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Come On In: Virtual Reality Beyond the Headset

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Abstract

In this paper I consider embodiment, spectatorship, and virtuality as they relate to aesthetic experience and how they can be understood through the interactive installation, *Come On In* (2020) by dancer, choreographer, and director Faye Driscoll. I argue that virtual reality need not include the use of VR technologies such as headsets, but rather that it is a mode of experience that blurs the boundary between fact and fiction through what Vittorio Gallese calls "embodied simulation." In Driscoll's installation, the visitor's body is used to channel and enact the performance as they are seated or reclined while listening to a kind of guided meditation through headphones. The reclined body then, does not have to be viewed as passive, but rather as facilitating an embodied experience, a claim that is supported by Jacques Rancière's theory of *the emancipated spectator*. Further, I look at vulnerability as a condition of cognition (made literal in the reclined body) through David Bates's historical analysis of the evolution of artificial intelligence, linking the plasticity of cognition with the conception of embodied simulation and immersive experience, to point to the liberatory potential of art.

Keywords Spectatorship Embodied simulation Neuroplasticity Virtual Reality Interactive Art

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Introduction

The participatory installation, *Come On In* (2020) by dancer, choreographer, and director Faye Driscoll operates in the realm of embodiment, spectatorship, and virtuality, raising important questions around aesthetic experience in relation to virtual reality. Though *Come On In* is not presented as virtual reality art, it conflates performer and audience in its mode of individual yet communal experience that relies heavily on our capacity to imagine and engage with others through our own experience. Like Grant Tavinor,[1] I argue that virtual reality need not include the use of VR technologies such as headsets, but rather that it is a mode of experience that blurs the boundary between fact and fiction through what Vittorio Gallese calls "embodied simulation" – an active relationship between the body and its milieu that does not necessarily entail physical movement. Going further and decoupling perceptual experience from a "sense of reality," I draw on the work of Jérôme Dokic and Jean-Rémy Martin who show that experiencing spatio-sensory contents is not necessarily accompanied by a sense of reality, or conversely, that the sense of reality is not constitutive of perception.[2] They argue instead for the sense of reality as a meta-cognitive process which applied to virtual reality technology means that immersion is more dependent on refresh rate or smoothness of movement than highly detailed and realistic environments. In the case of Driscoll's installation, we can understand the recorded speech that visitors listen to through headphones while seated or reclined on platformed mattresses as an instance of virtual reality which relies on embodied simulation. Switching seamlessly between conjuring visceral

1 G. Tavinor, *The Aesthetics of Virtual Reality* (New York: Routledge, Taylor & Francis Group, 2022).
2 J. Dokic, J-R. Martin, "Felt Reality and the Opacity of Perception," *Topoi* 36, no. 2 (2015): 299-309, https://doi.org/10.1007/s11245-015-9327-2.

images, guiding the visitor through feeling their own body, and speaking poetic phrases, Driscoll takes you on an intimate journey, as her voice in your ear goes under your skin, into your guts. The visitor's body is thus used to channel and enact the performance as they lay supine. This brings up an interesting parallel to Gallese's claim that the inert body is more prone to immersion. It does not then have to be viewed as passive, but rather as facilitating an embodied experience, a claim that seems to be reflected in Jacques Rancière's theory of the emancipated spectator. Gallese can thus be seen to provide neuroscientific support for Rancière's argument of the spectator as always already active, enacted in Driscoll's *Come On In* and maintained in her own discussion of the work. Further, the position of the reclined or inactive body resurfaces throughout this inquiry, prompting a look at vulnerability as a condition of cognition (made literal in the reclined or seated, relaxed body) through David Bates's historical analysis of the evolution of artificial intelligence, thus linking the plasticity of cognition with the conception of embodied simulation and immersive experience. In this paper, I am not interested in artificial intelligence per se, but what assumptions the work in that field has uncovered about cognition and human experience, subsequently revealing the fundamental conditions for cognition, which are relevant to my inquiry. Finally, in following Janet Murray's call to bring the techno-utopian virtual reality discourse back to earth,[3] I hope to reconceptualize virtual reality with the body in mind. By expanding the definition of VR, we may de-fetishize it and recover its potential for art. Following Gallese's theory of embodied simulation and the anthropology of Alfred Gell, I propose that agency is mediated by the artwork which becomes a fulcrum of liberation within a network of social relations. Perhaps what

3 J.H. Murray, "Virtual/Reality: How to Tell the Difference," *Journal of Visual Culture* 19, no. 1 (2020): 11-27, https://doi.org/10.1177/1470412920906253.

will liberate us is not VR technology but art in its capacity to reflect ourselves and our culture back to us.

