Nulltopia: Of Disjunct Space

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ABSTRACT:
Nulltopia is disjunction in space, the non-space between one space and another. Such disjunction becomes important in the ontology of imaginary worlds, whose thresholds are not fully traversable. Some knowledge and some exigencies transfer across the boundaries of an image, but some do not, remaining asymmetrically bound, extant only on one side – potentiating scenarios like starving while eating Minecraft cookies. This theoretical study presents an exercise in the metaphysics of digital games, defining nulltopia in reference to dreams, the theatrical proscenium, vehicle windows, video screens, loudspeakers, and interactive consoles; and contextualizing nulltopia relative to immersion. Developing from a syncretic combination of movement and depiction, the video screen extends a technology of imagination that already existed in component forms. Partially separating slow reality from fast imaginary, nulltopia affords both discourse and addiction to the 'etiolated actual', in contrast to an imagined, perfectly immersive, 'society without screens',the bounds of whose world become imperceptible.

KEY WORDS:
digital game, imagination, immersion, nulltopia, ontology, perception of motion, space, virtual reality.

Introduction

"I hate portals."
- Geralt of Rivia, *The Witcher 3: The Wild Hunt*[1]

Where "space is a practiced place",[2] *nulltopia* is disjunction in space. Such disjunction becomes important in the ontology of imaginary worlds, whose thresholds are not fully traversable. Some knowledge and some exigencies transfer across the boundaries of an image, but some do not, remaining asymmetrically bound, extant only on one side – potentiating scenarios like starving while eating *Minecraft*[3] cookies. Nulltopia is the non-space between one space and another. This theoretical study defines nulltopia, celebrates nulltopia's affordances, and relates nulltopia's hazards to the flow of addiction. The argument unfolds through eight sections: (1) a description of nulltopia in terms of space and discontinuity, followed by a genealogy tracing nulltopia through (2) dreams; (3) the theatrical proscenium; (4) windows; (5) video screens; (6) loudspeakers; and (7) interactive consoles, before (8) contextualizing nulltopia relative to immersion.

At its core, this argument is an exercise in the metaphysics of imaginary worlds, with metaphysics understood not as the abstraction of ideal forms, but as deliberation about the metaphors we choose to guide our ontologies – still abstract, but less normative, and perhaps less teleological.[4] The research method is philosophy, following G. Deleuze and F. Guattari's definition of philosophy as "the art of forming, inventing, and fabricating

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1   CD PROJEKT RED: *The Witcher 3: The Wild Hunt.* [digital game]. Warsaw : CD Projekt, 2015.
2   DE CERTEAU, M.: *The Practice of Everyday Life*. Berkeley, CA : University of California Press, 1988, p. 117.
3   MOJANG: *Minecraft*. [digital game]. Stockholm : Mojang, 2011.
4   For more information, see: LAKOFF, G., JOHNSON, M.: *Metaphors We Live By*. Chicago, IL : University of Chicago Press, 2008.

concepts".[5] Nulltopia and its lexical derivatives are neologisms intended to provoke novel intuitions for future empirical exploration. The goals of the study are to describe indices of nulltopia, and to advocate nulltopia's importance for investigation as an object connected with wellbeing.

Nulltopia is Unoccupiable Space

Nulltopia functions as, but does not feel like, liminal space. This affect-function split results from a division between applications of the term liminality: in architecture, liminal spaces like streets function as transitions between other spaces;[6] whereas in psychotherapy, especially depth psychology after C. Jung,[7] a liminal space is a space that plays host to transformation – in this sense, the therapist's office may become a liminal space, because a liminal event occurs inside it. Nulltopia functions as, but does not feel like, liminal space, because nulltopia occurs at a limen between other spaces; however, being uninhabitable, nulltopia has no affect associated with its habitation. Nulltopia is less phenomenal than noumenal. Its interiority neither seems nor feels like anything.

Likewise, nulltopia may or may not be considered a type of virtual space, and nulltopia has such an ambiguous status because of differences between definitions for the 'virtual'. P. Milgram and F. Kishino place the virtual and the real on a continuum, where virtual objects cause effects but cannot be observed as directly or interacted with in as many ways.[8] B. Massumi agrees that a virtual object is observable only in its effects: "The virtual, as such, is inaccessible to the senses. This does not, however, preclude figuring it, in the sense of constructing images of it. [...] When expressions of its effects arc multiplied, the virtual fleetingly appears. Its fleeting is in the cracks between and the surfaces around the images".[9]

