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# The Pervasive and the Digital: Immersive Worlds in Blast Theory's 'A Machine to See With' and Dennis Del Favero's 'Scenario'

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## ABSTRACT

This paper discusses two immersive story worlds between two distinct interactive artworks. Blast Theory's *A Machine to See With* (2010) is a pervasive fictional experience that enables users, through the technology of their mobile phone, to become immersed within a fictional crime scenario across a real geographical setting. Dennis Del Favero's art project, *Scenario* (2011), by contrast, is an interactive and immersive story that takes place in a 360-degree digital cinematic space called an AVIE (Advanced Visualization and Interaction Environment). This immersive world is a mixed reality environment, a meeting place where five real users and ten digital screen characters converge and interact through the technology of motion sensing. Participants are virtually wired into the immersive world through the performance of their movement. This paper will explore both of these artworks through original interviews the author has conducted with each of the artists.

## KEYWORDS

Blast Theory, Dennis Del Favero, Immersion, Immersive Storytelling, Interactive Art Narrative, Pervasive and Digital Technology, Worlds

## INTRODUCTION

The immersiveness of virtual worlds is ubiquitous in a digital age. Virtual presence through online activity, such as gaming, shopping, socializing, or any form of communication, merges and coexists a real-life user with a virtual other, dividing selfhood into a relationship of being both here in an actual world and there in a virtual world simultaneously. Theorists such as Don Ihde, Brian Massumi, Anna Munster, N. Katherine Hayles, Brian Rotman and Mark B.N. Hansen have discussed this corporeal split in their respective works and fields of research. This paper utilises these theorists, particularly Hansen's by considering the role of the body in the immersive worlds of interactive art.

As Hansen asserts in *New Philosophy for New Media*, immersive worlds such as virtual reality environments, comprise of a negotiation or mergence between that of a user's body as it becomes enfolded into a virtual dataspace (Hansen, 2004, p. 162). This type of immersiveness, as Hansen notes, produces a "dynamic coupling of body and image, where the body transforms the medium as the medium transforms the body" (Hansen, 2004, p. 186). Within this paper the author adopts Hansen's corporeal understanding of interactive art to consider two artworks that similarly hybridize the user's active body within an immersive world to create narrative experiences. These worlds are

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Blast Theory's *A Machine to See With* (2010) and Dennis Del Favero's *Scenario* (2011). In each artwork a coproduction between a body and a technology forms an interactive world, a world that falls in line with Oliver Grau's writings on immersion.

In *Virtual Art: From Illusion to Immersion*, Grau states that "immersion is mentally absorbing and a process, a change, a passage from one mental state to another. It is characterized by diminishing critical distance to what is shown and increasing emotional involvement in what is happening" (Grau, 2003, p. 13). This paper's particular interest in interactive art, rather than cinema or television as a site for immersion also follows Grau's reasoning. Immersive media such as paintings, the cinema or television, as Grau asserts, "are delimited by a frame that is apparent to the observer" (Grau, 2003, p. 14), which to some extent leaves the observer outside of it. Interactive art by contrast puts a person inside a world by transcending them from an observer to a user, an active body with agency inside a world. As Ryszard Kluszczyński has noted, in interactive art an artist does not make a finished piece of work that is watched but rather, "produces an area of activity for the receivers, whose interactive actions bring to life an artwork-event" (Kluszczyński, 2010). Consequentially, an experience is co-shaped by a user and an artist. This is the very reason as to why the methodological approach of this paper is similarly co-shaped between the author and interviews with each of the two interactive artwork designers.

## A MACHINE TO SEE WITH

*Just listen to the voice on the phone. The voice tells you what to do. The voice says you're playing the lead in a movie. Hide in the toilets, find the getaway car, stake out the bank and take a deep breath. You're going in.*

The description above is taken from Blast Theory's website (Blast Theory, 2017), which describes their artwork, *A Machine to See With*. This is a pervasive game that involves a group of users following instructions on their mobile phones. As these instructions are spoken each user must carry them out, mobilising each individual participant across a real urban environment. Within a specific starting point in a city setting and at an arranged time, a participant's phone will ring. The voice on the phone will then proceed to instruct a user about the fictitious bank robbery they are going on, leading them to real checkpoints and other participants before eventually reaching the doors of a public bank. The immersive fictionality of this experience relies upon the user obeying instructions through the technology of their mobile phone.