Embodied Simulation in Faye Driscoll's *Come On In*

I begin where Bates ends his genealogy of artificial intelligence:

> Our digital brains – brains modeled on and simulated by computers and increasingly formed by repeated interactions with our digital prostheses – will reveal their genuine plasticity only when they rediscover the power of interrupting their own automaticity.[4]

Encounters with art offer us the opportunity to interrupt our own automaticity by taking us out of the flow of everyday life and presenting the world anew. I use Faye Driscoll's installation *Come On In* as an example of this kind of generative interruption and a case study for an expanded definition of virtual reality art. *Come On In* was her first solo museum exhibition, designed in collaboration with Nick Vaughan and Jake Margolin. It is a coda to her trilogy of performance work for the stage, *Thank You For Coming* (2014-2019), and makes use of ideas and phrases from the whole trilogy, recombining material and channeling the performance through the visitor's body via prerecorded audio tracks of the artist's voice. The space of the exhibition is designed as a sanctuary, with dimmed, pulsating ambient light and sound. The room is carpeted, and contains multiple platformed mattresses, each with a pair of headphones where visitors are invited to listen to the audio recordings, collectively titled *Guided Choreography for the Living and the Dead* – a play on the practice of guided meditation. The

4 D. Bates, "Automaticity, Plasticity, and the Deviant Origins of Artificial Intelligence," in D. Bates, N. Bassiri, eds., *Plasticity and Pathology: On the Formation of the Neural Subject* (New York: Fordham University Press, 2015): 194-218.

work was commissioned and presented at the Walker Art Center right before the Covid-19 pandemic hit the United States in 2020 and forced the exhibition to close to the public. Because of this, they developed part of it into an online experience which has allowed me to access and experience one of Driscoll's audio recordings for myself, prompting me to consider the nature of this experience of remote choreography where the performance is enacted in and through my own body.[5] A short excerpt from the spoken words reads as follows:

> And now squeeze your muscles around your bones and hold, squeeze, hold. And as you release, you expand into your vulnera–bility and up out your eyeballs, through your pride, and you soften the muscularity around your concern for what you look like right now. And you feel deep up into your pelvic floor all the way up, up, up to your lungs and your grief, and you let it fall, fall, fall down through the floors of this building, past the white paint and the wall texts, and you fall, fall, fall into someone walking in the gallery downstairs, looking at art. And you feel your face flush with their embarrassment as they stumble and stutter and feel like they just don't understand it.[6]

Driscoll is here weaving together the inner world of her audience, their bodies and feelings, with an external reality, dream logic, and the representation of the emotions of others. She conjures a virtual world that is not limited to the body of the participant but is anchored there. Her installation is strikingly resonant with Vittorio Gallese's theory of embodied simulation, which proposes that observing others, we take on their actions and movements in our own body through motor representation of the same action. It is

5 "Come On In," Walker Art Center, www.walkerart.org/magazine/faye-driscoll-come-on-in-online, accessed February 1, 2022.
6 F. Driscoll, transcript of "Come On In" online experience, https://dialogues.page.link/come-on-in-transcript, accessed November 10, 2024.

"a non-conscious, pre-reflective functional mechanism of the brain-body system, whose function is to model objects, agents and events."[7] When we see an action performed or hear an action represented through speech as with Driscoll's words, the same areas of the brain are activated as when we perform the action ourselves. This is facilitated by what are called "mirror neurons," a discovery made by Giacomo Rizzolatti's team of which Gallese was a part, and which has led to a number of contested neuroscientific claims that continue to be debated.[8] In addition to the actions of others, embodied simulation is also triggered by our surroundings and objects therewithin: our peripersonal space, or space of potential action, which is further affected by our "personal and social identity, the context, our mood and disposition," our memories and past experiences.[9]

While remaining skeptical about the naming of mirror neurons, Brian Massumi makes a similar claim with regard to the fundamental role of what he calls the "virtual body" for perceptual experience. Massumi discusses the special case of mirror-touch synaesthesia (where touch on another's body is felt on one's own) not as a mistake but as a reminder of the primordial human state of multiplicity of perception in infancy before individuation and separation into discrete sense modalities, revealing relation to be primary in our experience. "To say that mirror-touch has to do with spatial confusion is to be confused about the fact that the physiological body is the tip of the iceberg of the virtual

7 V. Gallese, "Visions of the Body. Embodied Simulation and Aesthetic Experience," *Aisthesis* 10, no. 1 (2017): 41-50, 44, https://doi.org/10.13128/Aisthesis-20902.

8 See: V. Gallese et al., "Mirror Neuron Forum," *Perspectives on Psychological Science* 6, no. 4 (2011): 369-407, https://doi.org/10.1177/1745691611413392; C. Heyes, C. Catmur, "What Happened to Mirror Neurons?," *Perspectives on Psychological Science* 17, no. 1 (2022): 153-168, https://doi.org/10.1177/1745691621990638; JM. Taylor, "Mirror Neurons After a Quarter Century: New light, new cracks," Harvard University blog, https://sitn.hms.harvard.edu/flash/2016/mirror-neurons-quarter-century-new-light-new-cracks/, accessed July 15, 2024.

