gamevironments

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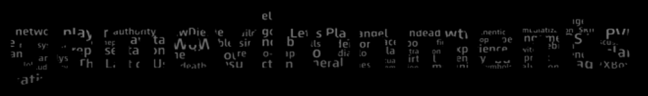

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Video Gaming and Death

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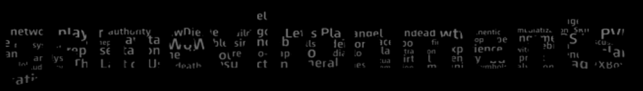

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articles

Death, Fabulation, and Virtual Reality Gaming

Jordan Brady Loewen

Abstract
There are few things more common in video gaming than death. The result of falling, stabbing, shooting, draining, and countless other verbs of decay and destruction. Talk of "dying" in video games often exchanges teleological weight for the more pragmatic machinic signaling of transition back to the actual world from a gamic one. In the relatively short history of the video game medium, there is little evidence that a video game death might trigger any existential self-reflection. This paper argues that contemporary virtual reality technology can change video gaming's relationship to death through its ability to trigger out-of-body experiences. To make this case, I examine the VR games *Arizona Sunshine* and *Deep Sea* in light of scientific studies exploring the affective and ideational influence of VR experiences. I then reframe them in light of the virtual philosophy of Henri Bergson, specifically his theorization of fabulation as the religious tendency of the human body, exposing VR's ability to take advantage of various capacities of human embodiment, which amplify the visual and tactile affordances of the video game medium. In doing so, this paper raises the ever-present concerns and questions of all new technology and media as they shape how we think about ourselves in relation to death, embodiment and subjectivity.
Keywords: Virtual Reality, Games, Religion, Bergson, Fabulation, Death, Phantom Limb, Proprioception, Deleuze, Zombies, gamevironments

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Introduction

There are few things more common in video gaming than death. A result of falling, stabbing, shooting, draining, and countless other forms of decay and destruction, death in video gaming commonly acts as a machinic signifier for conclusion or failure or as a mode of transition out of the gamic space of the magic circle. "Extra lives" and save functions might stave off this transition, as does a quick press of the reset button, rendering "death" into little more than a simple pause between gamic activity,

a blip in the level of fun in the gaming experience. Yet, despite the grisly consequences for countless video game avatars, the "death" effects for the material bodies of players is typically minimal. That is not to say that the emotional weight of "dying" is not significant, with thrown controllers, flipped tables, and slumped shoulders as indicative examples, but that any threat to a player's material persistence is rare. Perhaps this is why in the relatively short history of the video game medium it seems uncommon for a video game death to trigger any existential self-reflection or carry any teleological weight. Some researchers have even gone as far to argue that video games actually reduce these types of imaginative impulses (Burris and Dow 2015). While others suggest video games have the capacity to trigger reflection but with mixed results (Chittaro and Sioni 2018). But what if games could achieve more visceral consequences? What if games were capable of changing what we think and how we feel about death, whether we realized it or not? This is what makes the potential coupling of contemporary virtual reality technology (VR) and gaming so interesting.

Given the advent of affordable and technologically impressive VR tech, new research on its physiological and psychological effects has exploded, with studies ranging from how VR can be used to improve pain reduction during surgery (Mosso Vázquez et al. 2018), to applications for people with Alzheimer's (García-Betances et al. 2015), to anxiety reduction techniques for applying vaccinations to children (Nilsson et al. 2009). A particularly compelling study for scholars of religion occurred in January of 2017, where researchers from the University of Barcelona used VR technology to explore the psychological consequences of out of body experiences (OBE), specifically as they affect the fear of death. The researchers were inspired by recent studies on near death experiences (NDE), which indicate that they often involve "the perception of moving through a tunnel, bright lights, meeting spiritual beings, a panoramic life

review, euphoria, and an out-of-body experience". More importantly, the survivors of these experiences generally "exhibit a change in life outlook following such an event becoming more concerned about others, becoming more generous and charitable" (Bourdin et al., 2017, 2). With these results in mind, the researchers hypothesized that

