

# Directorial Style for Interactive Storytelling and the Fallacy of Ownership: The Case of *Resident Evil 7*

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## Abstract

This article discusses some of the issues affecting storytelling in an immersive and interactive medium such as Virtual Reality. Interactive works which reconfigure their images as three-dimensional environments bearing affordances seems able to convey a proper sense of “spatial presence” – that is, the perceptive and cognitive illusion of being physically immersed in a digital environment, rather than in the material one which actually surrounds the body. However, I will show that VR technology is doomed to produce “breaks in presence”: moments which rise awareness of the mediated nature of the experience, shattering the illusion of presence, and which represent undesirable side-effects for the aesthetics of immersion generally promoted by VR works. In order to do so, I will use the VR game *Resident Evil 7* as a case study. First, I will analyse the sophisticated formal solutions employed by the game to create a terrifying illusion of presence, highlighting their connection with cinematic strategies common to the horror genre; then, I will focus on sections of the interactive experience which nonetheless devalue the effects of these stylistic gears by bringing consciousness about the impalpable and disembodied nature of the virtual body during the (simulated) physical interaction with the environment.

**Keywords:** Virtual Reality; Presence; Body ownership; Affordances; Embodiment.

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## 1 Introduction

In an issue dedicated to the topic of storytelling in Virtual Reality (VR), discussing the VR game *Resident Evil 7: Biohazard* (2017; from now on, *RE7*) can prove very useful in order to stress virtues but also weaknesses of interactive narratives, because I argue that this work represents, at the moment, the state-of-the-art in design of interactive experiences: widely praised by both players and critics,<sup>1</sup> for what its VR version is concerned — in fact, the game may as well be played like a traditional videogame, on a flat 2D screen and without the use of a head-mounted display (HMD) — *RE7* provides a visceral and terrifying first-person<sup>2</sup> experience by unfolding a complex and extended plot (no less than nine hours of interaction, which become many more if we consider the reiterate failures occurring when the player faces hard challenges, and the additional downloadable contents prolonging the storyline) and allowing the user to traverse a wide and detailed simulated environment with a seeming total freedom of movement and exploration. The player enjoys all the so-called six degrees of freedom, namely she is able not only to direct her gaze by rotating around her own axis, but to walk in any direction she wants,<sup>3</sup> while interacting with a virtual world whose elements are responsive in real time to her actions. Such freedom, coupled with the responsivity of the simulation, overcomes Eugeni's (2018) complaints about the asynchrony in the relationship between the temporal unfolding of the user's actions in many VR experiences, and the fixed and pre-recorded nature of their images, which are, then, unable to react accordingly to the user's choices. Therefore, *RE7* would seem a brilliant work of interactive design, capable of immersing its player in a frightening narrative environment and of making her feel spatially present in it.

Nevertheless, the purpose of this essay is to justify my claim that no matter how perfect the simulation may be from a mimetic standpoint, the illusion of presence is doomed to be shattered because VR is ontologically unable to match the sense of agency it arouses — in ways unparalleled in non-interactive media — with a tantamount sense of actual ownership of one's body,<sup>4</sup> thus, hampering the narrative efficacy of its works. Precisely due to the high realism and apparent believability of its environment, *RE7* stands as a paradigmatic case to highlight the problems affecting storytelling practices in VR: in what follows, I will analyse the sophisticated formal solutions employed by the game in order to create a terrifying illusion of presence (demonstrating their connection with cinematic strategies common to the horror genre), then I will focus on sections of the interactive experience which nonetheless devaluate the effects of those stylistic gears by bringing consciousness about the impalpable and disembodied essence of the virtual body during the (simulated) physical interaction with the environment.

