

Abstract

Good Night, Sleep Tight is an interactive virtual reality performance created by theatre and digital arts company ZU-UK. It was previewed at Gerry's Kitchen in July 2017. Combining VR and binaural technologies, participants are put to bed and transported to a dreamscape composed of childhood imagery and aerial cityscapes. This artistic position remixes the audience's experience and the artistic processes of *Good Night, Sleep Tight* to proffer a critical engagement with the aesthetics of VR. Theories pertaining to VR and theatre are emerging but not yet fully established. The discourse between technologists and artists is key to understanding how VR is a new artistic medium requiring a language not solely redolent of gaming or theatre. The format of this article reflects ZU-UK's contention that VR experiences are best designed as collaborations between artists and audiences who construct an imaginary world through interactive media. The seven scenes below concentrate on different aspects of the rehearsal process and the final performance from the perspectives of the ZU-UK directors, VR technologists, and participants. Interspersed throughout the article are fragments from the *Good Night, Sleep Tight* script and a description of the piece from the reader's perspective, who acts as ZU-UK's imaginary audience member.

Key Words

Interactive, Participatory, Binaural, Childhood, VR, Mixed Reality

Good Night, Sleep Tight (Remix)

Cast List:

Emily Donovan (Technologist)

Persis Jadé Maravala (Artistic Director, ZU-UK)

Jorge Lopes Ramos (Executive Director, ZU-UK)

Kayja Zisels Maravala (Child's Voice)

Audience Voices (Various)

You (.....)

You walk into Gerry's Kitchen and see

three beds

facing a window

looking onto a road in

Stratford.

Three women

in identical dresses

smile and

greet you

and

one of them

takes your hand

and puts you in pyjamas

and then puts you
to bed.

Scene One - An Artistic Proposition

PJM: If you work with the idea that the whole world is experienced through someone's body, then what happens when you play with that body?

JLR: We want an embodiment of a film so the audience's sensation of their body moves into an eight year old being put to bed.

ED: Imagine each of the dimensions is a direction you can move in. You can move in any one direction but the other directions don't change. You stay static in the other three dimensions. The fourth dimension is another direction you can move in that has the same property. That's why time can be considered a fourth dimension.

She's looking at
you like she knows
you but
you don't
know her.
But you do
know what
she is.

Scene Two - The Performance of VR

PJM: I'm not really sure I ever wanted to work with VR. My first experience of it was very powerful. Jorge and I went to this god awful event in the Olympic Park where they were trying to flog buildings that weren't even built yet. The developers were moving into the Olympic Park and they were pitching something to all of the artists in the area. It was corporate. Nasty and shitty. As we were leaving I caught sight of some guys showing off a VR roller coaster experience. God, it was really horrible but really powerful. The roller coaster was going down. I don't like things like that. But I became completely obsessed with the thought that my brain would believe something even when I knew it wasn't true. So I stood there for ages. They had to pull me off in the end. I kept trying to meditate my physical reaction. All the physical sensations and reactions were already in play so I was trying to override my brain system by saying 'It's VR. You're not really on a roller coaster'. I couldn't do it. My body felt like it was truly free falling. My stomach turned and my head started spinning. That was the fascination. The body will believe something and the conscious mind can't. Our involuntary systems are stronger. I found that little patch of inconsistency really interesting, the space between how much we believe we are in control and how much we are in reality.

CA: VR is a new art form. But because it's seen as a boy's toy it isn't taken seriously. Language and money are closely tied at the moment, and what VR needs is a theatre language, or is at least aware that it is borrowing language from other mediums. The medium needs its own categories as it evolves.