9 V. Gallese, "Visions of the Body. Embodied Simulation and Aesthetic Experience," *Aisthesis* 10, no. 1 (2017): 41-50, 46, https://doi.org/10.13128/Aisthesis-20902.

body."[10] This is an anti-mechanistic view of embodiment that lines up with Gallese's concept of embodied simulation. What we see when we look at something is not simply a recording of what stands in front of us, "but the result of a complex construction whose outcome is the result of the fundamental contribution of our body with its motor potentialities, our senses and emotions, our imagination and our memories."[11] The intercorporeality that embodied simulation thus produces brings into question the distinction between fact and fiction, or real and virtual, since the same brain circuits are activated in our embodied responses in both cases. Elsewhere, Gallese has written about embodied simulation in relation to aesthetic experience in the arts, specifically when considering imagination: "When we imagine a visual scene, we activate the same cortical visual areas normally active when we do perceive the same visual scene."[12] Therefore, since the difference between real and imaginary is not straightforward, we might question what really constitutes virtual reality.

Virtual Reality and Felt Reality

Following Grant Tavinor's definition of virtual reality as "the remediation of the perceptual world,"[13] and not necessarily computational or fictional, I suggest that Faye Driscoll's *Come On In* is a virtual reality experience. Tavinor further describes VR as "egocentric picturing"[14] and virtuality as a familiar thing taking a novel or "non-customary"

10 B. Massumi, "Art of the Relational Body," in D. Martin, ed., *Mirror-Touch Synaesthesia: Thresholds of Empathy with Art* (Oxford: Oxford University Press, 2018): 191-205, 202.
11 V. Gallese, "Visions of the Body. Embodied Simulation and Aesthetic Experience:" 48.
12 V. Gallese, "Embodied Simulation. Its Bearing on Aesthetic Experience and the Dialogue Between Neuroscience and the Humanities," *Gestalt Theory* 41, no. 2 (2019): 113-127, 116, https://doi.org/10.2478/gth-2019-0013.
13 G. Tavinor, "The Aesthetics of Virtual Reality (Routledge, 2022)," interview by Pierre d'Alancaisez, New Books in Art, New Books Network (NBn), January 28, 2022, 53:00, https://newbooksnetwork.com/the-aesthetics-of-virtual-reality, accessed July 15, 2024.
14 G. Tavinor, *The Aesthetics of Virtual Reality:* 59.

form while retaining the functionality of the original.[15]He also addresses the erroneous conflation of virtual with computational, explaining this as a natural tendency given that computers are essentially remediation machines, yet showing that we cannot limit virtuality to computation.[16] This allows me to point to the continuity between different aesthetic expressions of virtual reality that have the effect of perceptual immersion through embodied simulation in order to think beyond current and existing technology, which no doubt has its own media specificity, yet exists on a continuum of experience we might describe as virtual reality and which engages our sense of reality. By separating virtuality and computation, we might also deflate the hype around VR that often obscures analysis of virtual reality experiences. In describing the reality of VR technology and its material constraints, Janet Murray shows how an "attitude of omnipotent representational powers leading to a replacement of the real world with the virtual world has led non-scientists to overestimate the present and future of VR experiences."[17] By contrast, N. Katherine Hayles has argued that virtual reality art is uniquely situated to impress upon those who experience it that bodies and the world exist in relation by making that relation explicit via artificial means.[18] The experience of virtual reality is a real experience, whether the world of that experience is virtual or real. Body and embodiment are understood by Hayles in relational terms, not as preexisting entities but as emerging out of reciprocal action between the individual mindbody and the worlds it inhabits.[19] Similarly, *Come On In* makes explicit the relationality with oneself and between internal feelings and external

15 Ibid.: 26.
16 Ibid.: 22.
17 J.H. Murray, "Virtual/Reality:" 14.
18 N.K. Hayles, "Flesh and Metal: Reconfiguring the Mindbody in Virtual Environments." *Configurations* 10, no. 2 (Spring 2002): 297-320, https://doi.org/10.1353/con.2003.0015.
19 Ibid.: 298-299, 304.

qualities, blurring the distinction between them. Where does one begin and the other end?

In their research on felt reality and the opacity of perception, Jêrome Dokic and Jean-Rémy Martin effectively decouple what they refer to as the "sense of reality" (the sense that the object of a perceptual experience is real) from perceptual experience itself. In other words, they claim that the experience of spatio-sensory contents is not necessarily accompanied by a sense of reality, or conversely, that "the sense of reality is not constitutive of perception, and can even be generated in the absence of any perceptual experience."[20] They look at several scenarios, including virtual reality, to probe this relation between felt reality and perceptual experience, and have found that the sense of reality is not affected by the resolution or level of detail in the rendered virtual environment, whereas the refresh rate does have an impact. An example of this can be found in Jordan Wolfson's *Real Violence* (2017) as described by Grant Bollmer and Katherine Guinness who point out that although it appears very realistic, the virtual reality video is actually quite low resolution but has a high refresh rate.[21] In Wolfson's piece that depicts a brutal beating, the low resolution conceals the fact that the victim is a mannequin and not a real person. This validates Dokic and Martin's finding that smoothness of motion is more important than visual detail for the sense of reality. They conclude in their article that the sense of reality is a metacognitive feeling – a kind of self-reflexive capacity – based on various reality-monitoring processes, essentially sensing how much strain cognition is under and thus being able to infer whether something is real (takes less brainpower to perceive) or illusory (requires more work). They give the example of observing an