> "…if we could put people in a situation illustrating the possibility of their consciousness being outside of their body, then this would provide implicit evidence (but not necessarily explicit belief) that survival beyond the body is possible, and hence produce a reduction in fear of death." (ibid., 2)

This paper examines VR's potential for affecting implicit and explicit beliefs about death, as presented by the results of the Barcelona experiment, and its consequences for gamers. By reframing the conclusions of the Barcelona experiment in terms of the virtual philosophy of Henri Bergson and two virtual reality games, *Arizona Sunshine* (2016) and *Deep Sea* (2010), I contend that VR gaming, more so than non-VR gaming, can take advantage of what I will call the religio-fabulative capacities of the human body to implicitly shape the beliefs of players about persistence beyond material finality. In doing so, this paper raises questions about how video games and virtual reality shape the ways we think about ourselves in relation to death, embodiment, subjectivity, and our relationship to society at large.

Death and VR: *Arizona Sunshine*

After a few moments fiddling with the HTC Vive headset, my eyes settle into the masked darkness and await transportation into a digital-virtual world. The wait is not long as I quickly find myself squinting under the glare of an Arizona sun, surrounded by the rusty colored cliffs of the American southwest in the opening scene of the virtual reality zombie game *Arizona Sunshine*. Haunting groans of shambling undead corpses drift quietly through the canyon as I begin preparing for the inevitable horde.

I take stock of my surroundings, including my own body. My hands float along ahead of me, cut off at the wrist, while the rest of my body is conspicuously absent. Though my torso, legs, and arms have no digital manifestation, it still feels like I am "here" in this digital world. The tactile responses of my floating digital hands, weighted down by the physical controllers in my material hands outside the game world are enough to provide a sense of presence in this gamic world, a presence only reinforced by the vibratory feedback of my digital weapon as I begin firing at the hungry moaning zombie shambling towards me. "No brains for you!" I think confidently to myself as the now bullet-ridden corpse collapses into the dirt before me.

Minutes later I succumb to the violent slashing of a zombie sneaking up behind me as I distractedly try to lob a grenade. The screen fades to green and my ears fill with the wet fleshy sounds of the undead ghoul feasting on my dead virtual body. When the screen finally fades to black, I pause for some self-reflection. I am feeling odd. On the one hand, I know that I have "died." Years of Pavlovian gaming experience is what settles this as my first thought. On the other hand, I persist, both within and outside the game. Despite witnessing firsthand, a zombie's bloodstained mouth gnawing at the space where my arm should be, I remain insignificantly changed. I experience no solemnity, just a banal frustration of having briefly failed (along with a sneaking suspicion that maybe that game glitched, and my failure was not actually the result of my own actions!). Seconds later the word "LOADING" appears, indicating the game is resetting and I am returned to the beginning of the level.

These types of "death" are common in video game worlds: faded screens, the collapsed body of an avatar, violent sounds. Though the gamic perspective may change from first person to second to third, the general experience is the same. "Death" in most games acts as a simple mechanic for starting again: a signal of failure

or in game studies terms, as a transition out of the magic circle constituting the diegetic game environment. Media scholar Sabine Harrer writes

> "…losing [in video games] has mostly been used to represent temporary failure on the way to eventual mastery –potentially hindering but never entirely threatening the player. Game over is yet another moment in an infinite circuit of trial and error, subverting the meaning of death as end of life by using it as a sanctioning mechanism for ill-performed player interaction." (Harrer 2013, 610)

Because "dying" is an element of the activity and space of play, players can recognize the end of their gamic avatar without the end of their material body. Any sense of threat of material death is nullified because there is no intimate physiological relationship to the machinic reality of the game.[i] Death and dying can affect the player in plenty of other ways, however. For example, if we read the death mechanic as the interruption of the "flow of experience" of the gamic world and action, then the death mechanic is the interruption of that flow. In that sense, including the death mechanic in games is a way to make them feel more "life-like" but on the most intuitive rather than abstracted existential level. Not to mention the frustration caused by gamic interruption (death) can lead to increased arousal that some have connected to hostility and aggression (Williams 2009).