You're in bed

holding a
teddy bear
and
She's putting something on your head
and you can
see the window
and the
road
and she's
still there
holding your
hand.
Then
suddenly
you look at her
and
see

Scene Three - Origins

PJM: The origins of *Good Night, Sleep Tight* are from a scene in *Hotel Medea* when the audience were put to bed. We had been experimenting with interfering with the normalcy of a person's physical position. The scene was one that people reported as the most important for them. I locked it in my brain that there was something very impactful about the experience of being put to bed. But it was difficult to build on,

simply because of scalability. We found that the maximum you could have was one actor to four people in two bunk beds, with the handmaiden in the middle. It felt difficult to move away from those numbers so we left it for a really long time. One idea we did have was that people could be without the handmaiden and experience something in the bed. At that time we had mini projectors and we started experimenting with putting the projector on the bed or above the audience or on their hand. But it looked a bit shit so it didn't go anywhere. That idea died until VR became cheap and ubiquitous with Google Cardboard. Suddenly you could make 360 degree films and we went back to the idea from that perspective. The experience could be furthered and augmented. What did happen that was unexpected was that we didn't do away with the live body. The expectation with VR is that you don't need an actor to mediate the experience. I was precious about not feeling that was true, that there was not enough of an experience without an actor.

a different woman.
She's singing.
Kissing your hand.
Stroking your face.
You feel the kiss
And the
touch.
She's kissing each
finger.
Singing a lullaby.

Just like when you were/n't
put to sleep by
your mum as a
child.

EM: Working with ZU-UK was my first experience of working with VR. I got involved with *Good Night, Sleep Tight* through my PhD supervisor at Queen Mary, who had already done some work with ZU-UK. My research is looking at 4D and mathematical visualisation in virtual reality.

Scene Four - Technologists and Artists in the Rehearsal Room

ED: There are different types and levels of VR technology at the moment. Google Cardboard is the most basic and runs on most smartphones. It has at most one external button to interact with the environment of the game. Daydream is a step up but it's limited to a small number of high end smartphones. A controller allows you to move around and interact in the game. There's the Oculus Rift, the HTC5 and the Playstation VR Headset. The HTC5 and Oculus Rift requires high powered Windows computers to run the machinery off of. There are a lot cables connected to the computer and the headset. But the resolution is way higher. Resolution is very important in VR. The screen you see is just a subset of the experience. The processing and the graphics are much more demanding than they are for traditional screens. The 360 degree video and computer graphics content create a stronger visual experience. Interactive game environments are different to 360 degree video. You can't move through video. You can move the camera and it feels like you're moving in the space. But your POV is always

from the camera. The main requirement from the artists was to create a system in which the actor and audience videos were automatically synchronised with each other. There's the headset for the audience and the tablets for the actors so they knew when to touch them. It was very important the videos synced on the tablet and headset so that the audience felt the touch at the same time they were seeing it. The idea was to make them more immersed in the experience. The aim of the tech was to allow them to put themselves in the child's body and to have a more emotional and personal experience through the touch.

Eyes that aren't
your eyes begin
to close.

They feel heavy.

You feel the

woman

cover you

with a

sheet.

It's warm.

When your eyes open

you

PJM: I'm interested in understanding what signals trick the audience's brain into deciding what is or isn't reality. From the beginning, our work has been about appealing to the irrational in a person. Appealing to physical urges or sides of themselves that they

can't control or can't resist. Acts that have physical stimulation. It doesn't matter if you do or don't like it. Something shifts in your normal state. Bringing people to an altered state by appealing to that unconscious level and the involuntary systems of the physical body makes the VR a continuation of our work. The brain needs two or three stimuli to believe this is reality. You see your body, you feel the touch and hear the sounds, these are all constructing a false reality which is hard to override. You're given the conventional picture of the ritual of being put to bed. Dressed in pyjamas, a storybook, a lamp. The signifiers are there. Participants quickly understand the role. You take your shoes off, even maybe be given hot chocolate. These modern rituals tell the audience they are going to sleep. You're being prepared to be tucked in. The VR mother goes through a whole sequence. We fitted in as many physical sensations as we could. There's a very important moment when the blanket lifts up and there's this wind that comes exactly at the same time the blanket goes over the face. This transports the audience member into another world.

ED: In order to have the film sync with the actors who controlled the audience headsets we built an app in Unity, a games engine. The Google Cardboard VR application runs off S6 smartphones. S7 smartphones were used for recording and stitching the 360 degree footage together. The footage was recorded using the Samsung Gear 360 degree camera which worked in conjunction with the S7s. The smartphones got put in the headset. We used features of the game environment to run the video. It worked but the trade-off was that it was not optimised for video playback. The video quality was not as good as it could have been. I was working most closely with Nacho Durán to get the stuff working for the show. Andrzej Korolczuk did the hard core coding for the app. Nacho is good at everything. He was especially good at video editing and the file

formatting to get it ready and put on the application. Nacho was the master hacker and I was his apprentice. We worked on a lot of parallel tracks at the same time. There was the filming, making the app, looking at other solutions to the app or other ways it could go. We did lots of different testing and hacking. Hacking is about finding solutions, playing around with stuff, taking what's available, seeing how it works and putting it together in different combinations. Nothing is off limits to co-opt, break apart, and see if it's useful.