The artists of Blast Theory (led by founding members Matt Adams, Ju Row Farr and Nick Tandavanitj) provide the opportunity for six participants to use their phones as a gateway to an interactive, immersive and pervasive story space, in which they construct a fictional event. Participants give their mobile numbers to the artists when signing up for this experience and are directed to a starting location at a specific time and place. Once ready, each participant receives a series of phone calls from an automated voice, created by the artists from the call-centre software Asterisk. This voice instructs each participant that they are going on a bank robbery and over the course of an hour, the voice phones each participant at sporadic moments, guiding and instructing them on where to go and what to do, with each directive moving participants closer to the targeted real-life bank.

This type of artwork virtually reconstructs the space before participants in which "[t]he city is understood as a cinematic space and the eyes of the participants as the screens themselves" (Treske,

2015, p. 35). Such an experience is Blast Theory's interpretation of 'locative cinema', which they describe in the following way:

*It is about cinema. We thought about the city as a cinematic space and considered how screens might be inserted into the streets or carried through them. Our approach was to think of our eyes as the screens themselves: as Chris Hedges says in The Empire of Illusion, 'we try to see ourselves moving through our life as a camera would see us, mindful of how we hold ourselves, how we dress, what we say. We invent movies that play in our heads.'* (Blast Theory, 2017)

Within this work, the Blast Theory artists create immersive spaces to be filled in by the user in both a physical and physiological manner as the voice on the phone robotically guides the player towards their fictional offence. The users are not able to verbally converse with the voice; instead they are absorbed by the voice physically and emotionally into a fictional world.

The phone, which is usually a two-way communication technology, is reconfigured to a one-way variant of a machine that a user acts and 'sees' through. Participants are encouraged to improvise actions that feel right based on the guidance spoken to them by the automated voice. In the artwork, the reduction of being controlled by the phone provides the opportunity to be amplified into a fictional space where each user can become a central character. This crime-based, mixed reality artwork, that blends the realness of a geographic city setting with a fictive bank robbery scenario, invites participants to fill this space with physical action and introspective sensation that they can feel within their skin. There are no screens depicting virtual imagery within this work, instead a user moves around an actual city that is given a virtual and immersive slant through the interface of the phone.

*A Machine to See With*, commissioned by ZER01: The Art & Technology Network, Sundance Film Festival's New Frontiers Initiative and Banff New Media Institute, was a work that began with the question 'what could cinema be outside the traditional cinematic space?' (BT interview, 11/2014) In an age in which cinema and technology are ubiquitous, downloadable to pocket sized devices and accessible at any time, combined with the inundation of urban cameras that countless photograph us throughout the day, Blast Theory's artwork plays with the idea of cinema's omnipresent affect and influence on the passing moments of our day-to-day lives. The voice, while instructing each participant on where to go and how to act, (turn right, blend in, look inconspicuous) has the capability of intensifying each player's own physical comportment, as they begin to visualise themselves in the starring role of a crime motion picture. In an interview the author conducted with Ju Row Farr she explained this structure and the importance of the artwork's narrative and immersive frame:

*Creating a structure and world in which people can participate is obviously very important and one of the things we are interested in is story. We see story or narrative across fiction, the real (the documentary), the imaginary and the virtual, so our thinking on narrative roams across those four areas. There has to be a story or journey that makes sense. The participant needs to know what they're being asked to do in order to enter into that world. They need to know their part in that story and what their place is in this work, (their call to action) then we can move what they're going to do or where the story or structure is going to twist. If you are talking about a classic narrative structure with a dramatic arc where the climax comes two thirds of the way in, we test and revise rigorously where those points are and we willfully play with those.* (BT interview, 11/2014)

