

Computer Games – Artform of the 21st Century?

Prof. Dr. Martin Reiser

Director,

Institute for Media Communication

GMD, German National Research Center for Information Technology

D-53754 Sankt Augustin

reiser@gmd.de

Abstract

Computer Graphics has come of age – its impact on society is everywhere and growing. Today, we are at a turning point. At the high-end, virtual movies of unprecedented complexity and realism proliferate and are loved by the public. Way beyond what was possible 1993 in “Jurassic Park”, dinosaurs roam in real backgrounds, real actors replay the fight for life in a centennial storm, Stuart Little, the cute mouse, is animated in unbelievable realism and interacts with his human hosts in complex scenes and more and more, fully artificial 3D animated full feature movies are created.

While movies are great, interaction is better. Last year, revenues of the game industry in the US equaled the box office returns and the market grows much faster than Hollywood. While the first action games were played solitarily, the new megatrend is cooperative gaming. “The Sims” mark a new paradigm, where

the player enacts and guides the melodrama of daily family life. This is likely the precursor of the interactive film of the future where soap operas are unfolding with viewer participation on various levels.

Technology will go straight ahead adding 2 orders of magnitude in the next 10 years. With modeling and rendering well understood, the technical challenges move to better level of detail, physically-based animation and autonomy of the virtual actors.

I expect the coming years to be very exciting. Internet, movies, television and computer games will merge into a seamless virtual entertainment world where the participants may be viewers, participants or even players. The challenge is content, not technology. The concept of an interactive narrative and drama as a game has yet to emerge. As it does, I believe the artform of the 21st century is being created. If the movie industry is a guide, it will take two decades to find its esthetics and language.