Yet it is rare for these gamic moments of death to contribute to any embodied anxiety about one's finality. Though I might experience implicit anxiety about zombies chasing or capturing me, I do not experience explicit concern that a zombie might actually chew off my arm or gorge itself on my flesh. This is even more surprising for video games that take advantage of virtual reality technologies, as the level of embodied immersion; the feeling of actually *being there*, or affected by, the digital video game world, is far more intense in VR than in other video game modalities (Slater and Sanchez-Vives 2016, 5). This affective capacity of VR is best

exemplified in the 2017 research experiment "A Virtual Out-of-Body Experience Reduces Fear of Death" performed by Pierre Bourdin, Itxaso Barberia, Ramon Oliva, and Mel Slater.

The Barcelona Experiment

The experimental method of the University of Barcelona researchers involved establishing "virtual embodiment", a sense of feeling one's body in a digitally simulated environment as a result of developing an intimate correspondence between the participant's physical body and digital avatar. To achieve the effect, participants donned the Oculus Rift headset, which displayed a virtual environment (VE) consisting of a digitally simulated room with some simple furniture and a human sized digital avatar. Unlike *Arizona Sunshine* in which the only visible aspects of a diegetic avatar were my two floating hands, the Barcelona researchers crafted an experience in which the participant's VE perspective was tied to the perspective of digital female avatar for a 1-to-1 ratio that acted as a substitute for their own material body. Directly in front of the participant's digital viewpoint was a mirror that reflected the digital avatar with a direct correspondence so that the participant could receive a fuller perspective over the movements in the digital environment. This idea was inspired by work done on a phenomenon called the "body ownership illusion", or "proprioceptive drift" (Rohde et al. 2011, 1), which has been explored further in various studies involving phantom limbs. The researchers were insistent that

> "(w)ith real-time motion capture the virtual body can be programmed to move synchronously with the person's real body movements. Moreover, if something is seen to touch the virtual body, the setup can include vibrotactile stimulation on the person's real body synchronous with the seen touch. Such multisensory stimulation typically leads to the perceptual illusion in people that the virtual body is their own, even though they know that this is not the case." (Bourdin et

al. 2017, 2)

This whole-body synchrony is a key element separating this experience from many current VR games like *Arizona Sunshine,* which at best only offer partial virtual synchronicity. To be fair, to achieve the type of "illusion" that the researchers achieved required a more expansive tactile feedback system than what current consumer VR systems typically include. It also involved a multistage process. They designed the first stage to trigger the "body ownership illusion" and establish actual-body to digital-virtual-body ownership using vibrotactile devices attached to the wrists and ankles of the participants. The researchers used digital bouncing balls that provided vibrotactile stimulation to achieve "synchronous visuomotor correlation between real and virtual body movements, and visuotactile synchronous correlation." (2017, 3) The second stage involved moving the digital perspective of the participant, associated with the first-person camera view of the digital simulation, above and away from their digital body. This camera-perspective movement shifted the sense of perception from where they were imagining their material body to be (intimately tied to their digital body) to a viewpoint behind the digital body, thus creating an OBE that resulted in their former digital-material body to become an "empty shell" (ibid., 3). According to the results of an after-experiment questionnaire in which participants were given various options for describing the spatial-locative experience of their body during the experiment, a significant portion of participants claimed to have experienced a sensation of being outside of their actual (material) body. When asked how this affected their fear of death, participants of the digital-OBE were 50% more likely than the control participants to admit a reduction in fear. The researchers concluded that their "results open up the possibility that virtual OBE experiences provide an implicit learning that consciousness in the sense of the center of perception can be separate from the physical body, and that therefore death of the physical body is not necessarily the end of consciousness" (ibid., 14).[ii]

That digital technology can induce conscious states otherwise reserved for psychedelic drugs or experiences of nearly dying is a relatively new phenomenon. Yet, what makes this particular case significant has less to do with OBE's and their effects, and more so that the researchers have shown how relatively easy it is for virtual reality technology to implicitly shape beliefs about the world in ways typically found in religious discourse and practice. What is it about VR that allows for these types of experiences so relatively easily compared to other types of video game technology? I contend that the best way to make sense of these results is to recognize them as a unique ability of VR technology to affectively intensify the human religious tendency for fabulation as it was initially conceived by the philosopher Henri Bergson.

