

abstract.doc – how to kick ass with a virtual foot

As a result of the continuing technological advances in hardware and software, the computer game's ability to realistically simulate virtual worlds increases. On this basis the emotional experience of real life is examined, and related to the computer game of the near future, termed Interactive Drama, when advanced speech-recognition, head-mounted-displays, and the simulation of complex social systems, has become part of the computer game.

On a basis of evolutionary psychology and the phenomenology of Merleau-Ponty, a cognitive-psychological perspective is established, forming the grounds of a central thesis which states that a higher "reality-level" of the interactive drama will lead to a more immersive experience, which in turn will enhance the emotional experience of the participant.

From this perspective, the fundamental aspects of the communication between participant and interactive drama are analyzed: participant, emotional experience, medium, form and content.

The evolutionary cognitive-psychological perspective that is applied allows for a thorough investigation of the mechanisms by which we construct meaning from, and react to, the world around us. The cognitive schema is posited as a central element in forming understanding, and as such is used to investigate the influence of the aforementioned fundamental aspects on the emotional experience.

In continuation of the established theoretical perspective, Keith Oatley and Nico Frijda describe the emotional experience as a functional adaptation, allowing for goal-directed motivational behavior in a complex world. The basics of emotional experience in general and 3 emotions in particular, are described as well as their conditions for variation in intensity. In addition 4 aesthetic principals are explored in an attempt to expand upon the tools available for designing interactive drama.

The interactive medium is discussed in order to clarify what impact it has on emotional experience compared to real life, and the consequences of interactivity on this experience. Central issues regarding the phenomenological relation to the virtual world are uncovered, which argues in favor of the central thesis. Additionally the combined results form the basis for further development of the aesthetic principals.

Form is explored in continuation of our evolutionary and phenomenological makeup, and in accordance with Mark Johnson the *image-schema* is posited as a cornerstone of understanding. The resulting view is that of the image schema as a very useful concept in analyzing a given sequence of events, in order to identify and manipulate aspects central to our emotional response.

The narrative structure of the interactive drama is linked to the dramatic tradition of Aristotle, and following Jean Mandler a central schema for narrative understanding is explained. It becomes evident that narrative and emotions are closely linked, and as the image schema is at the core of the narrative fundamentals, a universal approach to designing interactive drama is reached.

The results are summarized in a groundbreaking new design-theory, linked to the participant's phenomenological relation to the interactive drama, and the consequences for his emotional experience. Finally a few pointers to where this new theory will take future design are given, in order to show the concrete implications of this design-approach.