

Generative design as a method to foster explorative behaviour in virtual motor rehabilitation

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ABSTRACT

The article contrasts the bottom-up with the top-down approach to the development of systems for virtual motor rehabilitation. A research project is presented that uses the top-down approach for the development of a system for virtual neurorehabilitation of amputees suffering from phantom limb pain. Artistic visualisations that are inspired by the field of generative design will be used to constitute the illusion of a moving phantom limb. The coupling between the movements of the patients and the visual effect is not straightforward but needs to be discovered through explorative behaviour. It is assumed that this will help the patients to concentrate on the treatment and therefore a strong therapeutic effect will be achieved.

Full papers will be published in the Conference Proceedings and will be available to delegates at the conference on Sept. 10.

Full papers will be released on-line in the ICDVRAT archive on March 15.