20 J. Dokic, J-R. Martin, "Felt Reality:" 307-308.
21 G. Bollmer, K. Guinness, "Empathy and nausea: virtual reality and Jordan Wolfson's Real Violence," *Journal of Visual Culture* 19, no. 1 (2020): 28-46, 30, 43 (note 3), https://doi.org/10.1177/1470412920906261

elephant, which "is simply 'processed' while in imagination it is produced and the production part adds a supplementary 'difficulty' for the system."[22] Sensorimotor interactions are implicated in that they can heighten the sense of reality but because we are so sensitive to sensorimotor fidelity, this is also where it can fail if the interaction isn't true to life. However, we can learn to see through the mediation of virtual reality to perceive primarily the objects or events referenced. This goes counter to Murray's claim that we are *always* aware of a VR experience as such, instead suggesting that we might at times forget that the experience is not taking place in actuality. After training with a device that mediates the relation and achieving fluency with it, "reality-monitoring processes are 'fooled' and tag the objects at the source of proximal sensory events as having actuality."[23] This works similarly to learning to drive, walk with a cane, or become accustomed to a prosthetic limb.[24]

Immersion and the sense of reality thus go hand-in-hand with agency or what we might call the sense of agency even when we do not have the possibility to act and change the course of events. Since virtual reality is a remediation of perceptual experience it should therefore also be a remediation of agency, which prompts a consideration of agency in art experience more broadly. Alfred Gell's anthropological theory of art posits the artwork as a nexus of social relations, leaving the question of what an artwork can be, open, and introducing agency into the equation.

But in fact anything whatsoever could, conceivably, be an art object from the anthropological point of view, including living persons, because the anthropological theory of art (which we can roughly

22 J. Dokic, J-R. Martin, "Felt Reality:" 304.
23 Ibid.: 305.
24 See Michael Polanyi's discussion of tacit knowing in M. Polanyi, *The Tacit Dimension* (Garden City NY: Doubleday, 1967), and M. Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (1958) (Chicago: The University of Chicago Press, 2015).

define as 'social relations in the vicinity of objects mediating social agency') merges seamlessly with the social anthropology of persons and their bodies.[25]

This kind of cross-media conceptualization is useful for my purposes in considering how virtual reality might span both the use of headsets and other types of tools, technologies, and scenarios. For Gell, agency is transmitted from the artist through the artwork and replicated by it, finding its recipient in the perceiver of the artwork (which Gell refers to as the index), who may then identify with the agency expressed in it and feel it as their own; "the other's agency is not just suffered via the index; it is also thereby perpetuated and reproduced."[26] This bears a striking resemblance to how embodied simulation works, and how Gallese describes the action of the artist taken up by the viewer:

Beholders' eyes catch not only provides [sic] information about the shape, direction and texture of the cuts or strokes but by means of embodied simulation, they breach into the actual motor expression of the artist when creating the artwork.[27]

The direction of the agency of the artist expressed in the work of art is thus mirrored in the beholder. As Gell writes, "An agent is the source, the origin, of causal events, independently of the state of the physical universe."[28] In Driscoll's piece I feel myself as the source or origin of action, just as I might in a virtual reality environment wearing a headset. Even in the at-home experience of *Come On In* I feel that I am actively participating; that I am doing something, even as I remain seated in my chair. I am, in fact,

25 A. Gell, *Art and Agency: An Anthropological Theory* (Oxford: Clarendon Press, 1998): 7.
26 Ibid.: 227.
27 V. Gallese, "Embodied Simulation Theory: Imagination and Narrative:" 118.
28 A. Gell, *Art and Agency: An Anthropological Theory:*" 16.

embodying the simulation that Driscoll has orchestrated through her narration and the framing of the experience as it is accessed online.

We might then say that the perceived potential for action matters more for the sense of reality here than actual possibilities to affect the course of events, to choose your own path. Allowing the visitor to project themselves into the space of the exhibition seems to be more important for immersive experience than attempting to create a complex and realistic virtual simile. However, a sense of agency is greatly aided by being given the choice of shifting one's view and/or position at will.[29] An interesting thing to add is Murray's assertion that it is the boundary or interface between the fictional world and the real one that aids us in attaining and sustaining an immersive state by focusing our attention.[30] The VR headset is such a "threshold object," as she calls it, as is the TV screen, or the headphones in Driscoll's installation. Gallese also makes this point in speaking about the frame of a painting as an immersive device: "Such distancing, this temporary suspension of the factive grip on our daily occupations, liberates new simulative energies."[31] This corresponds with another claim by Gallese as part of his theory of embodied simulation, that distancing from stimuli in the external world produces a more immersive experience of a virtual world by making available more energy for the embodied simulation of that world e.g., more of the sensorimotor system is available when you don't also have to navigate a physical environment. "Being forced to inaction, we are more open to feelings and emotions."[32] As muscle tone slackens, more neural resources can be allocated to "intensifying the activation of bodily-formatted representations, and in so doing, making us adhere more

29 J. Dokic, J-R. Martin, "Felt Reality:" 305.
30 J.H. Murray, "Virtual/Reality:" 18.
31 V. Gallese, "Embodied Simulation Theory: Imagination and Narrative:" 199.
32 V. Gallese, "Visions of the Body:" 47.