Within this work, Blast Theory furnish their participants with the tools to move to and from emotional states as frequently as they move to and from geographic locations. Users are guided from checkpoint to checkpoint across a city in preparation for the final act of entering and robbing the bank. A player might begin their journey by being directed into a public washroom. From here the voice instructs the players to rate themselves on how they perform under pressure by asking them to

score themselves between one and nine on the keypad of their phone. This task is intended to give the player a sense of control over whether it will be them or an accomplice (another player sharing the experience) that will perform the robbery or instead be assigned to the post of lookout. In actuality these choices do not affect the prerecorded instructions and every player will be, at carefully timed intervals, the lookout *and* the one to enter the bank. Other tasks are also requested of the player, such as taking out all their money and concealing it somewhere about their person. Such requests are contrived to resonate with players as familiar cinematic tropes designed to ease them into the performing roles of onscreen characters by turning their own possessions into props and the actual city into a set.

This idea is intensified by a different strand of content within the artwork running parallel to the fictional heist. Juxtaposed to the role of bank robber, Blast Theory also provide participants with the opportunity to experience an additional meta role of an actor on set playing the character of the bank robber in a heist movie. The voice on the phone informs the user that the city around them is nothing more than artificial scenery, built solely for the user to act and star in. The voice will occasionally remind the user to imagine that a camera is on them, and will prompt them to think about their own actions and gestures in terms of where the camera is placed and the type of shot it might be. Within the washroom, the voice on the phone may inform the player that the (imaginary) camera is filming them through gaps in the wall. The voice may further prompt the user to hold certain personal items of inventory out towards the (imaginary) camera so that the (imaginary) spectator might learn something of their protagonist. Subjective viewpoint is thus multiple within this artwork through the arrangement of fluctuating roles between character, actor and external spectator, which Farr explained in the following way:

*What we believe is that the cinema is inside people; that our senses are the machines to see with. It's kind of like this is the cinema world and we are walking through it and we don't need a bit of rectangular glass to show us that or to frame that. So we've framed it through story and description of the camera moving up your body and that everything around you is paper thin and made up. (BT interview, 11/2014)*

As Farr indicates the player's body *is* the machine to see with in this artwork as it performs two roles side by side: the criminal and the actor – and adopts four multiple perspectives at once: criminal, actor, external spectator and pervasive game player. When the author asked Farr the significance of these shifting perspectives she replied:

*We are under no illusions that what we're doing is making a fiction, this is a fictional experience but our works are often in the real world. So we're aware as people that when we're going around and we're listening, lets say to a story on a pair of headphones, what will impact on that story is the other stuff in the real world. For example taking the headphones off to get your car keys out, or pay for the coffee you've bought. There are always these interruptions and there are always these multiple levels in which we operate as individuals. So the artwork is trying to recognise and play with those things by destabilising the participant. We want, within a very tight timeframe to be able to pull the participant around and destabilise them without psychological damage. [A Machine to See With] is meant to feel visceral, its meant to feel real and I suppose that's what we really like. We want that sense that we are alive now. And we want it to feel like it is a possibility and that's not just an intellectual thing but also a physiological positioning. I like that sense that you can physically feel different to the world around you, and we do that all the time. If we feel worried or anxious things look different, you can feel that in your body, the world around us looks different and that's all we're doing. In a way [the artwork] is using those things that we naturally have as resources: physiological resources. (BT interview, 11/2014)*

*A Machine to See With* is organised in a specific way so that each player never actually enters the bank but this is not revealed until the very last second. As the player draws closer to the building after fulfilling the automated instructions of scrutinising it, walking around it and devising an escape route, the voice informs the player it will begin a countdown from ten. The human puppet is instructed to have their hand on the door handle of the bank ready to go in at one. In the final second the voice tells the player to abort the mission, abruptly ending the experience at what is devised to be a tense moment in the body of the performer. Through this arrangement Blast Theory sets the stage for a user to experience the emotive and physiological sensation of a criminal, mere moments before their offence. The intensity is designed to magnify the user's fictitious experience and stay under their skin long past it. This amplified sensation, taken from the screen and figuratively injected placebo-like into the sensing body of the user, works in tandem with magnified feelings of paranoia and potential grandeur through the partial belief of an invisible movie-camera watching their every move. In a different interview, Tandavanitj comments that:

...[o]ne of the strongest responses from people is ... a sense of being watched, and we've invoked that quite a lot, because we talk about a camera being on you, and trying to frame it as being cinematic and placing you within a field of view of a camera. And people feel extremely paranoid, they don't know whether there is a camera there or not, they don't know whether there are half a dozen Blast Theory [performers] all standing, waiting to come on stage or step out in front of them at any point. And so I think that sensation is really common. (Dias, 2012)

During the interview, Farr also recounted that past players have misread the people around them, sensing through modified physiological radars, that other members of the public are somehow involved in the experience and conversant to the player's criminal intentions, highlighting the immersiveness of the world that the artists create. The artwork therefore amplifies fictive sensation in the user's own body, as well as in the external space of the city and bodies of others.

Blast Theory's artwork creates an immersive world by initiating fictional interaction between the participant and their phone, members of the general public and the five other players whose paths might cross. Consequentially, the immersiveness of the world is both real and virtual, as the collective roles and perspectives of criminal and actor and heightened sense of corporeal and spatial awareness, come together through the technology of the phone. The phone technology and the user's body thus adhere to what Jason Farman describes in *Mobile Interface Theory: Embodied Space and Locative Media*. Within this work Farman cites Elizabeth Grosz's, *Volatile Bodies: Towards a Corporeal Feminism*, which states that, "[t]he body must be regarded as a site of social, political, cultural and geographic inscriptions, productions or constitution" (Grosz, 1994, p. 23).

In *Mobile Interface Theory* Farman uses Grosz and Jacques Derrida's concept of the *mise en abyme* (used metaphorically to show human inability to escape culture adapted from Derrida's indispensability of 'the text') as a way to argue that embodiment, or being a body, is always inherently linked to existing within a cultural space. For Farman, "spaces and bodies are co-constitutive as they produce one another, and this production must be theorized with cultural and physiological specificity" (Farman, 2012, p. 18). Farman utilises Henri Lefebvre's *The Production of Space* that states: "[e]ach living body *is* space and *has* space: it produces itself in space and it also produces that space" (Lefebvre, 1991, p. 170). This intertwining of body and space can be considered a compounded relationship in tune with Maurice Merleau-Ponty's *Phenomenology of Perception* that states, "[t]o be a body, is to be tied to a certain world, ... our body is not primarily *in* space: it is of it" (Merleau-Ponty, 2002, p. 171). This is echoed by Don Ihde's interpretation that body and world are folded into one another. "This is to say ... what we eventually come to know of ourselves is strictly reciprocal with what we come to know of the world. Without world there would be no self; without self, no experience of the world" (Ihde, 1983, p. 53). Farman considers space as being synonymous with culture, asserting that: "our bodies, our spaces, and our technologies are all formed within culture and subsequently

work within the bounds of culture to transform it” (Farman, 2012, p. 25). With this in mind Farman considers how a technological interface (such as a phone) can elicit new experiences of embodiment and open new worldly spaces through the body. By way of example, Farman cites Allucquère Roseanne Stone’s sociological study of phone sex from her article ‘Split Subjects, Not Atoms; Or How I Fell in Love with My Prosthesis.’ Within this work Stone draws upon her experience of time spent with phone sex workers, reasoning how “what was being sent back and forth over the wires wasn’t just information, it was *bodies*” (Stone, 1994, p. 176). As she explains:

*The sex workers took an extremely complex, highly detailed set of behaviors, translated them into a single sense modality, then further boiled them down to a series of highly compressed tokens. They then squirted those tokens down a voice-grade phone line. At the other end of the line the recipient of all this effort added boiling water, so to speak, and reconstituted the tokens into a fully detailed set of images and interactions in multiple sensory modes. (Stone, 1994, p. 177)*

Stone’s description is what Blast Theory achieves by replacing phone sex with phone narrative or phone immersion. The technology of the phone opens up new fictitious world spaces for users to see with fresh eyes. This is how the technology of the phone, as well as the body, become machines to see with, as they work together to create an immersive, virtual and imaginary environment.