But before that, it is important to clarify, briefly, the conceptual framework encompassing my interpretation of *RE7* as a narrative experience and of the flaws of VR storytelling in general; starting from the assumption that terms like “flaws” or “problems” bear a negative meaning which is legitimate only on the basis of the premise that the purpose of interactive narrative must be to replicate events in a realistic way. If one assumes that, as designers seem to do, then the properties of *RE7* I will discuss in this essay can be interpreted as structural

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1. A brief overview of the major international game review sites would demonstrate the general appraisal of *RE7* (though reviews do not always focus on the “2D” and VR versions as distinct experiences, the latter is usually intended as a further enhancement of the qualities of the former): on the review aggregator Metacritic, the game is rated 86 out of 100 (the vote is based on 100 reviews by professional critics) and 8 out of 10, based on 3261 ratings by players (<https://www.metacritic.com/game/playstation-4/resident-evil-7-biohazard>); 10 out of 10 on Destructoid (<https://www.destructoid.com/stories/review-resident-evil-7-biohazard-413909.phtml>), 4.5 out of 5 on GamesRadar+ (<https://www.gamesradar.com/resident-evil-7-biohazard-review/>), 8.5 out of 10 on Game Informer ([https://www.gameinformer.com/games/resident\\_evil\\_7\\_biohazard/b/playstation4/archive/2017/01/23/a-familiar-taste-of-blood.aspx](https://www.gameinformer.com/games/resident_evil_7_biohazard/b/playstation4/archive/2017/01/23/a-familiar-taste-of-blood.aspx)), 8 out of 10 on GameSpot (<https://www.gamespot.com/reviews/resident-evil-7-biohazard-review/1900-6416603/>); last access for all the sites is 11-05-21).

2. The employment of a first-person perspective marks a significant shift from the third-person point of view typically used in the previous games of the *Resident Evil* franchise, fostering direct embodiment in the protagonist of the story, Ethan Winters, and, thus, making the game suitable for the aesthetics of VR.

3. Actually, to physically move one's body is not required, because forward and backward movements are produced from manipulation of the analog sticks of the PlayStation 4 controller used by the player. So, the common problem of setting VR experiences inside large and empty locales (so that the user does not hit objects or walls) is bypassed, and, nonetheless, the illusion of complete movement is preserved.

4. This is not to say that the theme of agency is unproblematic in interactive media. Quite the contrary: their inadequacy to satisfy the stimuli for action elicited by the virtual environment can weaken the experience as well. Anyway, such topic is beyond the scope of this essay, and it will not be explored further here.

flaws preventing the accomplishment of such a goal. Clearly, mimetism — or better, in the case of immersive media, the convincing replication of the phenomenological preconditions of our embodied experience of an event — is not the only aesthetics that could be pursued, but currently, it is indeed the most valorised one in VR storytelling. That is, the majority of VR works strives to hide the traces of their own “metatextuality” (Metz 2015), to erase the signs revealing the mediated nature of the experience, in order to provide a seamless effect of presence in the virtual environment — as I will try to explain in the next section from the perspective of ecology of perception — only to unintentionally let such signs resurface as factors affecting the overall realistic illusion. Because of that, it could prove useful to analyse the shortcomings of mimetic interactive storytelling made apparent by an exemplary case such as *RE7*.

## 2 Feeling present in a virtual environment: a matter of ecological validity

First of all, it is useful to remark — although it may seem somehow obvious — that narrative in an interactive medium is, by definition, a performative practice involving at the same time both the (more or less preorganized) flux of enveloping images and the human subject of the experience, who is driven by the medium to recognize herself less as a traditional viewer than as actor and co-creator of the “story,” whose developments and outcomes are going to be influenced by her choices. However, the issue that is crucial to address is what distinctive shape the performance takes when moulded by an audiovisual and immersive medium such as VR. What I mean is that the embodied experience enacted in *RE7* can not be equated to that, for example, of a movie like *Bandersnatch* (2018) or a gamebook, though all three can legitimately be labelled as interactive works in every respect. A method to explain where the difference between them lies is to differentiate the concept of interactivity from an updated version of that of ergodicity theorized by Espen Aarseth, so that the former would account for those experiences forcing the user to perform a limited set of actions aimed at preventing interruptions in the narrative unfolding of the text. According to the Norwegian scholar, the core feature of ergodic texts is not just that “[a] nontrivial effort is required to allow the reader to traverse the text” (Aarseth 1997: 1); it is, also, their “multicursality” (ivi: 8), a term which, if referred to ergodic media like videogames and VR, can not be merely equated to that of multilinearity. I propose to interpret it as synonym for multidimensionality, pointing to how ergodic media — in tune with the “an-iconic” tendencies of contemporary images (Pinotti 2018) — strive to hide their preorganized essence by reconfiguring their images as three-dimensional environments surrounding the user’s body from every side. According to hypertext theory, *RE7* would be as much a hypertext as a gamebook is (i.e., all the possible outcomes to the user’s actions are already predetermined), but the environmental semblance assumed by the former foster the illusion of being immersed in a space of unforeseeable virtualities whose actualization, through the user’s complete freedom of choice, nourishes ever-changing experiential dimensions;<sup>5</sup> therefore, *RE7* would belong to a very specific category of hypertexts, defined by Maietti as “spatiotemporally thick hypertexts” (2017: 95), which conceal the hypertextual logic of a system of links connecting blocks of information with the simulation of an environment demanding interaction through one’s own body (being it the physical body of the user or the prosthetic body of the avatar in videogames). Although such a claim may be problematic, because it does not take into account that random generation of events allowed, to a certain extent, by the combinatory nature of the code of three-dimensional digital ergodic texts, it highlights the fact that the apparent free will and causality they promise are an illusion: all the possible developments and outcomes of the experience are embedded in a “context of crontrol” (Myers 2017: 105) determining what the user and the environment can or can not do, and what events can occur in the latter.