Scene Five - The Audience Experience

KZM: In dreams you are too tired to be you. Too tired to perform the exhausting repertoire that you've rehearsed since birth. You learnt your lines by rote, honed every single action and every day you are ready to take it from the top again. And so each morning you awake with the desire to get it right, to be a good and meaningful person, to be, as simple as it sounds, happy. But the performance is exhausting. As you fall asleep your body is recuperating on many levels; biological, physiological as well as physical. The enormous level of activity that will occur as you sleep, dream, fix, mend, repair and heal your body from your day, from your week, from your life.

PJM: Audiences are being interacted with in VR. The touch is not something they control. It happens to them. They are only interacting with the visual at that point. But you can coach people into interacting emotionally. This experience of being tucked in by the mother is so powerful an idea whether you had it or not. It will either take you back to the experience or make you feel the absence of that experience, which for me is really personal because I didn't grow up with a mother. But in the piece I'm doing it to my daughter, Kajya. There's this tension for the participant. 'How do I deal with this now? What do I do now? There's no escaping from this experience. I'm being put to bed by mother.' That is there for every person. I accept that it might be more of a

westernised concept. Keeping *Good Night, Sleep Tight* in the post industrial revolution western world means it's not universal. However, I have worked with things that are quite ritualistic in the piece which are universal - touch and song. I think one would have to work really hard not to interact with that on an emotional level. It's very hard not to have an association.

AV: This was my first VR experience. The synchronisation of the real world and the VR was very powerful. I was touched in a surprising way... It made me think about the way I'll die and what happens after that. We all think these things, but we never have time to stop and experience them...It was an incredibly immersive experience. I felt very present... It reminded me of an Italian film from the 1930s... I was made to feel very comforted, the singing and touching was soothing, calming and overwhelming... I loved looking around during the dream. The audio enhanced the feeling of depth...The journey almost felt real. I felt connected with my inner-self. The experience was a journey with me, myself and I... It felt like a warm-up . You could have gone to the afterlife... It's good to share the experience because it was so emotionally effective.

are flying over a
dreamscape.
The sun is
shining and
in the corner of
your eye you
see a bird.

Beneath is stone.

Stone the colour of sand.

Trees. Green.

And blue blue blue.

A child is speaking.

KZM: Let's skip forward. Right forward. As forward as you can get. Your death. The moment of your death. The moment your personal narrative comes to an end. What will it be like? Where will you be? Will a heart transplant operation have gone wrong? Will it be a nasty pile up on the M25? Will it be in a nuclear holocaust started by a tweet too far? Will it be an elegant peaceful death or a messy bloody one? It's a difficult idea to think on? Think on. We are all going to die.

PJM: The participant is responsible for the flying in the dream sequence. If they don't move nothing much is going to happen. If they move their body then they are rewarded with a fuller, denser, thicker experience. Being in the cloud, seeing unexpected things. You have to be active. It's a bit like awarding the audience's initiative or willingness to look around in a low risk way. The film starts to close down as they fall asleep. Another reality then takes over. The dream life. When we did it in Colombia - a very Catholic country - it was a very interesting experience. I was sat by the door when the audience left. They didn't think they were going to sleep. They thought I was describing the death moment to heaven. That was very freaky because it couldn't have been further from my mind as a committed atheist. They spoke about going up to the light, towards their maker. For a while I was pretty pissed off about this. Once I stopped being annoyed I realised that there is something quite interesting between the meeting of the death and the child. When they went into the dreamscape the moment was a film of Bogota. The

idea is to film wherever the audience are. Everything at a distance takes on this nostalgic, quite beautiful aspect. There's almost something moving and precious about a bird's eye view. Kajya speaks a text about death. It alludes to life. The audience member is quite abruptly woken up. The audience were a bit disorientated.