## SCENARIO

In contrast to Blast Theory’s pervasive real world experience, Del Favero’s *Scenario* is an interactive and immersive story space that takes place in a digital environment. Created at iCinema (Centre for Interactive Cinema Research established in 2002 at the University of New South Wales), this interactive artwork immerses five participants simultaneously by taking its cue from their physical activity. This involves the users walking around the projection space and following on screen characters in order to structure and mobilise story events within the virtual world. The AVIE auditorium (Advanced Visualization and Interaction Environment) is a 3D projection environment containing a cylindrical screen with a diameter of ten metres across and four metres high. It is a mixed reality environment, a meeting place where five corporeal users and ten digital screen characters converge. Six pairs of stereoscopic projectors within the AVIE give the illusion that these characters inhabit the same space as the users. This is strengthened by the donning of 3D glasses and a custom-built audio system.

When first entering the AVIE participants are greeted by an eerie voice amidst the sound of a waning thunderstorm. The voice beckons the spectators to come forth, directing their attention to the imagery of large disembodied eyes that float around the cylindrical, panoramic screen space. The voice instructs the spectators to choose one of these eyes to be their ‘eye’ into the virtual milieu, which the participants do by moving towards them. After selection, each eye is mounted by a light-coloured digital humanoid figure, which takes the spectator through an underground labyrinth of shadowy passageways. The digital figures in these early parts of the work serve as guides to the participants before developing to avatars that become tethered to the rhythm and movement of each of the user’s bodies. From the first moment of entering the space the user becomes virtually *wired* into the installation through the movement of their bodies that are sensed by the technological and immersive architecture of the space, revealing a specific relationship between the narrative, technology, body and space of the digital world.

As Del Favero and Timothy Barker have highlighted, the origins of *Scenario* was to test out the formation of meaningful relationships between humans and technology by generating “innovative research in the field of machine learning and artificial intelligence (AI), along with iCinema’s ongoing research into immersive and interactive environments” (Favero & Barker, 2010). The result of this transaction between a human user and digital character in *Scenario* is what they term a co-

evolutionary narrative. In a separate paper by Neil Brown, Barker and Del Favero, this term is defined as “a narrative that evolves or emerges based on a relationship formed between a human user and a digital agent able to respond autonomously” (Brown, Barker, & Del Favero, 2011).

After each user chooses their eye they become immersed in an atmospheric journey. This journey begins with the sound and imagery of falling rain as participants are led through passages that appear to move as if they (the user) are traversing the space. Occasionally the humanoid *guide* stops in their tracks to pick something up, showing it to their human followers. These exhibited objects are smooth ‘bloodless’ body parts that appear to have once belonged to another humanoid character before something or someone fragmented it. Here the users are supposed to encounter a sense of mystery, atrocity and criminality.

This is assisted by the dark ambient tones of these strange backdrops, designed to coerce a sense of uncanniness and foreboding in each participant’s body. This is heightened as Del Favero and Timothy Barker write, by the way users experience “the ambiguity of the sensory objects that surround [them]” (Favero & Barker, 2010) juxtaposed with sensations that are “relatively familiar as [they] can see [their] own physical bodies and the bodies of the other users” (Favero & Barker, 2010). Like *A Machine to See With*, an immersive world dichotomy of here and there, real and virtual is established, highlighting Munster when she claims that, “our bodies, analog compositions that they are, can ... transform themselves and become virtual selves” (Munster, 2006, p. 114). For Munster “analog/digital relations are interdependent rather than separate” (Munster, 2006, p. 114), allowing a trajectory or flux to extend beyond our bounded bodies into a virtual other. This is a concept shared by many. Hayles comments that informational patterns such as email are a way that “problematizes thinking of the body as a self-evident physicality” (Hayles, 1999, p. 27), while Rotman claims likewise, stating that email and other electronic communication channels, change a user into a parallel form of self in which their electronic presence exists virtually beside their organic flesh body (Rotman, 2008). Each theoretical idea about being a body is elucidated in *Scenario*. Furthermore, participants are again required to adopt an active role within the story to keep the immersiveness charged, which within this artwork is acknowledged and recognised by the digital characters.

