

Esra Isguzar

Can we forgive a robot?

As humans, we make moral judgments based on our interpretation of the mindstate of the agent we are judging. For example, we tend to blame someone more if we believe a harmful act was intentional as opposed to accidental. Before being able to do this, it is essential to perceive agents as intentional beings (Martini, Gonzales, Wiese, 2016). This means we need to perceive an agent as having (some sort of) a mind. The physical characteristics of a robot can activate mechanisms in our brain in ways similar to what happens when we face social interaction partners. This study addresses the question whether physically more human-like robots are more likely to be perceived as intentional beings, and thus be judged more like we would judge a human. The study results from two experiments show some evidence that participants blame robots relatively more for a harmful act when they shows more human-like features. The findings are discussed in the light of existing literature and recommendations are made for future research.

Arzu Sahin

The Effect of Solely Descriptive Auditory Route Cues on Navigation Performance of Cyclists

In this day and age society strives to improve road safety. Legal prohibitions are introduced that prevent holding an electronic device while riding a bicycle. These prohibitions are meant to reduce the number of road casualties by preventing people to derive their attention from the road. Although handsfree usage of electronic devices is still allowed, visual route guidance displayed in front of the user might still distract the cyclist too much. This opens up the question whether non-visual navigation aids are sufficient enough to help one navigate from one place to another. Therefore, the goal of this study was to examine the navigation performance of cyclists whilst using solely descriptive auditory route cues, in comparison to using only visual navigation instructions and using both visual guidance and descriptive auditory route cues. An interactive virtual system with stationary bicycle was used to simulate a bike ride through an unfamiliar urban environment. The findings of this study are based on a sample of 45 participants divided into three groups, each with its own type of navigational guidance. We measured reaction time and the number of errors as indicators of navigation performance. Results show no significant differences in navigation performance between groups, nor gender. This implies that people do not perform better or worse whilst navigating with solely auditory guidance, in comparison to solely visual guidance and both visual and auditory guidance.

Kees Sommer

Kind words: How prosociality shapes cross-modal language

This project proposes that self-domestication in humans, correlating with increased prosocial neurochemical activity, resulted in a heightened sensitivity to cross-modal associations. Evidence supporting this is presented. This hypothesis is further explored through a behavioural experiment testing the relationship between prosociality and cross-modal sensitivity.

Evelien Mols

Algorithmic Authority: Motives behind relinquishing our decisions to Artificial Intelligent systems

Artificial Intelligent systems are increasing in popularity, but research about the predictors of using the technology, and more specifically about granting authority to algorithmic advice, lacks. In this research we try to find an answer to the question what constructs are decisive in giving authority to algorithmic aid during decision-making? First, a conceptual framework was developed to gain insight in to the factors contributing to the acceptance of algorithmic authority. Next, an experiment was developed and conducted where one had to accept or reject algorithmic aid during a dismiss decision. Four experimental groups received different background information about the algorithmic aid. We analyzed the responses of 212 respondents. Results show that known historical use of the algorithm, accuracy information of the algorithm or background information regarding the qualification of the developers did not contribute to the rate of acceptance of algorithmic aid in comparison with the control condition. Information about social usage of the algorithm showed, contrary existing literature, a significant negative effect on the amount of algorithmic-reliance. Also the perceived task complexity and perceived quality of the algorithm were affected by the background information. Age and gender seem to have a moderating effect on these outcomes. This research contributes to our knowledge of human interaction with algorithm based dismiss decisions.