AV: The atmosphere was very weird. It was Kafka-like, surreal... I didn't know what was going to happen when I arrived at Gerry's. I'm not a theatre person so I liked the context of public space. I liked that the performance was in the midst of everything else... I didn't understand how I was supposed to be part of the performance... Was I supposed to be who I am? Then the handmaiden took the lead, speaking to me like a child. And then there was a child in me speaking out loud...I had to surrender myself and let go in *Good Night, Sleep Tight*. I was able to do this because the actors created a nurturing environment to face death, one of the toughest topics to deal with... I lost the sense of being in a public space... I got a nostalgic feeling even though I never had a teddy bear growing up... I got the sense of being a child again. I realised that I missed feeling like a child.

KZM: Do you miss your childhood or are you glad it's all over? Were you closer to your mother or your father? Did your family, on some level, disappoint you? What is it that was never nurtured in you? What would have been different? Do you remember trusting that outstretched hand and putting your little hand inside of it? As an adult how much of you is still that child? When did you first become aware that life could be painful?

Scene Six - The Collaborative Contract

EM: I had never worked with artists before. It was hard but it was the best working environment I've ever had. I feel like I've had a hand in making *Good Night, Sleep Tight* but I didn't feel like I was an artist making it. I don't know what it feels like to feel like an artist. I could never have come up with the story and the audience experience. I loved the content but I felt it was already there and my job was to make that happen technologically. It was very creative in terms of finding solutions to the tonnes of problems we had. I felt like the technology was there to serve the purpose of making the thing happen. Having a VR in a public space... It was mesmerising to watch the actresses moving in sync with the video and with each other. It would be cool if there was a way for there to be more of an interaction between the virtual world and the world of the public space. It's difficult to predict how VR will affect performance. The VR space is like building a dream world. It can get as weird as people can imagine. VR and social interaction will be a big thing. Going online can now be a 3D experience with WebVR.

PJM: The relationship between artists and technologists is very different to the one performers have with a technical crew. Emily was listening to my artistic vision and asking what she has to do to make that work. Working with Nacho is different because he is an artist and presents as an artist. That's very useful because he'll bring something in and I'll go, 'Yes that's beautiful'. Sometimes this means there are clashes of vision and that might create a sticking moment. But mostly it's a question of vocabulary. Technologists have to take more responsibility to explain to artists that what they've asked them to do will take a long time. And artists have to take way more responsibility for being aware that they are not working with as buoyant a discipline as theatre. Theatre is extremely buoyant. You can change things very easily. It's very, very porous.

Technology isn't. Technology has to be fixed and tested. The two worlds and rhythms coming together can be quite tricky.

Scene Seven - The Future of VR as a Live Art Form

CA: We need to stop talking about non-gaming VR experiences in terms of storytelling, when in fact the author doesn't have control over an audience's experience.

PJM: The really exciting thing about VR is that you are immediately transported to a believable set. Especially in game play. Even though it's believable when you play it there are a whole host of limitations. The participant can't move. The ones we are experimenting with are site specific so there's this eerie re-reading of the same place you are in. We're not interested in creating entirely fictional realities. We're interested in the mundane. I think that work in public spaces with VR is a great way of taking work to people and demystifying technology for audiences. The reason I created *Good Night, Sleep Tight* was because the most primary relationship you can have in your entire lifetime is the one with your mother and it's the one most contra with what VR is being used for at the moment: porno and shoot 'em up games. Both those things are very alienating. Porno and shoot 'em up games rely on a huge amount of masquerade and bravado; it's all surface. I wanted to make something that was really counter positioned to the conventional use of VR. Taking VR into the public realm...it's not the means that's important, it's the content. Putting VR into public spaces means you don't have conventional social restrictions of theatre. It hasn't got that preciousness that theatre has. The true beauty of VR is transporting audiences away from any physical

environment, be it a restaurant or airport or shopping mall. What matters is the buffer in and out of the event, to really embed something meaningful.

Epilogue

KZM: When will it end? When you will walk without noise and open the door into darkness? And just how can it be, how can it be that it takes a whole life to learn how to live? When my eyes close to fall asleep they will do the same thing when I die but for the last time.

Your eyes
are now
open.