Within the third ‘act’, the users are transported to an open clearing in a forest. Scattered about this bucolic setting lay more body parts, and off to one side is a shadow, a large human figure. The users learn through the voiceover that this silhouette and the limbs littered in front of it belong to a colossal baby. The five participants are then assigned the task of reassembling the child back to wholeness. The means to perform this task involves each light-coloured character developing into an avatar and mirroring each of the participant’s movements and gestures. The avatars beckon to the users, asking them to help. The users must then move around the space, locating the body parts before returning them to the figure of the child through this process of avatarial mimicry.

This restorative task is made difficult by dark shadow characters, programmed with artificial intelligence to autonomously block the user’s light avatars and impede the child from repair. This process transpires through infrared cameras within the AVIE that senses movement and feeds this data into a software programme called iTRACK (Favero & Barker, 2010). iTRACK communicates each user’s body motion data with the digital characters, “which then reason about an appropriate course of action to take” (Favero & Barker, 2010). The dark characters are programmed to hinder movement by obstructing the light avatar’s path to the child. Making approximately five thousand decisions a second (DD interview, 06/14), the dark characters independently learn and respond to the user’s movements in order to debilitate their corporeal efforts. If dark succeeds, the space collapses into blackness followed by the imagery of raining ash to symbolise the burning out of the child’s life. If on the other hand the users succeed by outsmarting the machine, the child comes to life and walks through the surrounding forest as snow begins to fall, a symbolisation of renewal (Barker, 2012).

As Edward Scheer has identified in his analysis of *Scenario*, the broken child is pivotal to the artwork through its symbolic evocation to Jacques Lacan’s concept of the fragmented body’ (Scheer & Sewell, 2011, p. 68). In Lacanian psychoanalysis the development of a child’s ego in the mirror

stage, whereupon the child perceives itself as a whole for the first time and begins to forge an identity, is fuelled by the desire to escape their previous and vulnerable existence as an assemblage of fragmented limbs. As Scheer identifies by way of Malcolm Bowie's writings on Lacan, "the body once seemed dismembered, all over the place, and the anxiety associated with this memory fuels the individual's desire to be the possessor and the resident of a secure bodily 'I'" (Bowie, 1993, p. 26). The restoration of the infant's body is therefore more than just a game but is rather a story and immersive space portraying what it means to be a body. In an interview the author conducted with Del Favero he elaborated on this, stating:

*A baby goes through a process of having to put itself together. To become a person you have to be able to articulate not only your intention to move your arm but actually recognise that your arm is attached to your body. To do that requires an imaginative function. You are human. You are putting a body together in the virtual world [the baby] but you are also putting your body together with the help of the virtual characters. Your behaviour in the space changes what happens and it [the space] changes you. (DD interview, 06/14)*

Del Favero's description is indicative of Hansen's description of body-brain activity in virtual reality environments, particularly in the sense of a dynamic coupling that takes place between a user's body and the artwork imagery, where the body and medium transform one another (Hansen, 2004, p. 186). Del Favero's exposition is also symptomatic of body ecology in terms of how parts connect to and relate to one another, and how in Brian Massumi's sense of affect, bodily movement always fills an incorporeal space of potentiality. In *Parables for the Virtual: Movement, Affect, Sensation*, Massumi describes affect as a virtual co-presence of potentiality that is integrated into humans as bodily beings. Massumi asserts that, "the body is as immediately abstract as it is concrete; its activity and expressivity extend, as on their underside, into an incorporeal, yet perfectly real, dimension of pressing potential" (Massumi, 2002, p. 31). In other words affect is a threshold in which the real proprioceptive body converges with. Affect can therefore be considered a virtual, incorporeal space for potential action and changeability. As Massumi states:

*What is being termed affect ... is precisely this two-sidedness, the simultaneous participation of the virtual in the actual and the actual in the virtual, as one arises from and returns to the other. Affect is this two-sidedness as seen from the side of the actual thing. ... Affects are virtual synesthetic perspectives anchored in (functionally limited by) the actually existing, particular things that embody them. The autonomy of affect is its participation in the virtual. ... Affect is autonomous to the degree to which it escapes confinement in the particular body whose vitality, or potential for interaction, it is. (Massumi, 2002, p. 35)*