So, the environmental likeness of virtual worlds requires us to move from the theories of hypertexts to ecology of perception, which, I argue, represents a fruitful tool to understand the limits of mimetic storytelling for VR. In fact, by re-shaping themselves as enveloping environments, these images replicate the perceptive conditions regulating how human beings experience the real world. That is, they become bearer of affordances, a concept coined by James J. Gibson (2014) and whose definition has been the subject of a great debate, that is impossible to recall in detail here. Suffice to say, affordances are possibilities for action produced by the encounter between a specific animal species and the elements of a specific environment, both generating

5. The main reference is the philosophical inquiry about the notion of virtuality, although I can not further discuss this theme here. See Lévy 1995.

what Stoffregen (2003) has defined an “animal-environment system.” Therefore, I reject Turvey’s (1992) classic reading of affordances as stable features or natural dispositions of objects, instead embracing Stoffregen’s — but also Chemero’s (2003) and Heft’s (2003) — idea that they are emerging properties of this relational and dynamic system. Such is the basis of our existence in the world as human beings: by recognizing affordances in the objects surrounding us, meaning is conferred on our interaction with the environment we inhabit. A situation (i.e., a certain asset of the animal-environment system) varies when an affordance is actualized, so that affordances themselves may change and be reorganized in unpredictable ways, always opening new conditions for interaction.

I argue that to apply these notions to the digital worlds of VR can offer a useful interpretative key in order to explain our embodied experience of the latter. I consider the reproduction of affordances (or, better said, of the perceptive conditions for meaningful interaction with the environment) in the simulation to be one of the main reasons behind the occurrence of what has been theorized as one of the most important media-specific qualities of VR, namely the cognitive and perceptive illusion of being present in the virtual world. A specialised field of research (virtual presence studies) has been devoted to the sense of presence in mediated environments but, in attempting to account for every trait of such a complex phenomenon, it has led to manifold and heterogeneous definitions. The one I am referring to more directly here is that of “spatial” presence, which can be described as the illusion of being physically immersed in a digital environment, rather than in the material one which actually surrounds the body: when we have to deal with two environments (the physical and the virtual) at the same time, it can happen, if the sensory stimuli and the cognitive processes produced by the virtual world are able to match those characterizing our existence in the real world, that we feel our body immersed and present in the simulated environment, as if it was actually in the space of the images (for a comprehensive review of the literature on this topic see Hartmann et al. 2015).

However, presence in ergodic media is very unstable, because there are factors which can lead to what Slater and Steed (2000) call “breaks in presence”: moments which rise awareness of the mediated nature of the experience and represent undesirable side-effects for the aesthetics of immersion generally promoted by VR, therefore weakening also its narrative and emotional scope. According to these scholars, breaks in presence are born from factors internal or external to the medium, the former related to flaws in the technological apparatus, and the latter to events happening in the real world which bring our attention back to it; but I claim that Slater and Steed miss the point of what is truly important for the occurrence of breaks in presence, because the reasons they discuss are just mere accidents, or shortcomings of the technology which will be fixed soon by technical improvements. By stating that spatial presence is a matter of ecological validity, I am pointing to more structural (i.e., ontological) factors, arising from the paradoxical coexistence, in ergodic media, of environmental semblance (with its promise of total freedom for the user) and textual boundaries which entangle the user’s agency within an always limited set of options. Much could be said about how the unsuitability of the simulation to satisfy the affordances that the user, nonetheless, perceives in the virtual environment can shatter the illusion of presence; but this is not the focus of my essay.

