Gunnar presentation:

Sensory Media: Indirect Augmented Reality and Situated Simulations of Future Topics (Urban Planning).

Since the Virtual Reality hype collapsed in the mid 1990s the field of Augmented Reality has proved itself to be an experimental research tradition in steady growth. Augmented Reality has matured and become a more diverse platform expanding and moving beyond its Mixed Reality origin as described by Milgram and Kishino (1994). The recent emergence and availability of sensor‘based and location‘aware smartphones and tablets is challenging the original taxonomy of augmented reality the way it was characterized by Azuma (1997). With mobile sensory devices the mixed reality boundary is no longer residing at the level of the display. The frame of the display has itself become the border between the virtual and the real (Liestøl 2011a). These new configurations has been named Indirect Augmented Reality (Winter et al. 2011). A Situated Simulation is an example of this indirect kind of mobile augmented reality.

In a situated simulation there is approximate identity between the users visual perception of the real physical environment and the users visual perspective into a 3D graphics environment as it is represented on the screen. The relative congruity between the real and the virtual is obtained by letting the camera position and movement in the 3D environment be conditioned by the location, movement and orientation sensors of the device. As the user moves in real space the perspective inside the virtual space changes accordingly. This form of representation is then applied to simulate alternative version of a given location; the simulation may relate to and display past, present or future dimensions.

In this paper we suggest the notion of *Sensory Media* and discuss how it makes possible new forms of mobile and location‘aware representations, that is: Situated Simulations as a kind of Mobile Augmented Reality applications. Over the past three years we have primarily focused on past topics (ancient archaeological sites) in our explorations into the narrative and rhetorical potential of this form of representation (Liestøl et al. 2011b). In this paper, however, we move to the future mode and discuss practical experiments with the use of a situated simulations *pre‘*constructing planned buildings in an urban setting. The case in question is a much debated construction project in downtown Oslo, Norway: The New National Museum (Forum Artis). The paper describes the design process of the simulation as well as how it has been received and judged by people involved in the planning and design of the new Museum.

References

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