Consequentially, a body is put together with every move it makes in a process of continuous becoming. This is something that Del Favero and Barker delve further into when they highlight how *Scenario's* model for action is structured by a theory of assemblage that is developed by Gilles Deleuze and broadened by Manuel DeLanda's *A New Philosophy of Society*. Within this work, Barker and Del Favero highlight that DeLanda's assemblages are a way to consider a collection of wholes, such as the whole of an atom, organ, human body, ecosystem or society. Regardless of the content, an assemblage consists of all the parts that make up this whole:

*However, it is always more than a mere aggregate of these parts. For instance, it is not that a human body is constituted simply by an aggregate of organs. Rather, the human body is constituted by the organs' capacity to act and to work with one another. Similarly, a society is not made up merely by a sum of people. What makes the society an assemblage is the capacity that each individual has to*

*interrelate within the collective. In short, an assemblage is always constituted by the capacity for interaction between its parts. (Favero & Barker, 2010)*

In other words, it is not just the parts that make up an assemblage but also how they act, or how they could act, through the potentiality of their interaction to one another. “It is the *affect* of the parts – as their capacity to act on one another – that matters, not their materiality, individual power or visual appearance” (Favero & Barker, 2010).

DeLanda considers a human conversation as an assemblage for it is made up of specific rules and organisational states that condition the exchange of information. People, language (sub-divided into words and tone), the scenario as to why they are conversing, (family, friends or colleagues or any other association) and the unforeseen potentiality of what might be said, or how something might be interpreted, are all integral parts of such a discourse assemblage. In a similar capacity, the co-evolution narrative of *Scenario* is also something that can be considered a conversation between human and computer within an immersive space. As Andrew Stern states, “[b]y making the computer *listen* to the audience (the first half of reactivity), *think* about what it heard (autonomy), and then speak its thoughts back to the audience (the second half of reactivity), the artwork can have a dialog, a *conversation* with the audience” (Stern, 2001).

This conversation of *Scenario* between the digital characters and the human users relies upon an embodied assemblage through the way that the iTRACK system detects motion, translates it into digital data and responds accordingly. Added to the role the human user plays during the artwork, the design of the interface by the artist and technical procedures of a computer programmer are all integral parts of the assemblage. The immersive digital world of *Scenario* sets out a specific relationship for the user, whereupon their corporeality is detected and reduced into code, then instantly projected into the circular screen, amplifying the user’s body into a parallel form of self. This parallel body becomes the means to experience a parallel narrative of the child who will either live or die based upon how users perform, once tethered (in a virtual capacity) to their avatars.

The experience of the artwork is one of curiosity and discomfort, of sharing a space with something anterior to the self, or trying to come to terms in a shared space with the other. This is something that Del Favero elaborated on in the interview:

*We started with the notion of trying to find a way to allow users to interact with intelligent characters. How do we provide viewers with sufficient motivation or affect/identification to actually want to participate? ... What we tried initially was a children’s game of the user putting differently shaped objects through holes in the ground. This worked functionally but it lacked that ability to draw the user into a narrative or affect a user. So then we started looking at how we can seriously use a narrative architecture to drive that affect or that engagement so the logic of the interaction could play out. We were interested in how viewers are motivated inside this technical space [Scenario] and the connection between your unconscious motivations and your physical behaviour, because that’s what this technology is trying to grapple with. It’s trying to engage with your motivations and your motivations are both things that you are aware of but by and large they’re things you’re not aware of. They play out on the peripheral of your unconsciousness. (DD interview, 06/14)*

The desire to save the child during the restorative process serves as a reminder of the performing role of the caring parent or nurturing adult, which as Del Favero commented, is an intrinsically primal and human response to a child in distress (DD interview, 06/14). If a user goes above and beyond to save this child from anguish, or alternatively is indifferent to the whole affair, these conscious or unconscious feelings are presented physically within the space, revealed through the user’s bodily endeavours.

