Exploring New Alterity Relations
The Unique Qualities of Social Interactions with Machines

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Figure 1 - The never-hungry caterpillar.
Photos and prototype by Matthias Laschke.
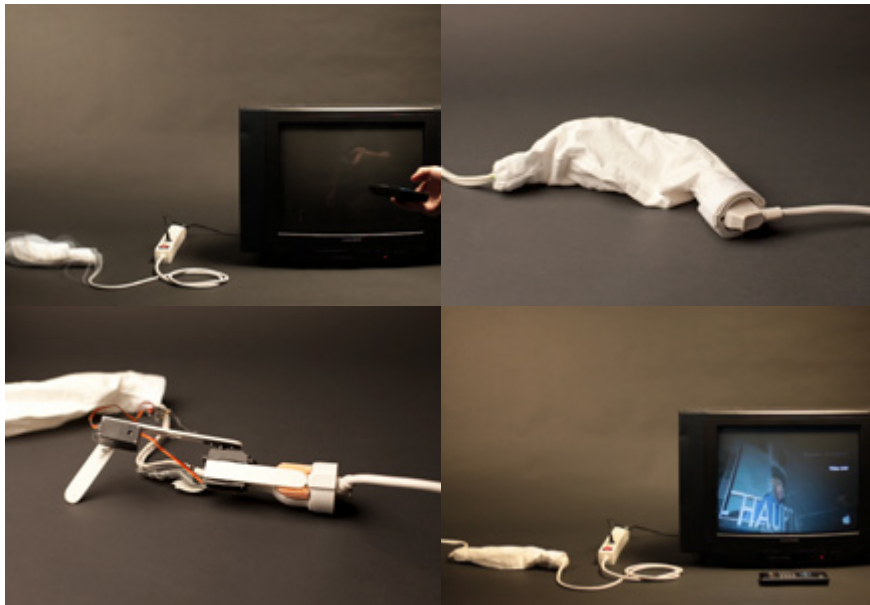
Abstract
In Human-Computer Interaction (HCI) and design, human-technology relations, as proposed by Ihde [5] and extended by Verbeek and Rosenberger [8], represent an insightful perspective on design paradigms and directions of desirable ways to interact with technology. For example, current design approaches in HCI, such as 'Embodiment' (e.g., [3]) or Human-Computer Integration [7], often result in technologies that "disappear" and become an extension of their user.

However, the importance of self-learning, self-reliant, and proactive computational artifacts is on the rise and possible relations change and broaden – especially alterity-relations. So far, designers struggle to explore these new alterity-relations with machines and often resort to naïve anthropomorphism or zoomorphism, which come with risks (e.g., reinforcing inappropriate gender stereotypes [1, 4] or influencing children in unknown ways [9]). They also fail to make use of the unique qualities and capabilities that emerge in alterity relations with machines such as being non-judgmental or persistent (e.g., [2, 10]).

A concrete, yet still simple example is the never-hungry caterpillar ([6], see figure 1). While neither learning nor 'intelligent', it triggers reflection in a persistent and unwavering way - unique to a machine. It invokes a strong sense of alterity through the interaction. Unfortunately, it still mimics an animal. Hence, both for HCI and design alterity relations offer an inspiring perspective but also many open questions that need to be explored. In our contribution, we want to show examples of what this new expanded alterity could look like, as well as primers for discussion and future exploration.

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