The broad theoretical stance that can be drawn out of these considerations is that to understand spatial presence “an *action-based* framework according to which presence is dynamically achieved and maintained by acting in that environment” (Gamberini and Spagnolli 2015: 102) is required. The prominence of (possibilities for) action is a key element to make a person feel present in an environment, to such an extent that Riva and Waterworth can claim that presence is “a core neuropsychological phenomenon the effect of which is to produce a sense of agency and control: subjects are ‘present’ if they feel themselves able to enact their intentions in an external world” (2014: 206). But actions (and, hence, presence) are possible only if we are embodied beings who perceive affordances in the world and use their bodies to actualize them. Therefore the sense of agency, albeit paramount to human relationships with an environment, is not the only cause for the illusion of presence in virtual worlds; it is complemented by a corresponding sense of ownership of one’s own body, namely the consciousness that to act through a physical body can also mean to suffer the effects of other beings’ actions on that body: “we are agents that influence the world, and we may also be patients, that is: objects of other agents’ actions or events unfolding around us” (Gregersen and Grodal 2009: 65).

In the rest of this essay I will discuss the — mostly successful — stylistic strategies developed by *RE7* in order to prevent breaks in presence resulting from the discrepancy between perceived affordances and factual actions

allowed by the text, and then I will demonstrate that the game is not equally capable of compensating for the impalpable and disembodied nature of the diegetic virtual body controlled by the player; so that the emotional and narrative engagement with the (story)world of *RE7* ends up severely compromised by such inescapable flaws of immersive simulations of the ecological asset of environments.

### 3 *RE7*: style and embodied narrative

The impossibility to satisfy all the affordances perceived by the user is a problem that every audiovisual ergodic work must face. The style of *RE7*, which heavily relies on features drawn from cinematographic (the horror genre) and videogame (the survival horror genre) traditions, strives to diminish the undesired impact of the shortcomings in the user's agency by strengthening the immersive quality of the experience. It is remarkable that, in order to do so, *RE7* builds a virtual world whose illusive charge is produced not primarily by the visual spectacle, instead by capitalizing on the allusive power of sound.

The main trait is the use of binaural audio, which successfully simulates the spatiotemporal unfolding of sounds in the environment: at first, the user perceives the sound as closer to one ear and then, shortly after, to the other, so that it seems that the sound wave propagates from a specific point towards the user's spatial location. So, binaural audio, which "is able to produce a significantly more convincing sense of localisation" (Garner 2018) compared to other techniques, enhances the impression of embodiment in the digital environment, making the latter "thicker" than what visual perception alone can provide; moreover, such technique is important from a gaming standpoint, because "in computer games, it is essential to determine the approximate location of the sound generators" (Roux-Girard 2011: 200) in order for the player to infer dynamic spatial relationships between her body and the objects and living beings inhabiting the environment. Furthermore, this function is paramount in *RE7* because it is both a survival horror game, in which the role of sound "is increased tenfold as sound becomes the engine of the gamer's immersion within the horrific universe" (ivi: 192), and a first-person shooter, an aesthetic form which "uses sound to immerse the player within the game environment in a way that a 2-dimensional platform game [...] or a variety of role playing games (RPGs) do not typically attempt" (Grimshaw and Schott 2008: 2): the possibility to clearly localize an impending threat as, for example, coming from behind the player's back is a viable way to make her feel present in a three-dimensional environment full of stimuli for action and characterized by a mood of constant danger.