In B. Massumi's ontology, the virtual is a reservoir of potential from which a body draws one course of action by inhibiting – dampening – the rest.[10] The Massumian virtual is pre-qualia, unqualified, energy that has not yet been imbued with meaning – which, meaning-making, differentiation, happens later, with 'actualization'. Perhaps ironically, B. Massumi uses the term 'virtual' somewhat like – in an ontology avoiding distinction between the real and unreal – what Kantian philosophy positions as the noumenal thing-in-itself inaccessible to the senses,[11] with one difference being that Kantian things-in-themselves are substantively different from each other, whereas Massumian virtuality is not predicated on differentiation whatsoever. In B. Massumi's Spinozist and Deleuzian train of thought, the most important distinction is the virtual versus the actual, rather

5   DELEUZE, G., GUATTARI, F.: *What Is Philosophy?*. New York, NY : Columbia University Press, 1994, p. 2.
6   See also: MATTHEWS, H.: The Street as a Liminal Space: The Barbed Spaces of Childhood. In CHRISTENSEN, P., O'BRIEN, M. (eds.): *Children in the City: Home Neighbourhood and Community*. London : Routledge, 2003, p. 119-135.
7   ANDREWS, H.: Liminality. In WRIGHT, J. D. (ed.): *International Encyclopedia of the Social and Behavioral Sciences*. London : Elsevier, 2015, p. 131.
8   See: MILGRAM, P., KISHINO, F.: A Taxonomy of Mixed Reality Visual Displays. In *IEICE Transactions on Information and Systems*, 1994, Vol. E77-D, No. 12, p. 1321-1329.
9   MASSUMI, B.: *Parables for the Virtual: Movement, Affect, Sensation*. Durham, NC : Duke University Press, 2002, p. 145.
10   Ibidem, p. 33.
11   STANG, N. F.: Kant's Transcendental Idealism. In ZALTA, E. N. (ed.): *The Stanford Encyclopedia of Philosophy*. Stanford, CA : Metaphysics Research Lab, Stanford University, 2022. [online]. [2022-07-31]. Available at: <https://plato.stanford.edu/archives/spr2022/entries/kant-transcendental-idealism/>.

than the phenomenal versus the noumenal or the virtual versus the real. Nevertheless, B. Massumi's ontology still admits meaning for the popular term 'virtual world', provided we distinguish the virtuality of the virtual world from the image of the virtual world. For example, the world of *Doctor Who*[12] is not the ensemble of images associated with the show's title, but rather something implied by the images the show presents, and those images' interrelations.

In contrast, much vernacular use of the term 'virtual' identifies virtual worlds by their difference from the real, with 'real' differentiated from 'fictive', and 'virtual' signifying some type of heightening, concretization, interactive distribution or material and energetic overdetermination of fiction. Such vernacular seems nonsensical in B. Massumi's description of virtuality, but finds some accord with G. Deleuze's, which includes *memory* – "real without being actual, ideal without being abstract".[13]

To avoid becoming an argument about lexicon, this study avoids answering whether imaginary worlds count as virtual; here, a digital game world is at least an imaginary world; dreams, digital games, and the imagination all involve imaginary worlds, with digital games intersubjectively distributing the practice of imagination by means of audiovisual signifiers and interaction patterns. However, some disagreeable distinctions are inevitable – here, the imaginary world of a digital game is not 'real'. The player whose avatar eats a Minecraft cookie does not 'really' eat the cookie. We could say 'physical' instead of real; but that would preclude the physical unreal – the parsing of an imaginary world via physical intuitions; in which sense the choppable Minecraft trees and climbable Minecraft mountains around our picnicking player reward physical intuitions. Reality is failure. It is a limit on what of the virtual becomes actual. The real admits of, hosts, different transferences than the fictional. We encounter the realness of the real as insurmountable disability of the imagination – limits on the capacity of the Minecraft cookie to provide nourishment; situations where imagining something does not make it so. As in the discoveries of clinical trials or laboratory experiments, the real presents as defeat – the defeat of a frame of reference, model or schema for expectation or anticipatory behaviour. The real is failed transduction.