Bergsonian Fabulation

Bergson's conception of fabulation is most fully developed in his work *The Two Sources of Morality and Religion* (1935), as he expands his philosophy of the virtual to make a case for the philosophical and psychological roots of morality and religion. In a core section of the book, he conceptualizes fabulation as a psycho-social function of human consciousness that highlights the affective potential of otherwise subjective virtual images. In other words, it provides humans with the faculties for conceiving of "semi-personal powers" or "efficient presences" (ibid., 196). The philosopher James Burton argues that what Bergson is implying is that fabulation is the human ability to attribute spirit and mind to other bodies for the purposes of stronger social bonding and is the core faculty from which arises more advanced faculties' like imagination, fictionalization, mythologization, hallucination, etc.[iii] Paraphrasing Bergson, Burton writes that

> "(f)abulation enables belief in non-actual forces and entities with the power to support humans in overcoming physical threats, to punish the pursuit of

> individual self-interest at the expense of the group, and to suggest the reassuring existence of the soul beyond bodily death. Such beliefs form the basis for the development of religious customs (which may eventually be formalized as laws) that help maintain the stability of the group." (Burton 2008, 267).

As Bergson lays out in the *Two Sources*, an evolutionary consequence of human intellect is the ability to recognize one's own individuality apart from the group, which can result in instabilities. When this self-conceptualizing individual confronts the cold, hard, limitations of the world, it recognizes its own finality and responds with fear and selfish tendencies and negatively affect social relations. In response, nature proceeds in developing a 'virtual instinct' of human consciousness that manifests itself most prominently in religious thinking and persists as a defensive reaction to the "dissolvent power of the intellect" (Bergson 1935, 122) as it conceives of its own demise. The virtual instinct produces an "image of a continuation of life after death" that opposes "the idea of inevitable death" (ibid., 131). And the tools of this 'virtual instinct' are psychological, the primary being the human capacity for fabulation.

In conceptualizing fabulation, Bergson was seeking explanatory power for the source of religion, which itself consist of two tendencies, one towards openness and the other closeness. He limits fabulation primarily as an impulse of what he calls closed, or static, religion, as a means of producing gods to which a society submits itself to in order to maintain group stability.[iv] For example, when speaking about how ancient cultures created and encountered gods, Bergson points out that it was unsurprising that belief came so easily, as these types of belief-events are a core attribute of human consciousness. In effect, these gods were "real, but with a reality that yet hinged in some degree on the human will" (ibid., 199). As evidenced by these effects of static religion, fabulation is a 'partial anthropomorphism' that imbues the world

with Other Minds, of various degrees of individuality, finding limits in pantheism and a theistic God. In other words, fabulation actualizes the soul.

Despite what seems to be a focus on immateriality, Bergson was careful not to forego the body in the pursuit of the mind. In fact, he articulated a radical position seeking to dissolve mind-body dualism without losing the unique qualities of each as they are actualized in individual human consciousness. This is important because prior to its mythologization by society and in the service of closed religion, the initial fabulative impulse is to conceive a virtual image of consistency between the mind and body (visual and tactile) images of the body within the individual consciousness. Before gods, the human actualizes the soul (mind). This soul image exceeds the material body though "an unwary mind will put the visual image and the tactile image in the same category, will attribute to them the same reality, and will assume them to be relatively independent of one another" (ibid., 133). Thinking through this from a different direction: in a relaxed conscious state, humans perceive the mind and body as separate entities while a more focused consciousness is required to recognize mind and body as one. Here Bergson is arguing against a mechanistic materialism that sees any concept of the soul as merely a "shadow or effect" of materiality and not a result of the architecture of consciousness itself:

> "If the question arises [of the unity of body and soul], it is because our present-day idea of a soul living on after the body overlays the image, which presents itself to the immediate consciousness, of the body able to live on after its death. Yet this image does exist, and it takes but a slight effort to recall it. It is nothing more than the visual image of the body detached from the tactile image." (ibid., 133)

The soul is the visual image of our body, detached from the tactile image. And the visual image that results from this detachment has affective power even though "the

ghostly envelope of the body seems incapable, by itself, of exerting a pressure on human events" (ibid., 134). The affective power of this detached visual image is a result of a yearning that contributes to our very real sense that our consciousness persists and feels, even after the material image of our body fades away.

At its roots, the fabulative tendency is the same process by which *all* representation arises (how we perceive all reality).[v] Since we experience our own individual resistance to the natural flow of events (as freedom of will), we assume this ability in other living things. Fabulation allows us to see/explain difference in the world by perceiving images of life. Witnessing the movement of other things (their duration, differentiation from us) spiritualizes them, gives them a life of their own. Thinking of this in terms of video games, fabulation is what allows a player to recognize the image of an enemy non-player character (NPC) as having some sort of life to it. To recognize a zombie as a threat in need of bullets. Without fabulation, we would approach the artificial intelligence of a game the same way a pet dog or cat approaches images on television, as nothing more than shapes, emptied of the living presence of another creature. More importantly, in VR gaming terms, fabulation is what allows for a player to feel immersed in their digital avatar. It is what allows a player in *Arizona Sunshine* to recognize mere floating hands as one's own.

Fabulation and VR

Turning back to the Barcelona experiment, we can now see that the "illusion" of body-ownership is no illusion at all, in the sense of mere-trickery or falsehood. The experimenters did not trick the participants into some false reality. Rather, what this VR experiment has done is transfer the visual-body-image (produced by the virtual instinct of fabulation) onto a digital-body-image (produced using digital computing),

and then coupled the digital-body-image to the actual tactile-image of the material body (through proprioceptive drift). It is a similar (though not exact) process to what happens when we see our reflection in a mirror. Our reflection is the virtual-body-image of our actual-tactile-image (our material body). In other words, the researchers took advantage of the technological affordances of VR technology to replace the participant's virtual image (the combination of the visual and tactile image that an individual considers to be their "self") with a digital-body image. Then, given the durational and perceptive freedom afforded by the digital-virtual environment, the researchers were able to separate the actual tactile-image from the digital-body-image (by manipulating the in-VR camera perspective). This manipulation reinforces the relaxed perspective of "soul" (visual-body image) and body (actual-tactile image) while intensifying their separation, thus highlighting VR's ability to engage the imagistic aspect of human consciousness in what we now call proprioceptive drift and visual-tactile synchrony. All of which highlights the homo-religious tendential response to death: that we implicitly believe our actual-tactile-image may exist in excess of our visual-body-image. That we can *feel* things without being able to visualize our embodiment (not just our body).

That the out of body experiences of the participants in the study would reinforce a belief in the persistence of the soul (visual-body-image) is unsurprising, as the function of the soul is fabulative, and in service to society as a whole. An individual for whom death is less frightening displays a host of prominent positive traits that society would encourage, such as feelings of calm and peace (Blanke and Falcon 2009). What is more compelling about this experiment is that it highlights VR technology's ability to amplify what Bergson would call the religious tendency of fabulation. The experiment exposes the ways our experiences in VR environments are the direct result of the human capacity for religion.