However, it would be a mistake to believe that the sense of presence is reinforced only by means of realistic strategies: *RE7* largely employs other gears — typical of survival horrors — which generate markedly expressive and anti-mimetic effects. For example, one of the recurring goals of survival horrors is to immerse the player in an uncanny atmosphere, and the intangible essence of sound can better help fulfilling such aim than the concreteness of the visual. *RE7* relies on what Jørgensen labels "transdiegetic" sounds (2011), namely sounds blurring the boundary between the diegetic and extra-diegetic domains in order to destabilize the player's perception of a situation: the designers of *RE7* have inserted in its soundtrack many sounds resembling the grunts and screams of the terrifying monsters populating the virtual world, therefore "lur[ing] the gamer into thinking that there are more threats than there actually are" (Roux-Girard 2011: 207). The player, concerned about the possibility of being attacked from a direction that is out of her visual field, experiences a condition of instant alarm, only to discover that the frightening sound is just an extra-diegetic trick. Apparently, this moment of awareness of the mediated nature of the experience, arising from the revelation of a technical dimension beyond the narrative one, is supposed to lead to breaks in presence; but I argue that, rather, it is employed to cast an ontological doubt about what belongs to the narrative and what does not that serves as a reminder of the player's being "inside" a treacherous environment over which she can not exercise any form of actual control and monitoring, due to her embodied and imperfect perceptual access to the environment. So, no matter if previous hearings of a deceptive transdiegetic sound led to recognize its extra-diegetic origin, any time the player will hear one of these sounds, it will be impossible to rule out with absolute certainty the possibility of the specific sound being related, this time, to a diegetic creature. The player is kept in a state of high warning and physical responsiveness (which can prove to be very stressful in the most disturbing moments of the experience), and the illusion of immersion and presence is indeed enhanced, rather than shattered.

The predominance of sound in the aesthetics of *RE7* may be connected also to what Hanich defines as "sug-

gested horror” (2010), a concept that the scholar refers to the style of horror films, but which can be successfully applied to all audiovisual forms of horror narratives. According to Hanich, “suggested horror relies on *intimidating imaginations* of violence and/or a monster evoked through verbal descriptions, sound effects or partial, blocked and withheld vision” (ivi: 109). The common feature of the stylistic solutions included in the notion of suggested horror is precisely the core role played by sound, whose purpose is to encourage in the viewer emotional responses that are more lasting and intense than those elicited by “direct” horror; this latter term is more generally connected, in Hanich’s analysis, to visual presentations of horrific contents, which are estimated to be less effective because “due to the externality and exactitude of perceptions the frightening aspect of direct horror quickly wears out. [...] The viewer facing violence and monstrosity *directly*, after a while becomes ‘enlightened’: he or she stops fearing what was once unseen” (ivi: 115). In the case of *RE7*, the allusive power of suggested horror is even intensified, because the ergodic nature of this work engages its user with her body and from a first-person perspective, so that the basic element common to the set of stylistic strategies promoted by suggested horror, namely that “the viewer does not observe from a secret vantage point with perfect vision, but often suffers from visual lack” (ivi: 110), is staged in a very direct manner: a flawed and partial visual faculty, the resultant relevance of imaginative processes in interpreting an ongoing situation, plus the vulnerability of the body acting from a position that is internal to the environment, are but essential prerequisites of human embodied existence in the physical world which VR is able to reproduce accurately.

However, the sophisticated solutions employed by *RE7* do not address the sphere of sound alone. As mentioned, direct horror is affected by the quick decreasing of its frightening effects because the more a viewer stares at horrific contents, the more she grows accustomed to them and feelings of fear vanish. To suggest threats through sound is one solution to such an undesired comprehension of the fictive nature of horror, but it can not be enough for a first-person shooter, which necessarily requires moments of intense direct battling against various species of repulsive creatures;<sup>6</sup> *RE7* must face the risks related to a prolonged interaction with monstrosity from a visual standpoint too, and it succeeds in that thanks to a brilliant design choice. The game realizes the dynamic counterpart of the typical trick used by direct horror, consisting in editing short shots of horror content, so that the viewer can watch it only for a brief amount of time. Obviously, in VR it is impossible to manipulate the point of view of the user; thus, *RE7* has to focus its efforts towards diegetic characters. For example, one of the creepiest segments of the experience is the fight against Marguerite, the spider-woman. The battle takes place inside a crumbling building that the player, as well as Marguerite, can traverse in its entirety in any moment of the fight; Marguerite’s AI is programmed in such way that she tends to hide over and over behind the remnants of the building, eventually attacking the player by surprise. Such attitude is coherent, in diegetic terms, with the beast side of Marguerite’s personality (like a spider, she retreats when harmed and then organizes a new strategy), but it is also part of a “directorial” project activating a fruitful alternation between moments of growing tension — when the player has to explore the environment in order to localize the enemy — and adrenaline rushes produced by Marguerite’s attacks. So, the narrative style of this fight is based on a sort of internal editing which prevents (at least momentarily) that its frightening charge decreases as the player stares at the monster.