Strangely, T. Hobbes aligns closely with B. Massumi's thinking about signal processing, of waves and resonance and dampening. Hobbes imagined imagination as transduced sensation, and sensation as transduced physical energy – imagination "is nothing but decaying sense".[14] Poststructuralist theory adds additional complexity to the metaphor of decay: where T. Hobbes thought about physics linearly, B. Massumi has more giants upon whose shoulders to stand – paradigms of computer programming and cybernetics, with metaphors of recursion and feedback, intervene between the Enlightenment and the poststructuralist. Massumian trains of thought constantly loop around and collide with each other. T. Hobbes's conceptualization may seem mechanistic – if imagination is decaying sense, creativity is combinatorial, not transformative;[15] and indeed 'transformation' comes to seem like transubstantiation, mythic – but, in positing not so much a materialism as an energetics, Hobbes serves well to connect affect theory and today's ideas about distributed cognition, which consider thinking to take place among, not only immanent to individual, physical bodies.[16]

12   NEWEN, S., WEBBER, C. E., WILSON, D. (Creators): *Doctor Who (series)*. [TV]. London : BBC, 1963-2022.
13   DELEUZE, G.: *Difference and Repetition*. New York, NY : Columbia University Press, 1994, p. 208.
14   HOBBES, T., SMITH, W. G. P.: *Hobbes's Leviathan: Reprinted from the Edition of 1651*. Oxford : Clarendon Press, 1909, p. 13.
15   BODEN, M. A.: *The Creative Mind: Myths and Mechanisms*. London : Psychology Press, 2004, p. 9.
16   For more information, see: NEWEN, A., BRUIN, L. D., GALLAGHER, S.: 4E Cognition: Historical Roots, Key Concepts, and Central Issues. In NEWEN, A., BRUIN, L. D., GALLAGHER, S. (eds.): *The Oxford Handbook of 4E Cognition*. Oxford : Oxford University Press, 2018, p. 3-16.

A lacuna remains, however, in the way that transduction, from energy to sense to imagination, encounters barriers. The distribution of cognition, like the distribution of any signal and any energy, is not trivial: only some energy becomes distributed in each situation, while some becomes obstructed, contained, or even – though not destroyed – lost, to the noumenon outside the system at hand. In the experience of playing in a digital game world, images must transfer from a world represented and inhabited in some ways, to a world represented and inhabited in others. Such transference must cross the barrier that is nulltopia. While the concept of a nulltopia, non-space, may seem grossly fictive, the non-transference of certain forms of energy or material – such as the depicted physical nourishment of a cookie in Minecraft – is a profound and strange occurrence; so strange, this study thinks, that of nulltopia, we deserve not only a practical account or praxis, as has emerged in industry through the operationalized metaphor of 'immersion', but the additional, extended abstraction of a metaphysics.

Nulltopia of Dream

In dreams, object permanence is not consistent. A dreamworld changes wildly around its dreamer. Such transience is especially true for the parts of the dream not presently imagined. In dream, it may be possible to, for example, look to the left and see a door, then look ahead into a dark, interstellar void, then look to the left and neither see the door nor have any sensation that the door should have continued to be there. The permanence, substance, persistence from moment to moment, that a real door would have is not a feature of the now-gone door as dream object – the object that no longer is, that has been masked, dampened, inhibited.

The reduced, etiolated, or absent permanence of oneiric objects likewise applies to the ground a dreamer might assume to support their body. 'Standing' in a dreamworld, a dreamer has no knowledge of the ground underfoot; the ground is a consummate mystery. Not only is the dreamer's ability to investigate their environment limited – where some senses become attenuated in the dreamworld, perhaps including the dreamer's tactile capacity to feel qualities of the ground – further, the ground will not necessarily persist. The oneiric ground has as little substance as any place of human subjectivity. The following question becomes paradoxical: looking out across the world of the dream, where is your dream body? Where are you – where is your mind?

The dream is both a prototypical case of immersive imaginary, and the closest a subject can become to inhabiting nulltopia, where nulltopia is uninhabitable space. As J. Gough contemplates in Minecraft's evocative *End Poem*: "what did this player dream? [...] It dreamed it created. And it dreamed it destroyed. It dreamed it hunted, and was hunted. It dreamed of shelter. / Hah, the original interface. A million years old, and it still works".[17]

Nulltopia of Proscenium

The first nulltopic moment occurred somewhere in time immemorial. Perhaps it was the night sky – looking up and seeing shapes in the stars. Somebody postulated an astrological theory – that constellations are figures interacting, looking at each other, chasing

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17   For example, see: GOUGH, J.: End Poem. In MOJANG: *Minecraft.* [digital game]. Stockholm : Mojang, 2011.

each other. Sometimes the meaning of these signifiers became politically important, where interpretations hewed courses of action; yet despite feelings of determination, cosmos exegesis depends on cosmos agnosis; the disjunction, that, to some extent, what happens in the cosmos stays in the cosmos. That long hazy time ago, not being able to perturb or otherwise investigate constellations, interpreters of the stars gained the option to use them as discursive catalysts, as canvases of theoretical and dramatic projection.