To be clear not every VR experience or game guarantees an OBE or its consequences. VR is capable of producing these experiences, but it does not do so necessarily. The example of *Arizona Sunshine* highlights that VR games, even with all their graphical fidelity, immersion, and embodiment, can still operate using typical death mechanics of older video game forms. Despite being a game that establishes a minimalistic virtual embodiment, *Arizona Sunshine* still resorts to using death as mere mechanism of progress and limitation, rather than a tool for influencing implicit beliefs about death and life after. What is both frightening and exciting, however, is that given the relative simplicity of the Barcelona experiment, introducing an OBE element seems like it would not have been difficult for the designers of the game. Given a few more haptic sensors, perhaps a tutorial involving sensory feedback, and a few other gamic elements to establish strong proprioceptive drift, it would then only take some machinic adjustments of the diegetic VR camera perspective for the player to experience their consciousness leaving their body. Whether or not this might actually be a desirable element for game designers or players is in question, but the fact that it is possible is not. Then again, including OBE's as a game mechanic might also allow developers to make claims that their games increase players' selflessness, helping them become "more generous and charitable" (Bourdin et al. 2017, 2).

Conversely, though the Barcelona experiment makes clear that VR has the affective power to radically reshape our thoughts and beliefs about life and death for positive effect, what are the potential negative effects and affects of this technological capacity? Fabulation is taken up by closed religions and societies seeking to maintain social cohesion and not always positively, as Bergson points out. Could the fabulative tendency of VR be taken up for greater fear production or other negative psychological traits? Enter *Deep Sea*, an honorable mention at the 2010 Independent

Games Festival.

Death and VR: *Deep Sea*

On the surface, *Deep Sea* is a game about surviving a deadly creature attack in a broken-down submersible, leagues under the sea. But more appropriately, *Deep Sea* is a simulation game that attempts to recreate the feeling of a slow and suffocating death. To enhance the immersion into the gamic world, the developer has players wear a special head-mounted-display (HMD). Rather than the traditional and semi-comfortable ergonomics of an HTC Vive, or Oculus Rift HMD, players are offered a repurposed gas mask that looks like something from a WWI horror film. The eyepieces are obscured and its ventilators inhibited so that the players' ability to take full breaths is physically limited, functioning as a different form of tactile immersion. Without any visual cues, the player must base their gamic decisions on audio cues from an NPC engineer using a malfunctioning radio and the sounds of the creatures rushing around their submersible. To complicate matters, the creatures are attracted to the sound of the player's respirator, so careful management of breath is key (not to mention the players breathing can be a distraction from hearing where the creatures are). The game also has no win-scenario. Players are simply tasked with seeing how long they can stay alive or keep playing before their fear of death overwhelms them and they are forced to remove their mask. In *Deep Sea*, the game does not merely use "death" as a mechanism for finality, but, rather, simulates dying and survival.

What makes *Deep Sea* relevant is the way it highlights two important facts about virtual reality: first, that VR games do not necessarily need elaborate sets or procedures to achieve virtual-embodiment (Kondo et al. 2018), and second, the

relative ease at which the human body is able to habitualize itself to virtual-embodiment in digital worlds. The game achieves proprioceptive drift by taking full advantage of the brain's own fabulative powers instead of an elaborate high fidelity mediated environment. Because the player has no visual reference, as the HMD occludes all light, the brain must contend with the tactile and auditory sensations produced within the occluded virtual environment. In doing so, these perceptive gaps are filled via fabulation with a heightened sense of affective presence within the VE. Though the actual visual-tactile body of the player remains firmly in the material realm, there is strong enough immersive transition to the digital body of the virtual environment, that the player can participate affectively. This embodied synchronicity makes available new types of digital manipulation capable of implicitly shaping beliefs of the players involved, at the very least their fear of death.

To be clear, as interesting as *Deep Sea*'s horror inducing elements are, there is only anecdotal data indicating *Deep Sea* is affecting the implicit beliefs of its players in the same way the Barcelona experiment indicates. There have not been any pre or post-experiential surveys of player feelings, thoughts, or beliefs. I present *Deep Sea* as an example because of the intentionality of its designer. In an interview with Gamasutra, the games designer, Robin Arnott, admits to creating *Deep Sea* as a game "…that you submit yourself to" in a way that seeks "to turn off the brain." He says, quote "I did anything I could to make the brain stop thinking, stop questioning, and just to accept things." And even though players do not indicate any change in belief, Arnott suggests that "Most people have a really intense negative experience" while playing *Deep Sea*, even if only temporarily, though "like a good horror film, one reflects on it positively in hindsight" (Johnson 2012). Coupling this level of intentionality, with the fabulative function of VR, could lead to game designers having amplified impact on our beliefs and thoughts in ways that we are still unable to cognize.

