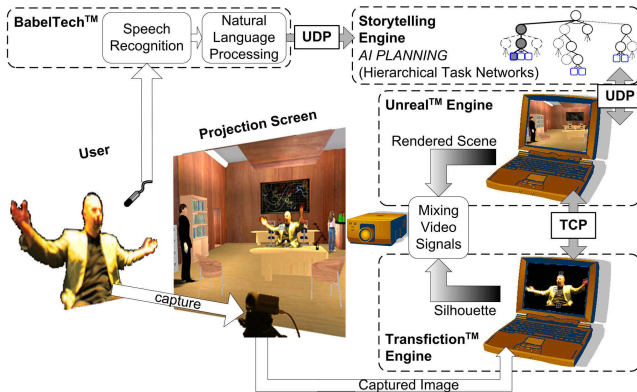




illustrated this approach on a virtual sitcom scenario. In the storytelling paradigm, though he can intervene at anytime, the user essentially watches the unfolding story as a spectator.



**Figure 2. Architecture of the Mixed Reality Interactive Storytelling System.**

More recently, we have addressed Mixed Reality Interactive Storytelling [3], extending previous research [4] by incorporating the interactive storytelling techniques previously developed (see Figure 2). We re-incorporated the user as a member of the cast, extending both his involvement and his immersion. The system follows a magic mirror metaphor, in which the user's video image is captured in real-time, mixed with a virtual world including synthetic characters, and projected on a wide screen facing the user, who sees himself taking part in the story. In this rather unusual form of experience, the user is at the same time an actor and a spectator. In the supporting application example, the user plays the role of the villain in a short James Bond movie episode, the main narrative drive being provided by the Bond character's role. The user's acting is analysed by a multimodal system based on speech recognition and gesture analysis and is interpreted as a response to Bond's actions, which determines the evolution of the scene [3].

One of the best-known visions of VR in popular culture, the Holodeck™, is also a narrative environment (which has inspired Virtual Storytelling as well [5]). Virtual Storytelling can be seen as a research into the meaning of the virtual experience, about the semantics of situated action in VR.

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