intensely to what we are simulating."[33] This prompts the question of the emancipatory potential of VR because it would seem to suggest that the more we give up control, the more effective the simulation is. Since virtual reality is the remediation of "an agent's experiential and interactive dealings *with a world,"*[34] I believe it is the nature of those dealings that determines its liberatory potential, not virtual reality itself, though it has that potential. Virtual reality is a mode of experience that may be technologically mediated, and as such it has certain characteristics and affordances that can be exploited in numerous ways. Modifying Marshall McLuhan's famous adage, we might say that the medium is not the whole message, adding: How is it used, and to what end? Crucially, I am looking at virtual reality in the special context of art, and it is this context that provides the potential for emancipation, in my view. While I believe VR can be emancipatory, it can only be emancipatory when used in a self-reflexive way, as it is in art.[35] Therefore, it is as art that VR is liberatory. Our capacity for embodied simulation comes to the fore in virtual reality as a way of perceiving the world of others.[36] However, this has its limitations as expressed by many, including Lisa Nakamura, who is skeptical of VR as an "empathy machine," and insists that VR documentaries that aim to produce empathy for the disenfranchised instead provide "absolution framed as information."[37] I would argue that this is a problem for any documentary with aspirations for social change but because VR is more immersive than traditional screen-based

33 Ibid.: 48.
34 G. Tavinor, *The Aesthetics of Virtual Reality*: 30.
35 Art is by definition self-reflexive, according to Alva Noë's definition of art in contrast to broader culture as something that reflects on that culture and therefore in some way stands apart from it before being assimilated into the culture at large again. See A. Noë, *The Entanglement: How Art and Philosophy Make Us What We Are* (Princeton NJ: Princeton University Press, 2023).
36 V. Gallese, "Embodied Simulation Theory: Imagination and Narrative."
37 L. Nakamura, "Feeling Good about Feeling Bad: Virtuous Virtual Reality and the Automation of Racial Empathy," *Journal of Visual Culture* 19, no. 1, (2020): 47-64, 53, https://doi.org/10.1177/1470412920906259. See also M. Carter, B. Egliston, "Fantasies of Empathy," in M. Carter, B. Egliston, *Fantasies of Virtual Reality* (Cambridge MA: MIT Press, 2024).

media we might feel that we ourselves have experienced something we have not. Perhaps what we experience when we interact with VR is not the world of the others that are depicted in it, but the world of the creator of the experience. This is how I interpret both Gell's and Gallese's descriptions of the functioning of the artwork as a nexus of social relations, mirroring the action of the artist in the embodiment of the viewer.

Vulnerability in Cognition and Experience

To be relaxed and sensorially shielded but physically exposed to your surroundings makes you vulnerable, unable to anticipate what might happen and to react quickly to any changes. It doesn't seem to make sense from an evolutionary survival perspective to seek such a state and yet we have evolved to daydream and be captivated by stories. By analyzing the history and evolution of research in artificial intelligence that have used different models of cognition, David Bates demonstrates the significance of fallibility for human thought and development.[38] Contrary to what is sometimes assumed, automaticity is not what defines human cognition, though it certainly depends on it. He explains the evolution of the conception of cognition in artificial intelligence research to highlight this shift in thinking.

At the same time that some cyberneticians were claiming that the brain was just an automatic calculator like the computer, crucial figures in the history of computing and cybernetics immediately recognized the importance of the plasticity of the brain for the project of AI: the plastic brain, it was thought, offered the possibil–ity of modeling creative, unpredictable leaps of human intelligence,

38 D. Bates, "Automaticity, Plasticity, and the Deviant Origins of Artificial Intelligence:" 194-218.

capacities that went beyond the relentlessly automatic performance of rigid functional mechanisms or habitual behaviors.[39]

It is the possibility of error without complete systemic failure that enables cognition for us (and presumably other sentient beings) because it is the inherent instability that allows for the "perpetual organization and reorganization"[40] needed for improvisation. The relative stability of organisms comes from their malleable nature. "Organisms are stable as *unities* precisely because their organization is *not* fixed into any one rigid structure."[41] In addition to plasticity, cognition also requires a social milieu to develop this adaptability through feedback from the surroundings. This necessitates an openness that risks the possibility of failure: a vulnerable position, made explicit and instrumentalized in Driscoll's *Come On In* which deals with humans as social and interdependent beings. Sets, performers, and audience are all malleable parts of the work which takes on the political through the physical and emotional using material objects as well as language and movement.[42] Generally, we can entertain possible scenarios and react to them emotionally, even when we understand that they are not "real" – reading a novel or watching a movie engages this capacity. As Gallese writes, "being human not only means to experience physical reality, but also to conceive possible worlds, to surrender to imagination and to fictional worlds."[43] The adaptability and plasticity of cognition both allows and requires this kind of surrender. Massumi emphasizes how the primordial chaos of perception into which we are born remains with us even as we leave infancy behind and

39 Ibid.: 197.
40 Ibid.: 199.
41 Ibid.: 207.
42 "Faye Driscoll: Come On In," Walker Art Center, www.walkerart.org/calendar/2020/faye-driscoll-come-on-in, accessed July 15, 2024.
43 V. Gallese, "Visions of the Body:" 42.