The theatrical proscenium is a fictionalizing technology, forming a distinction between space onstage rendering imaginary happenings, and the seats, the theatron, space hosting bodies of audience. The proscenium's delineation of imaginary space emerges from the general phenomenon of mimesis: though mimicry is a common feature of learning, a learner imitating, to embody and internalize, a practice, the proscenium facilitates a less immersive, less transformative mimicry, a form of partial mimicry; because, onstage, actor and character consubstantiate in human body. An actor does not fully turn into their character, but rather puts it on, not becoming but playing as, like the stage plays as rather than becomes the character's world. The unreality of drama gives it fluidity, actors playing multiple roles, the stage playing multiple places, liminal events of death and maiming proving miraculously reversible, trauma transformed into an object of contemplation and sometimes aesthetic pleasure.

Where maiming normally does not transcend the bounds of the imaginary, morality proves more like pleasure – copiously transmissible – motivating generations of moral concern about fiction, from Plato to M. Consalvo, who criticizes the notion that the boundaries of a game separate in-game activity from outside ethics.[18] In some cases, to interact with a represented world is to enact one-to-one effects in the real, as when a military drone pilot gazes into a console and aims a weapon, simultaneously causing real missiles to launch from real drones causing real suffering. While nulltopia prevents the drone pilot from reaching through the screen and making manual adjustments to the flying drone, the pilot nevertheless distributes their cognition, and violent intent, across nulltopia. Theatres have less aptitude for such trans-subjective, trans-spatial signal transduction. Nevertheless, where audiences gazed across the proscenium's threshold into a virtual world, they could still walk onto the stage and pester the actors. The proscenium is nulltopia by fiat, audience agreeing to cast the limit of the stage in the role of inter-world portal, an architecture maintained in the absence of walking through.

Nulltopia of Window

Enjoying the privileges of passengership, a child plays a game with the following procedure: on a train, or in the backseat of a car, look out the window and imagine someone alongside. While the car attains a speed at which no animal could run, the imagined figure yet lopes along, keeping pace with the car, overleaping obstacles, moving with the visual flow imposed by the frame of the window upon the landscape outside. Perhaps there are other phantasms: a spaceship; a low-flying airplane. The moving window becomes an imaginative aide.

In contrast to the limen of the proscenium – which presents a scene to an audience with both body sets in approximate stasis – and, perhaps, the object impermanence of the dream, to the extent that the dreamer's imagination supplies itself with its own

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18   For more information, see: CONSALVO, M.: There Is No Magic Circle. In *Games and Culture*, 2009, Vol. 4, No. 4, p. 408-417.

sense of movement – the vehicle window presents a technology of imagination through *dromology*,[19] through speed. The motive power of the vehicle does the cognitive work of flow-generation. Gazing through, across, the vehicle window, the passenger's imagination traverses a dromological gap inaccessible to a human body moving alone. Lubricating visions of spaceships and super-fast runners, dromological disjunction differs from other gazing. Here is a precursor to cinema: before there were video screens, there was, for a wealthy class, the world across vehicle glass. Thus we meet a polysemic term: *flow*. As B. Soderman notes, a phenomenal flow seems, like play, to be 'autotelic',[20] providing its own telos, as a type of experience functioning as an aesthetic good-in-itself. Dissecting M. Csikszentmihalyi's flow psychology,[21] B. Soderman notes M. Csikszentmihalyi's connection with A. Maslow.[22] A. Maslow posited a hierarchy of needs at whose base one finds survival exigencies like the pursuit of air, water and food, and in whose superstructure one finds 'peak experiences' of self-actualization. M. Csikszentmihalyi presented flow like Maslowian peak experience,[23] and advocated the pursuit of flow; leading, among other discourses, to processes of gamification, methods to better flow various productive activities, making work like play, making labour seem autotelic.

Although flow is normally associated with a sense of virtuosic activity,[24] passive shortcuts exist toward flow-like experiences. Consider, for example, the YouTube sub-genre of 'Minecraft parkour', featuring the flowing first-person perspective of a Minecraft avatar leaping from *voxel* to *voxel*.[25] The video echoes the trance of the child gazing out the car window, maintaining flowing subjectivity via vicarious movement, during real, seated passivity. The passenger trance is adaptive to patiency, to the world going by on the way to a destination. In an intervening development, between a windowed vehicle and an addicted audience, the video screen would make nulltopia more than a side effect.

Nulltopia of Screen

Cinematic motion picture emerges in large part from experimentation with the psychophysics of motion. High-frequency flashes of light trigger neurons that sense movement, turning sequences of pictures into images both of space and movement.[26] Here, this study speculates, is the mechanism by which looking out a car window facilitates imagination of moving creatures: the motion is not imaginary – motion is really there, in the flashes of things going by. While the creature may be imaginary, its movement is a high-fidelity representation, fictional only through its imaginative context; fictional in the sense that a real actor mimics an imagined role. When we already had the barrier of glass, the speed of a carriage, the fidelity of a photograph, cinema brought them together.

