

Puppet, Golem, Autonomous Avatar

A journey towards mixed reality stage

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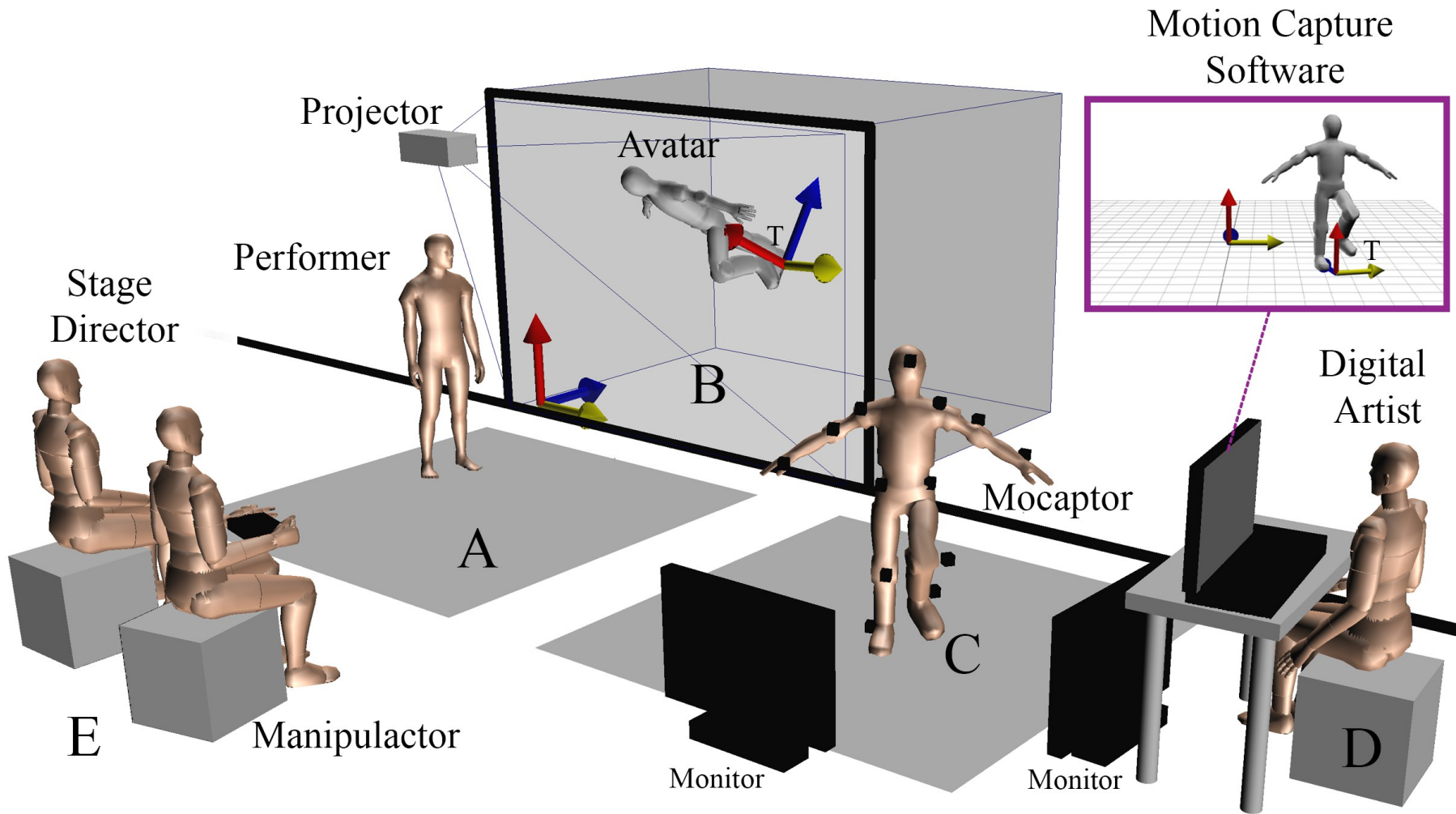
Summary of the talk

- Brief overview on ways to give life to humanoid objects
- Description of the mixed reality experience context
- Motion capture in theatrical context vs videogame context – walking in a videogame
- Needs of an external control of the avatar by the manipulator
- Explaining the acting situation of the avatar : one body – two minds
- Practical exemple : AvatarStaging platform

Brief overview on ways to give life to humanoid objects

- Puppet
- Autonomous creatures
 - The creature of Frankenstein (by Mary Shelley)
 - The robots of ROSSUM company (R.U.R by Capek)
 - Galatée by Pygmalion
 - AI in Gibson's Necromancer
- Golem