Conclusion

What the Barcelona experiment highlights is VR's capacity for achieving a more intimate embodied connection between the visual and tactile images of our bodies via the fabulative impulse than other media types like film, photography, and even non-VR gaming.[vi] This connection can lead to positive changes in psychological traits for VR users given certain experiential criteria. Situating this argument in a broader context and following Bergson's tying together fabulation and static religion, a larger consequence of this VR fabulative potentiality is that, like religion, VR can be taken up for moralities and societies of closure and openness. In the services of closure and stasis VR might build solidarity among communities, "whose members hold together, caring nothing for the rest of humanity, on the alert for attack or defense, bound, in fact, to a perpetual readiness for battle" to quote Bergson. Or perhaps VR might ultimately be an important tool in what Gilles Deleuze called societies of control, which seek to make more docile and loyal citizens for maintaining structures and institutions. An individual for whom death is less frightening displays a host of prominent positive traits that society would encourage, such as feelings of calm and peace. Perhaps the military might find use for soldiers for whom a reduction in their fear of death might make them more capable on the battlefield. Or perhaps these types of VR experiences would find use in hospice care or as part of end of life treatments.

Nevertheless, there is escape from the fabulative pessimism of closed societies via Deleuzian lines-of-flight through the dynamic fabulative potentialities of VR gaming. As much as the fabulative properties of VR have the capacity to work for Bergsonian static religion, they might be taken up in the equal and inverse tendency of dynamic religion and moralities of openness. For example, VR games and experiences can channel affects in digital-technical assemblages capable of creating new subjectivities

and solidarities. Alternatively, VR games and experiences can help us recognize the fragility and persistence of subjectivity. That our self-images are always being molded, uncoupled, and reattached to dynamically micro and macro unstable bodies. Some of the most high-profile examples of this can be seen in Chris Milk's *Clouds Over Sidra* (2015) and the *Machine to be Another* art collaboration. Games like *Arizona Sunshine* with their enhanced digital body immersion can offer radically different bodies for players to inhabit and perform that raise questions about identity in ways not available through other media. Though it is important to keep in mind, as Liam Jarvis points out, that we should be careful about (mis)recognizing the digital bodies we inhabit in culturally appropriating ways, as we can never actually be another (Jarvis 2017). I believe Bergson would agree. We are only ourselves, but we might become different.

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[i] Though pop culture has made a trope out of the concept "if you die in the game, you die for real" like in the 2006 film *Stay Alive* or 2017's *Jumanji: Welcome to the Jungle*, and even in anime like Sword Art Online.

[ii] Though it is still not clear what role religious conviction might play.

[iii] Imagination he considers to be "any concrete representation, which is neither perception nor memory." While fictionalization functions as "a very clearly defined faculty of the mind, that of creating personalities whose stories we relate to ourselves" (Bergson 1935, 195).

[iv] Societies that tend towards closure and stasis display a morality concerned with obedience, compulsion, and preservation, developing cohesion in what he calls "static religion." While those societies that tend towards openness display a morality of aspiration, joy, and creativity encouraging a more "dynamic religion" (Bergson). The first, static religion provides closure and consistency through laws, obligations, and codes. In contrast, he argues, dynamic, mystical religion inspires and contaminates affectively, resulting in zealous and creative activity. Neither form of society or religion exists in a pure state, as individuals and collectives flow through one nor the other, as compulsion for general socialization blurs the borders.

[v] This fabulative activity is similarly conceived in the philosophical systems of both Nietzsche and C. S Peirce where it functions as truth making rather than falsifying.

[vi] In terms of mediating technologies, it is interesting to note that Bergson himself was very critical of film. For someone who's project put emphasis on duration and movement, he found film to be too immobile and therefore illusory, producing an image of time that was too Cartesian. Deleuze's Cinema books are a response to Bergson's thinking on film as a virtual medium.