without which, "our world of experience would lose its intensity and plasticity."[44]

As Hannah Krafcik points out in a review of *Come On In* at the Portland Institute of Contemporary Art, Driscoll is highlighting vulnerability in her installation, both though "bodies reclined in stasis" and in the instruction itself: "She occasionally suggested that I 'soften' myself or some part of myself."[45] Further emphasizing the theme of vulnerability, Krafcik writes: "Her tone asks for surrender to this sensitized state, reminding me that vulnerability always comes at the risk of unexpected injury, microaggression, and other forms of harm."[46] What was clear to me from the documentation of *Come On In* and my own experience of the virtual version, is substantiated in both Krafcik's account and in writing by Miriam Felton-Dansky, who says: "What provocation is enough to make us put our bodies on the line, even in the safety of an experimental performance and under cover of a crowd?"[47] Though the audience is obviously in no real danger, the unguarded position of their bodies activates the cognitive processes that have been developed over the course of the evolution of our species, tapping into the creativity to be found in risky situations. My experience of *Come On* In is of course different from what Krafcik and Felton-Dansky describe in that I am alone in my own home, without the presence of strangers around me. Yet, the cognitive state of vulnerability is still a necessary component of the experience, a giving up of control and going along the path of emotional resonances laid out by Driscoll, and it is a state that has been crucial in the evolution of our species,

44 B. Massumi, "Art of the Relational Body:" 200.
45 H. Krafcik, "Faye Driscoll's 'Come on In" at PICA: A personal review,' *Oregon Arts Watch*, December 1, 2021, https://www.orartswatch.org/faye-driscolls-come-on-in-at-pica-a-personal-review/, accessed November 15, 2024.
46 Ibid.
47 M. Felton-Dansky, "The Stakes of Contact: Faye Driscoll's Thank You For Coming: Space & Come On In," *Walker Reader* (May 26, 2020), http://www.walkerart.org/magazine/the-stakes-of-contact-faye-driscolls-thank-you-for-coming-space-and-come-on-in, accessed November 10, 2024

as explained by Bates. It also seems to be an important aspect of embodied simulation where the risk of openness is key. Though it may seem to eschew physical movement from the emphasis on the stationary body, embodied simulation works because of our capacity to move. Internal and external movement are co-extensive as simulations are felt in the body. As explained by Massumi, "Physiologically, the motion in our body accompanying every feeling is the firing of mirror neurons, recruiting an extended network of activations throughout the brain."[48] As mentioned previously, sensorimotor interactions can heighten feelings of reality but can also be a weak point in a simulation. Though the body need not be moving in VR experiences, it uses its capacity for movement necessary for perceptual experience. As Massumi argues, it is through movement that perception is defined, and it is through movement that we come to know the world.[49] The remediation that happens in VR can fool our sense of reality, even if just momentarily, by our learning or growing accustomed to specific translations of virtual into perceptual. We see *through* the technology we are accustomed to, focusing mainly on the content of our experience, not the conditions. The technology dissolves as we sink into the experience but returns as we start to feel physical discomfort. As Bollmer and Guinness describe, Wolfson's *Real Violence* makes use of this fact to pull the viewer out of the immersive experience and remind them of their bodily reality by purposefully inducing nausea through camera movement: "Nausea refuses to let the body disappear."[50]

48 B. Massumi, "Art of the Relational Body:" 200.
49 Ibid.: 199.
50 G. Bollmer, K. Guinness, "Empathy and nausea:" 37.

Renowned video artist Pipilotti Rist is known for her large-scale video installations with a focus on the sensuous, and like Driscoll with *Come On In*, she often encourages visitors to lie down and watch her videos from a reclined position. In describing Rist's 2008-2009 exhibition *Pour Your Body Out* (7354 Cubic Meters) at the MoMA in New York, Kate Mondloch points to the role of the visitors' embodied presence: lounging and shoeless, "a swirling mass of supine bodies."[51] The exhibition emphasized relaxation and immersion, partly through Rist's own imperative to "Please feel as liberated as possible, and move as freely as you can or want to!"[52] Having experienced Rist's exhibition *Pixel Forest* at the New Museum in New York in 2016, I similarly observed the soft, amorphous furnishings, carpeting and dimmed lighting, encouraging viewers to lie down and spend some time watching the sensorially rich video projections. The artist consciously considers the viewer's body when designing her installations, emphasizing comfort and immersion, and encouraging complete relaxation. This is notable in my view for how it resonates with Gallese's insistence that the inert body is more available to feeling and emotion. "Our being still simultaneously enables us to fully deploy our simulative resources at the service of the immersive relationship with the fictional world."[53] Immersion is a self-reinforcing feedback mechanism between the fictional or virtual world and the viewer's body; the more focused our attention, the more engaged is our body in that

51 K. Mondloch, "Pour Your Body Out: On Visual and Other Pleasures in Pipilotti Rist," *Feminist Media Studies* 10, no. 2 (2010): 231-236, Note 2, https://doi.org/10.1080/14680771003690777.
52 Ibid.: 232.
53 V. Gallese, "Visions of the Body:" 47.

experience, and the more available the simulative capacities of our bodies are, the more our attention is focused.

