**Animation and Movement: Exchange between Media**

### Juergen Hagler
**Deviations and Anomalies at the Intersection of Animation, Media Art, and Technology**

The reciprocity between art and technology plays a central role in media arts and in computer animation in particular. Looking back at the history of computer animation, the first basic form of this interaction can be found in the targeted use of technology to develop specialized applications. A second form of this occurs when technological innovations serve as a source of inspiration for new and experimental approaches, leading to their refinement, modification and an extended range of utilization. The boundaries separating these two strategies are typically blurred, similar to the borders between art, research, and science.

What is the link between art, technology and animation? Animation – particularly computer animation – has strong ties to technology. The first computer animation was the product of a research project, providing a simulation of a satellite orbiting a planet. This was followed by a number of other milestones that strived to further develop computer animation. The first artistic use of computer animation involved the repurposing of military equipment and can thus be considered an anomaly of an established technology. John Whitney, Sr. and his brother James modified the controls of an antiaircraft gun and combined these with cameras to produce his first computer animations. Analogous to Friedrich Kittler's theory about the misuse of army property, war machines became an artist's animation toolset. The subversive use of technology in computer animation has been a prevalent theme ever since, relying on deviations, anomalies, and a deliberate exploitation of flaws. Animation can be of a reflective nature and specifically address its own substance and materiality as a theme, or it can be extended by technologies that are truly foreign to the field of animation. With examples of recent animated works, diverse forms of play and experimentations with animation and technology will be discussed.

### Biography

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Juergen Hagler studied art education, experimental visual design, and cultural studies at the University for Art and Design in Linz, Austria. He is Professor for Computer Animation and Animation Studies at the Department for Digital Media at the University of Applied Sciences Upper Austria, Campus Hagenberg. He became the program coordinator for the Digital Arts master's degree program in 2009. Since 2014, he is the head of the research group Playful Interactive Environments that focuses on the investigation of new and natural playful forms of interaction and the use of playful mechanisms to encourage specific behavioral patterns at the interface between game and animation. Since 2009, he is the curator of the Ars Electronica Animation Festival and initiator and organizer of the symposium Expanded Animation.