Later in the interview, Del Favero discussed how the idea of concealed desire and the conflation of unconsciousness buried within the conscious subject is thematised within the structure of this work, which is also inspired by the notorious Josef Fritzl case of 2008. As Del Favero explains:

*We came across the story of Fritzl early on because we wanted to deal with human desire or what motivates people – more often than not it is something they're not aware of. We liked the idea in the Fritzl story of the house, which was two houses in one: the underground house and the above ground house, the house of crime and the house of a family. The (Fritzl) house was a machine, another technology. And if you looked at this architecture, this machine from one perspective all you could see could was a normal family life but then if you changed perspective it became something else, a bit like an electron being either a wave or a particle. It depends on how you interact with that architecture, that's how the story evolved. (DD interview, 06/14)*

Del Favero describes the house as a machine, before him Deleuze and Felix Guattari use the concept of a machine to reformulate the notion of desire. The desiring machine, as they call it, relates to a “direct link between desire and production” (Young, Genosko, & Watson, 2013, p. 85). The desiring machine, according to Deleuze and Guattari, is the way in which the unconscious produces desire in a manufactured way. This is the desire to connect to other systems or machines, or the way in which “components couple and connect with one another” (Young et al., 2013, p. 85), such as the breast machine of the mother, the education machine of school or the communication machine of language. Deleuze and Guattari, in a way that resonates with Del Favero’s work, offer an alternate interpretation of desire from Freudian psychoanalysis. For Freud desire is established from lack. For Deleuze and Guattari, as for Del Favero, desire can be thought of as a productive force that is *machined*. A machine is the *flow* of this productive force, consistently interrupted by other machines. As Deleuze and Guattari state: “[a] machine may be defined as a system of interruptions or breaks (*coupures*). ... Every machine, in the first place, is related to a continual material flow (*hyle*) that it cuts into” (Deleuze, Guattari, & Hurley, 2004, pp. 38-39).

The underground prison of the Fritzl home is a machine that interrupts the domestically normal looking flow of family life in the above ground house and vice versa. A machine is actualised within *Scenario* so that activity interrupts spectatorship, movement interrupts the flow of story, and movement from user to character and reciprocally from character to user interrupt and affect one another, which as Del Favero and Barker state, can be clearly seen:

*We have observed that users tend to move in Scenario in a much slower and deliberate manner than in real world interactions. This may be [... that] the users' movements are affected as they attempt to regulate physical movements to the movements of the characters on the screen, as they follow the users around the space. [Also] because the users are innately aware that they are being closely watched and that all of their movements are being given significance, they may tend to reason more thoroughly about the consequences of their otherwise 'natural' movements, which produces these slow, deliberate movements, largely designed to 'test' their effect on the digital characters. (Favero & Barker, 2010)*

The sensing technology of the interface has real observable effects on the user’s movement. Users move more slowly around the space as the digital pace of the machine interrupts and conducts the flow of natural bodily rhythm.

*Scenario* as Del Favero explained to the author is an experience of performance that utilises four ‘E’s: *expanse, embedment, embodiment and enactment*. The *embodiment* occurs as the human’s whole body interfaces with the environment of the AVIE, allowing them to become *embedded* as code in the digital architecture. The user is thus *expanded/extended* into this codified space in which

their presence, *embedded* in the narrative flow, becomes a fertile ground to *enact* meaning making as co-authors and *embody* an interactive narrative within an immersive space.

## CONCLUSION

Within this paper two distinct immersive worlds of interactive artworks have been discussed: Blast Theory's *A Machine to See With* and Del Favero's *Scenario*, supported with firsthand interviews with each of the artists. In each artwork the author has considered how the respective worlds (pervasive and digital) are activated through a user's mobility. Consequentially these immersive worlds become animated through an ecology between technology and the human body where a user has control and simultaneously is controlled. In Blast Theory's world this enables a user to see an immersive world through the interface of their body and phone apparatus, while in Del Favero's, the digital artwork permits the user to co-create the events of an immersive world through engagement with AI and motion sensing technology. Despite the difference in technological sophistication, both artworks create environments through convergence of the human body with technological hardware. Through this relationship unique and stimulating worlds of immersion and narrative are accessible to users who both observe the story and world, and in turn, are assimilated into the story, *becoming* part of the world.

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## NOTE

For full transcripts of the interviews with Dennis Del Favero and Ju Row Farr, please go to: <https://glasgow.academia.edu/DanOBrien>