An Automatized Heider-Simmel Story Generation Tool

Martin V. Butz
Cognitive Modeling, Faculty of Science, University of Tübingen

Robert Geirhos
Cognitive Science, Faculty of Science, University of Tübingen

Jan Kneissler
Cognitive Modeling, Faculty of Science, University of Tübingen

Abstract: The social psychologists Fritz Heider and Marianne Simmel have shown in the 1950s that movies about very simple object interactions are typically interpreted in a very social manner, quickly perceiving motivations and emotions. We have developed a tool to generate Heider-Simmel-like videos. In contrast to the Heider-Simmel Interactive Theater project by Andrew Gordon and colleagues, though, our tool enables the generation of story-lines. The user is offered a manifold of individual object behaviors, such as approaching, avoiding, or circling around another object, and a manifold of perceptual events, such as the detection of another object, the touch of another object, etc. Behavior-event complexes can be chosen and concatenated by an intuitive user interface. The resulting story lines are then played-out by the tool in different scenarios, yielding different videos about socially similar interactions. The tool may be very useful for conducting future social- and object-interaction-related cognitive science projects.