## 4 The fallacy of ownership

The formal strategies discussed in the previous paragraph testify to the remarkable aesthetic efforts made by *RE7* in order to enhance the overall horrific mood of the experience and, thus, to cope with the possible breaks in presence generated by the limitedness of the player’s agency. But in spite of that, there are other aspects of the ergodic practice enabled by *RE7* which hamper the illusion of presence and the believability of the simulation. Besides, they represent ontological properties of VR as a medium in general, as mentioned above; thus, I argue that *RE7* has a paradigmatic value, since by studying it, one can highlight many obstacles that immersive narrative is unable to overcome.

Whereas the game improves the realistic features of its environment, instead it fails to successfully face the

6. Moreover, VR is a medium that generally does not relies on editing techniques and, therefore, it gives its user almost complete freedom to choose what to see and for how long. So, the process of normalizing horror is even more likely to occur in VR than in non-ergodic media.

crucial problem of providing the player with an adequate impression of ownership of her own body. As anticipated by citing Gregersen and Grodal at the beginning of this essay, ownership means that the player feels that she possesses a physical body inside the virtual environment; but therefore, it is important to understand that the sense that a virtual body is one's own is not born from the agency bestowed upon the player, rather from the possibility to perceive the effects of others' actions over her body. Said it best, agency is related to the active dimension of the interaction, while ownership to the passive one, in which the player recognizes herself as suffering the consequences of the agency exercised by the environment itself.

Such issues are addressed by Slater et al. (2009) in a series of three experiments, of whom the first two it is useful to mention here. In the first, they studied variations in the sense of ownership of a virtual arm felt by the participants of the experiment in two different conditions: when the digital arm was touched by a digital ball and at the same time the physical arm was touched by a device — called the Wand — regulating the movements of the ball too, and when the contact between the digital arm and the ball was pre-recorded, so that it did not correspond to a physical stimulation of the real arm. Results revealed that in the former situation the participants experienced a strong sense of ownership of the arm, which instead was much weaker in the latter. While the first experiment demonstrates the link between sense of ownership and passive role of the body as “acted,” the second one draws misleading conclusions: participants wore a data glove which registered the movements of the physical hand and arm, and decoded them as corresponding movements of their digital counterparts. The researchers assumed that such synchronicity between real and virtual movements improved the sense of ownership, but I argue that this claim is affected by a basic semantic error, namely that what participants feel when experiencing synchronic movements is not an impression of ownership, but the sense of agency: in fact, the second experiment puts its subjects in an active condition by allowing them to use their body so that a coherent reaction in the image is provoked, while in the first experiment participants' limbs are constrained in a state of passivity, in which the sense of ownership is proved to be dependent on the effects of an external agency.

