that posed difficulties for him/her. We aimed to understand what are relevant activities for the resident, how does the resident participate in this activities, and how can these activities be supported by a robot?

The analyses of this talk follows the resemiotization process (Iedema 2000) in which the agency of the human-robot interaction was developed from talking about the design features the robot should have, to testing cardboard prototypes and finally implementing the high-fidelity prototypes at the resident’s apartment. My interest is directed to understanding the concept of communicative competence by looking at how the participants understand resident’s and robot’s competences in the different sequences of the development of the robot. This will be done by analyzing sequences in which the participants assess the resident’s and robot’s competence to support each other’s agency.

***References***

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