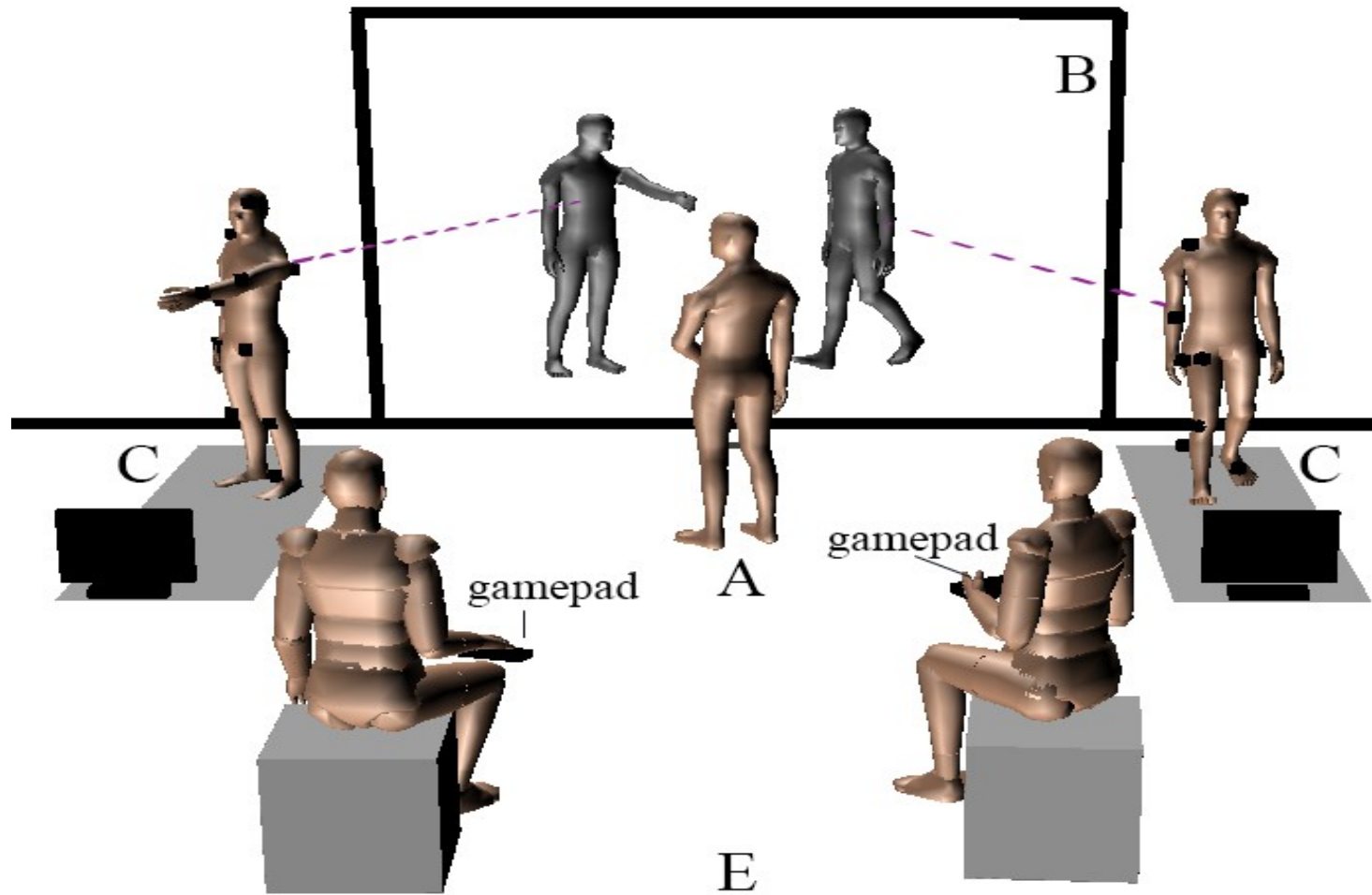
Description of the mixed reality experience context



Walking in a video game

- Motion capture in a theatrical context
 - Direct control seemingly without computation
 - High reactivity to the director indications
- Motion capture in a videogame context
 - Use of recorded animations that are computed to fit artistic purposes
 - Exemple of controlling a walking avatar
 - Recording two animations : an idle animation and a walk
 - Making loops from the recordings
 - Blending from idling to walking
 - Moving the reference of the avatar in connexion with speed and orientation

Needs of an external control of the avatar by the manipulator



Needs of an external control of the avatar by the manipulator

- Starting location
- Matching the mocaptor acting space and the 3D scenery
- Organizing interrelation between physical and digital stages

An avatar with one body and two minds

- One body
- Two minds

[Http://avatarstaging.eu](http://avatarstaging.eu)