Of course, considered the violent content of the most part of the experience, in the case of *RE7* tactile stimuli that are internal to the virtual environment are not matched with tactile stimulation of the physical body; but this is a structural problem usually affecting all VR works, and therefore, according to the results of the experiments discussed above, one can argue that the ontological properties of VR technology make the sense of ownership precarious in virtual environments, and the more it becomes unstable, the more the illusion of presence diminishes too. Ergodic media are intended, first of all, as forms of entertainment, and the realism they promise has the only purpose of increasing the spectacular charge of the experience;<sup>7</sup> designers rarely dare to push realistic simulation to an extent which would turn the exciting value of the interaction into its opposite, namely a complex and tiring practice strictly dependent on laws of physics. This is the problem highlighted by Gregersen and Grodal in their analysis of Nintendo Wii, which is a sort of hybrid, halfway between a traditional videogame console and a VR system because it requires a motor activation of the whole body but without enveloping the player in a virtual environment like HMDs do. The player lives an apparently less mediated experience, due to the likeness between her movements and the actions performed by the avatar on screen, but she recognizes also the lack of adherence of the simulation to the laws of physics. This makes clear that it is too easy to execute the actions programmed, meaning that the system is unable to reproduce the energetic efforts that a certain action would require in the physical world; for example, during the action of hitting a digital tennis ball with a digital tennis racket by actually swinging the material arm, it will be impossible for the medium to reproduce those physics parameters, like velocity, amount of muscle contraction or strength, which elicit in us the knowledge of being subjects whose bodies suffer the “action” of laws of physics and who need to react appropriately to any specific circumstance. Therefore, “a basic problem with the Wii-remote and many other game controllers of this kind” — and with ergodic technologies in general — “is that true force feedback is impossible to implement in controllers of this kind, and in a nutshell, this yields a dissociation of sensory experience” (Gregersen and Grodal 2009: 76).

In *RE7*, such a dissociation occurs due to two reasons: the first — and less strong one — is about the fact that,

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7. Clearly, I am talking about common mainstream ergodic works, like commercial videogames, on a 2D screen or in VR; there are relevant exceptions to the rule of mimetic spectacle, exceptions exploring different aspects of human interactions with virtuality: see, for example, a “classic” VR work like *Osmose* (1995) by Char Davies or, more recently, *Carne y Arena* (2017) by Alejandro G. Iñárritu, as discussed by Montani 2017.

from a diegetic perspective, the protagonist Ethan has to carry a variety of weapons (knives, guns, rifles, hand grenades ecc.) to fight against the monsters, but what the player holds in her hands is but the PS4 controller, whose control system is programmed in such a way that it settles all the activities related to the use of the weapon, like pointing and firing. This is a common feature of videogame controllers which, on the one side, is not so disruptive of the immersive illusion because players are largely accustomed to perform certain operations on screen via much less complex actions (like pressing a button); but, on the other side, recent efforts to translate the “semiotic system” of controllers into more mimetic forms (culminating with the design of the rifle-shaped Aim Controller) testify to a desire for realism spread at all levels of ergodic practices (Blomberg 2018).

The second issue with the sense of ownership in *RE7* is related to the impalpable nature of the virtual body unintentionally made evident by the game during interactions. Consider again the “directorial style” of the fight against Marguerite: when she suddenly attacks, the first reaction in the player is like a traditional jumpscare: a very intense fright at the beginning, but doomed to run out shortly; however, such fright could be prolonged by the consciousness that in ergodic media the scary creatures can also directly act on her body, threatening to harm it. But when she hits, her claws go through the player’s body instead of encountering its material resistance; likewise, when a mold monster rapidly approaches the player, it creates a climax of tension which fades away when it attacks and its arm fluidly traverses the screen from top to bottom, instead of stopping where Ethan’s body is supposed to be. One can take for granted the sense of ownership when the text does not put the player in the position of suffering the actions of other beings: in this case, sense of ownership and sense of agency become blurred, but the former is shattered when simulated physical contact haptically solicits the body. Therefore, the promises of realism, immersion and presence of ergodic media are ultimately betrayed.

## 5 Conclusions

By analyzing *RE7* as an ergodic text, I hope to have shown that mimetic storytelling for interactive media such as VR can develop brilliant directorial styles, but that at the same time it is affected by many structural flaws in simulating the embodied experience of an environment. But as pointed out in the introduction, I argue that mimetic simulation of how human beings perceive the world and act in it is not the only way — and neither the most useful — for ergodic media to tell stories and create meaning; if one assumes that to tell a story is not just to present a logically organized chain of causal events, then those same features framed as flaws can become fruitful resources for alternative modalities of storytelling, which would reveal brand new ways of interaction with (virtual) reality.

Although a vast literature has conceptualized VR as an immersive medium, my hypothesis for future research is that VR can express its aesthetic potential at its best only if it shrugs off the burden of mimetic reproduction. Reimagined in such a manner, VR can prove to be a great tool for a “disembodied” narrative experience, meaning an aesthetic form fostering both critical and reflexive attitudes, and a no less emotionally intense engagement in its marvelous worlds.

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