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# Can We Trust What's Real? Using Fiction to Explore the Potential Dissociative Effects of Immersive Virtual Reality

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## Abstract

Fiction, especially science fiction, has long been a vessel through which the potential ethical, social, and political implications of technology can be explored. We present a three act, fictional play that explores the potential implications that immersive virtual reality (VR) has on our sense of reality, including dissociation—a psychological experience in which people feel disconnected from their sensory experience, sense of self, or personal history. We invite readers and the attendees of the workshop to critically reflect on the interactions between the actors and VR, each other, and themselves. Through this we hope our fiction will guide the development of VR technology away from the possibility of potential abuses towards a positive and socially beneficial reality.

## Author Keywords

Virtual reality; speculative fiction; dissociation; ethics

## Introduction

Presence, a sense of 'being there', is often assumed as the ultimate goal for virtual reality (VR) because, if achieved, the immersant suspends disbelief and reacts as if they were in the 'real' world [2]. In VR, one is able to experience almost anything from the comfort of their own home, and researchers can study human behaviour through controlled and replicable virtual scenarios. We can give people a

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range of experiences, from the horrors of war in Syria to the awe-inspiring beauty of a sunrise in space to evoke a strong emotional response, yet at the same time we say “it’s *just* VR.” We blur the lines of the virtual and the ‘real,’ and assume that once we take off our VR headset we are grounded back in our ordinary reality. Yet, studies have shown that this is not the case [1, 4, 3].

The very thing that we, as researchers and designers, are striving for in our virtual realities, *presence*, is correlated to dissociation—a disruption in the normally integrated functions of consciousness, memory, identity, or perception of the environment [1, 4]. The consequences of dissociation can be incredibly disorienting and destabilizing. You may forget things or have gaps in your memory, and you may think the physical world is not real or that you are not real. In the following short play, we explore the potential abusive ethical implications of dissociation directly resulting from VR through a speculative fiction. Our goal with this fiction, which we will act out during the workshop, is to provoke discussion around the ethical implications of VR’s ability to impact our perception, behaviour, and idea of reality itself.

### **Act I: Indoctrination**

*A single person, Xavier, is in a virtual reality experience, moving around sporadically and interacting with the virtual environment enthusiastically. Enter Zola, looking curiously at this person in VR.*

**Zola:** Hello? Sorry to bother you...

**Xavier:** *(Continues playing VR experience, ignoring Zola.)*

**Zola:** *(Tapping the shoulder of the person in VR)* Excuse me!

**Xavier** *(Jumping back in surprise, and taking off VR headset)* Whoa! Didn’t realize anyone was there. What time is it?

**Zola:** Just past 4 o’clock in the afternoon. *(seeing Xavier’s surprised look, Zola continues)* It’s Thursday. What are you doing anyway?

**Xavier:** *(Handing the headset to Zola)* Virtual reality! It’s so awesome. I have to get going, but why don’t you give it a try?

*Xavier shows the VR headset and hands it to Zola.*

**Xavier:** Look, it’s like the real world, but better. You can’t get hurt... just do what you wish you could. It’ll come naturally, don’t worry. Make sense?

**Zola:** *(Looking hesitant at Xavier.)* Alright. Thanks.

*Xavier exits the scene, leaving Zola alone with the VR headset.*

**Zola:** *(Putting on the VR headset)* Let’s see what this VR nonsense is about.

*Zola plays a VR experience, with lots of physical interactions—dodging, pointing, picking up virtual objects, moving and stopping before the unseen virtual boundary, and placing virtual objects in their virtual backpack. Finally, Zola takes off the VR headset while facing a wall.*

**Zola:** *(Looking surprised at where they are facing)* Woah!

*Enter Stranger, walking past.*

**Stranger** Are you done with that yet?

**Zola:** *(Turning around, a bit startled)* What? Sorry. yes, here you go.

**Stranger** *(Taking the headset)* Cheers!

*Stranger puts on the VR headset and immediately starts playing a VR experience. Zola looks around, disoriented. Zola looks at their hands as if they are something foreign and disconnected, then shakes their head and exits.*

## **Act II: Immersion**

*The scene is empty, except for the VR headset. Enter Zola, sneakily looking around to make sure no one is there and seeing the VR headset is free to use and the space empty. They put on the headset.*

