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Woyzeck

Developer: Rebecca Rouse
ESRB Rating: Not Rated
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by Mike Sage

I recently had the opportunity to visit an ambitious Augmented Reality (AR) exhibit at Toronto's York University, produced and curated by theatre artist Rebecca Rouse. The piece is a fittingly bizarre adaptation of German playwright Georg Büchner's fragmented tragedy *Woyzeck*, ostensibly chosen for its notoriously incomplete narrative and potential for artistic freedom. Partially written during 1835-36 before Büchner died of Typhus, the play was never completed, and the un-ordered text has since been adapted into various avant-garde formats, such as a film by documentarian Werner Herzog, an opera by Alban Berg, and now, Rouse's interactive AR exhibit.

For those unfamiliar with the tale, it's an unconventional narrative doozey. Woyzeck is a simple infantryman driven to insanity and violence during his military employment in a provincial German encampment. The soldier makes money participating in menial labor and medical experiments conducted by the camp 'Doctor'. He gets nasty jealous when his lover Marie is seduced by the Drum Major, leading to a shady rape scene, a bevy of apocalyptic visions and a twisted murder; all of these are confusing events in Büchner's work, made all the more intriguing via Rouse's freeform playing with the narrative. In her adaptation, users have the choice to consume the scenes of *Woyzeck* in any order they see fit.

The technical accomplishment of Rouse's exhibit is rather astounding. Her installation seems simple at first glance: a dim, near empty room with a handful of peculiarly nondescript objects (several dolls, a dollhouse, a life-size plastic mannequin, a book and a shirt) hanging in mid-air, suspended by fishing line. But as users explore the setup with an augmented reality hand and headset, each object (and other points of spatial interest) trigger various video and audio clips, which play in the headset goggles. Her installation takes advantage of York University's state-of-the-art Future Cinemas Lab facilities, with a tracking grid mounted to the ceiling, which sends out ultrasonic and inertial pulses to those sensors worn on the head and hand. Because the user can explore the space in real time however he/she desires, the narrative is pieced together at the discretion of the user. The piece becomes a meditation on the narrative form itself.

Further blurring the narrative rules, Rouse's choice to enact these key moments with modern dance, overlaid with voiceover or song is a courageous one. Through viewing the almost ghostly images of these abstract scenes in the augmented reality goggles, the user can easily identify with Woyzeck's struggle with insanity. The clips themselves were shot with Rouse's collaborators Brendan Padgett and modern dance choreographer Kyle Shepard in New York City in front of a green screen. Each were overlaid with performed voiceover and song using an adaptation of the Woyzeck script, freshly translated into English by Rouse herself. At over an hour total running time, Rouse's installation is one of the world's longest form uses of augmented reality.

According to new media scholar Ronald Azuma, some important qualities of Augmented Reality are that it combines the real and virtual, it is interactive in real time and it is registered in 3D (Azuma, 1997). These concepts may date back to prehistory (and the environment-enhancing cave paintings), but Tom Caudell officially coined the term in 1990 while helping workers assemble cables into aircraft at Boeing. The very name suggests a better, more enhanced experience of the real world.

Today, it's more practically used in medical and military simulations or to enhance museum exhibitions. Where could it lead us? There are all sorts of possibilities, some more practical than others. GPS-embedded windshields that overlay maps and highlight upcoming direction changes and potential hazards could be useful, for example. Or, the future could hold electronic eye contacts that airbrush the way we see the world around us, digitally programmed to hide dirt and garbage or make unfortunate-looking people the digital

spitting image of Brad or Angelina.

But what of its place in the entertainment sector? How will choose-your-own-adventures like Rouse's ever truly catch on, particularly with the moviegoers and gamers Rouse and others like her are presumably targeting? Currently most AR, Rouse's adaptation of Woyzeck included, requires the use of clunky helmet-wear and such extensive tracking sensors overhead that having more than one or two users participating at once is logistically quite difficult.

Sure, the technology is in its infancy, but with facilities like the one housing Rouse's piece costing upwards of a half of a million dollars, augmented reality has a long way to go before it will have much accessible appeal beyond niche use in military and medical situations or experimental art. That said, Rouse's foray into augmented reality is unprecedented, and hints at the fascinating potential of narrative interaction only truly possible with this medium.

Rouse intends on touring the installation in the upcoming months, though only a handful of universities across North America (including Columbia, MIT, Georgia Tech and Carnegie Mellon) boast the operating facilities needed. For further behind-the-scenes information on the installation, visit the comprehensive website.

RATING: ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

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