Embodied simulation provides a framework for thinking about participation in relation to spectatorship, as not necessarily physically moving in space, yet engaged through immersion. This confirms Jacques Rancière's theory of the "emancipated spectator" as always already active, even when they might appear passive. In Rancière's defense of the spectator as active, he wants to protect the individual against subsumption within the collective. He is arguing against the theater as a space primarily for community-building which in its ultimate form would do away with theater all together, and for the theater as a place of actualization through the individual translation of narratives. The value of live performance lies for him in the telling and retelling of stories from a particular point of view that is then taken up by the viewer and interpreted through their own lived experience, without having to physically participate in the performance, yet projecting themselves into the space of action. Connections are made between performer and audience, but the goal is not to render the audience into a single mass of communal experience. He goes so far as to say that so-called participatory theater is a tool of indoctrination, not liberation, that abducts the spectator's subjectivity.[54] The viewer "must be confronted with the spectacle of something strange, which stands as an enigma and demands that he investigate the reason for its strangeness."[55] Like theater, virtual reality can be used uncritically and fail to recognize the full potential of the spectator and their creative capacity. Rancière argues that theater must be both immersive and emotionally engaging, as well as questioning and distancing. According to him, one without

54 Interestingly, for Gell, abduction is precisely how the artwork functions in mediating agency, and for Gallese this abduction is what is liberating about the art experience.
55 J. Rancière, "The Emancipated Spectator," *Artforum International* 45, no. 7 (2007): 270-280.

the other produces stultification because it is not based on an "equality of intelligence."[56] Instead, in the emancipation of the spectator, association and dissociation work in tandem as we are both ignorant of the things we do not yet know and knowledgeable about the things we do know. It is the translation of what we do not yet know through our existing knowledge that is the emancipatory process for Rancière. He rails against the "self-suppressing mediation" of participatory theater and didactic theater both, yet isn't all aesthetic experience self-effacing in the sense that we take up the experiences of others within ourselves, forgetting for a moment our own story? The point for Rancière is to return to the self, to bring what one knows from one's own experience to bear on the new experience, which in turn alters how one sees oneself. This dynamic is at play in embodied simulation, and a stated aim of Faye Driscoll's work *Come On In*: "As visitors follow her voice, they become a collection of slowly moving sculptures activating our innate capacity to be both object and subject, observer and observed."[57] The work is about spectatorship in its invitation to embody the space of performance from the vantage point of the performer, which is to be immersed and present in your body, to lose yourself in the performance while never fully losing awareness of yourself at the same time.[58] In so doing, Driscoll produces an oscillation between the roles of performer and audience in the viewer's embodied experience of the work, replicating the process of the emancipation of the spectator according to Rancière's theory. Just like Rist, Driscoll is very attentive to the viewer's body and designed the installation with that in mind. Noticing the default protective stance of viewing art in the museum, Driscoll decided

56 Ibid.: 275.
57 F. Driscoll, "Works: Come On In, 2020," https://www.fayedriscoll.com/performances-exhibitions/come-on-in, accessed March 12, 2022.
58 "Faye Driscoll in Conversation with Philip Bither," *Walker Reader* (May 22, 2020), www.walkerart.org/magazine/faye-driscoll-in-conversation-with-philip-bither, accessed July 15, 2024.

to subvert the guarded position of standing and facing the work, and instead invited the visitors to lie down, or at least sit on the platformed mattrasses. In so doing, she is asking the visitor to be vulnerable; a necessary condition for immersive viewership, and for our simulative capacities to come to the fore.

While Rist's work is immersive, I would not categorize it as an instance of virtual reality. This begs the question: What makes a virtual reality artwork different from any other immersive art? I would argue that virtual reality art seems to be more immersive than say a video installation precisely because it is so effective in shielding the viewer from the outside world, a factor that Gallese talks about in his theory of embodied simulation. It creates a kind of private dream space. In Driscoll's installation visitors are also shielded from their surroundings through the use of soft surfaces at various levels, inviting rest and encouraging visitors to close their eyes. Even in the at-home version of the experience, I am encouraged to get into a comfortable position. The voice in my headphones says: "Let go of evaluating things visually and bring your focus inside yourself."[59] In the experience, I am addressed directly in the imperative present tense and instructed to perform specific actions, at least through my imagination: "So, turn your head and look over your shoulder, and you've just heard someone calling your name and you turn to look at me."[60] Is there a difference between virtual reality experienced through a VR headset or head mounted display, and Driscoll's piece? In my view, the virtual reality headset might present a more totalizing experience where the sense of reality may be stronger because it captures more of the sensorimotor system. But this depends on how the VR experience is structured and it is difficult to talk about in the abstract. If we