**VR Narrator:** *(in a deep booming voice)* WELCOME, ZOLA. ARE YOU READY TO CONTINUE YOUR MISSION?

**Zola:** Yes.

*Zola begins waving around a light sword as if in a virtual battle scene, dodging virtual explosions and evading unseen threats.*

**Zola:** Almost... there...

*Zola is stabbed by another virtual light sword in the stomach and falls to their knees wounded. Zola pulls off the headset, looking down at the virtual stab wound, and nothing is there. Zola stares bewildered. Zola again looks at their hands as if they're foreign. This time they are visibly disturbed*

**Zola:** *(whispering to self)* Am I dreaming?

**Xavier:** *(Enters scene seeing Zola holding their side)* You alright there Zola?

**Zola:** Yeah... I guess. It's weird, you know?

**Xavier:** Yeah, it's been starting to mess with my dreams lately, like they're super vivid and lucid. Kinda crazy.

**Zola:** It's just VR though, right? That's the whole point—we can do all this stuff because it isn't real.

**Xavier:** Sure, I guess. Everyone used to say video games were dangerous, but that turned out to be bogus.

*Zola's phone rings.*

**Zola:** *(Looking at call display)* Sorry, gotta take this.

**Xavier:** See ya around. *(Xavier exits scene)*

**Zola:** *(Answering phone)* Hi. Yes, I'll be right there.

*Zola hangs up phone, turns to leave and makes the motion of putting phone in a virtual backpack. The phone drops to the ground.*

**Zola:** *(Picking up phone and leaving)* Shit!

## **Act III: Dissociation**

*Zola is once again wearing the VR headset, at the climax of the experience. Zola reaches out with one hand.*

**VR Narrator** MISSION COMPLETE.

*Zola exhales deeply as they lean against a virtual table. Zola stumbles, falling through the empty space. Taking a moment, Zola recovers and removes the VR headset, turning it off. Zola blinks hard looking around the deserted space.*

**VR Narrator** *(muffled from the removed headset)* BEGINNING NEXT MISSION.

*Zola brings the VR headset back to their eyes, looks around, and shakes their head. Zola powers it off and sets it down.*

**Xavier:** *(Entering scene energetically)* Zola!

**Zola:** Hey, good to see you. I thought this place was deserted.

**Xavier:** *(Looking around to see if anyone else is there)* We need to get out of here. They'll be looking for us.

**Zola:** *(Looking curiously at Xavier)* What do you mean they'll be looking for us? Who are they? Hey, let's go grab a bite. I just finished the first mission and I'm exhausted! These sore muscles certainly feel real hey?!

**Xavier:** *(Grabbing Zola by the shoulders and shaking them)* Wake up, Zola! Time's running out! We need to complete the mission.

**Zola:** *(Shaking their head)* You're not making any sense. What mission? The VR mission? It's OK, Xavier, we're in the real world now.

**Xavier:** No, they're after me, they're after you. We need to get out of here.

**Zola:** *(Moving to get the VR headset)* Look, I'll prove it to you. I have the headset right here...

*Zola looks confused at the spot where the VR headset used to be. There's nothing there.*

**Zola:** It was right here, I swear.

**Xavier:** Forget that. We need to compete the mission.

**Zola:** *(Shaking head and looking at their hands)* Am I dreaming?

**Xavier:** What does it matter?

*End.*

## Conclusion

What is the nature of reality? What is 'real' and what is not? As we move toward blurring the lines and living in multiple realities, we must consider the ethical implications and real world impacts of our virtual creations. Throughout human history, we have used storytelling to explore possible futures of appropriate and inappropriate uses of technology. Here, we present a fictional situation of dissociation to help explore the ethical implications of immersive virtual reality and act as a provocation for the workshop. We propose that acting through fictions like this can help technology designers think through the ethical implications and risks of technology before it becomes real. We leave the reader with a quote from another fictional work that we feel captures the theme of dissociation from reality:

"Tell me one last thing," said Harry. "Is this real? Or has this been happening inside my head?" "Of course it is happening inside your head, Harry, but why on earth should that mean that it is not real?"—J.K. Rowling, *Harry Potter and the Deathly Hallows*.

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