59 F. Driscoll, "Come On In."
60 Ibid.

take Wolfson's *Real Violence* as an example of an artwork that uses a VR headset, the viewer is implicated as witness to a brutal murder while made aware of the experience as VR through the deliberately excessive motion of the camera. The viewer's experience is forcefully orchestrated here while in Driscoll's piece, much is left up to the imagination of the viewer where it illustrates the process of embodied simulation by consciously connecting the interior space of feeling with the exterior world of action. In large part, the immersion of the piece is achieved through a multisensory mental projection and the melding of interior and exterior space facilitated by narration. It is not a mainly visual experience. Although Driscoll's piece differs from *Real Violence* in this way, the bodily reality of the audience is emphasized, not hidden from view in both cases. They both purposefully make us aware of our bodies, which, following Massumi's idea of the virtual body, is the seat of our liberatory potential. *Come On In* weaves the visitor's personal history and lived experience into the work, perhaps creating a deeper resonance for them, in contrast to Wolfson's piece which exploits shock to create a sense of alienation. But this is not to say that artwork that uses this strategy cannot be liberatory, as it can catalyze thought and action in the recipient's life beyond the art experience even as they may feel robbed of agency in the moment, the sense of agency thwarted.

Conclusion: The Embodied Spectator

In this paper, I have attempted to decouple virtual reality from the technology of VR. What is to be gained from such an approach? First, it is a return to relationality as primary and a recognition of embodiment as our inescapable condition. VR is often thought of as a gadget that allows us to escape the physical world and enter a world

with unbounded potential – both Murray and Hayles describe the masculinist fantasies this notion is tied up with – when it is precisely the limits and bounds that give our experience meaning. From the primordial chaos of sensation that Massumi describes, the world gains definition through our interactions with others and our understanding is honed in relation to our surroundings. Starting with undirected movement that provides us with feedback both about our environment and ourselves, our perceptions become distinct, and our movement directed, as we accumulate experience. A VR headset or head mounted display creates a remediation of perceptual experience in the same way that an audio recording evokes feeling and emotion. I claim that Driscoll's installation is a virtual reality work rather than augmented reality precisely because there is no hard line that separates real and virtual in our experience, and in that sense, VR *is* augmented reality. *Come On In* taps into our capacity to simulate experience through our bodies because of the non-causal relation between our sense of reality and perceptual experience: we can entertain fictions without thinking that they are real.

Second, decoupling virtual reality from the headset allows us to think about spectatorship much more broadly and recognize the continuity between watching and doing, looking and feeling, that neuroscience has validated. It allows for a media studies of the headset within the context of aesthetic experience and reframes participation in terms of embodiment without for that matter losing sight of the structural and personal. By decoupling virtual reality from the headset, we are able to analyze the headset in depth and in a medium-specific way. It sets the stage for asking more pointed questions in further inquiries about how the headset operates as a medium and how it operationalizes the sense of reality, agency, and representation. A crucial distinction for the emancipatory potential of virtual

reality is between virtual reality experiences generally and artworks that make use of virtual reality or create a virtual reality experience, as in the case of Driscoll's *Come On In*. Because of the reflexive nature of artistic inquiry, it acts as a mirror. Instead of disappearing into the work through immersion, we come face-to-face with ourselves, our culture and our society. Ultimately, this does not guarantee empathetic civic action irrespective of claims to the contrary made by tech gurus and filmmakers,[61] but it does engage the liberatory potential of embodied simulation.

We might conclude by saying that art, regardless of medium, demands vulnerability and plasticity by interrupting automaticity. It exploits our capacity for change as well as our simulative capabilities of feeling and emotion. As Brian Massumi puts it:

> Art, attentive to the relational complexity of experience's in–the–making, can make itself the experimental practice of composing new peaks of perception expressing the living, moving body's qualitative multiplicity, unfolding in new variations its capacity to change.[62]

The automaticity that is a dead end for cognition, is the deference to our habits and guarded positions. Meanwhile, art can provide the space to be vulnerable in ways we cannot otherwise cognitively afford. By allowing ourselves to be immersed, "we can fully deploy our simulative resources, letting our defensive guard against daily reality slip for a while."[63] Embodied simulation is not a mere representation of perceptual experience but works in the realm of qualities rather than objects, which means that the true infinity of potential resides not in the headset but within ourselves. Our sense of agency is tied to our capacity to

61 L. Nakamura, "Feeling Good about Feeling Bad."
62 B. Massumi, "Art of the Relational Body:" 205.
63 V. Gallese, "Visions of the Body:" 47.

dream and imagine, to picture ourselves differently, going beyond what we perceive to be actually existing. Putting on the headphones and listening to Driscoll's voice pulls me in and takes me on a wild ride through my own body and into a virtual world that is anything but merely representational. She says:

> Bring your attention to your feet. Observe the sensations in your feet and up, out your eyeballs and into your ears through the ambiguity of your gaze. Soften your face, crack it, crack it into an indiscernible smile and move that down into your fingerprints and out your confusing text message threads.[64]

My fingers tingle with the familiar feeling of being in a text conversation, I think of the Mona Lisa, and of body horror all at the same time, along with a million facets of feelings that cannot be expressed in words. The headphones are channeling devices that quiet the world around me and focus my attention so that I can feel this experience more fully. The virtual is made physical through embodied simulation, and I have become a participant, bringing my attention to the ways in which I am always already participating in the world around me both as performer and audience.

64 F. Driscoll, "Come On In."

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