19   See also: VIRILIO, P.: *Speed and Politics*. Los Angeles, CA : Semiotext(e), 2006.
20   SODERMAN, B.: *Against Flow: Video Games and the Flowing Subject*. Cambridge, MA : MIT Press, 2021, p. 32.
21   CSIKSZENTMIHALYI, M.: *Beyond Boredom and Anxiety: The Experience of Play in Work and Games*. San Francisco, CA : Jossey-Bass, 1975, p. 74.
22   See: MASLOW, A.: A Theory of Human Motivation. In *Psychological Review*, 1943, Vol. 50, No. 4, p. 370-396.
23   SODERMAN, B.: *Against Flow: Video Games and the Flowing Subject*. Cambridge, MA : MIT Press, 2021, p. 39.
24   CSIKSZENTMIHALYI, M.: *Beyond Boredom and Anxiety: The Experience of Play in Work and Games*. San Francisco, CA : Jossey-Bass, 1975, p. 74.
25   For example, see: *1 Hour 20 Minutes of Relaxing Minecraft Parkour (Nostalgia, Scenery, No Ads)*. Released on 24th December 2018. [online]. [2022-07-31]. Available at: <https://www.youtube.com/watch?v=n_Dv4JMiwK8>.; Remark by the author: Voxel is a term used in 3D computer graphics, by analogy with the pixel in 2-dimensional space.
26   For more information, see: ZACKS, J.: *Flicker: Your Brain on Movies*. New York, NY : Oxford University Press, 2014, p. 154-161.

The visual fidelity of photographic technology prompted a normative response in art criticism, exemplified in C. Greenberg's famous medium-specificity argument for abstract painting.[27] Per C. Greenberg, photography had completed the modernist project of rendering visual perspective, becoming so hi-fi that the art of painting seems comparatively inadequate; so, rather than compete for a different field's niche, painters ought to embrace abstract expressionism, a style in which paintings avoid representing recognizable objects, and evoke instead a sense of what C. Greenberg positioned as painting's greatest good: flatness. Yet flatness, pristine flatness, is a difficult effect to render; by comparison, painters easily slip into depicting some vestige of perspective, through a curious window-like power of the canvas.

Subsequent fictions – *Dark Souls*[28], for example, in the Painted World of Ariamis – have played with the idea of entering a painting with one's whole body. Greenbergian art criticism implies such an imaginative entrance enacted to some extent whenever a viewer gazes into paintings that do not achieve the ideal of abstract expressionism. C. Greenberg suggests, in effect, that most paintings produce low-fi images of virtual space. The video screen is a canvas, accelerated. The screen paints fast because it has a generic, dormant form – unexcited screens are just walls; but, excited, a screen hosts ephemera variating with an ease whose closest precedents lie in theatre and dream. The screen is message-unspecific, an unfixed medium for fixed 'media', a window that can move with infinite pace, its expenses of energy, its sacrifices, hidden.

The Acousmatic – Nulltopia of Loudspeaker

In the discourse around electroacoustic composition, 'source-bonding' refers to "the natural tendency to relate sounds to supposed sources and causes, and to relate sounds to each other because they appear to have shared or associated origins".[29] In 'acousmatic' composition, music plays back through loudspeakers, which break the bond between recorded object and playback environment, a situation that musician R. M. Schafer called *schizophonia*. Schizophonia imbues audio with a sense of expansive potential provenance, making the source of each sound in an acousmatic composition mysterious; making the source bond into an object of creative, receptive reconstruction.[30]

Just as the video screen, as generic object and physical barrier, serves as window into an imagined world, so the loudspeaker, by destabilizing the source bond, facilitates the aesthetic attribution of sounds to imagined scenarios. Composers instrumentalize the capacity of the generic loudspeaker to afford fantastical continuity between spaces, as can be heard in extradiegetic film music, music of ambiguous imaginary attribution; or among varied reverberation effects applied simultaneously to different instruments in a pop recording. The loudspeaker is schizophonic and thus schizo-spatial. It presents, here, the sound of space there. The loudspeaker's rendering of alternate space extends the window role-play of the screen, as both an implication to a world on the other side – not

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27   See: GREENBERG, C.: Towards a Newer Laocoon. In *Partisan Review*, 1940, Vol. 7, No. 4, p. 296-310.
28   FROMSOFTWARE: *Dark Souls*. [digital game]. Tokyo : Namco Bandai Games, 2011.
29   SMALLEY, D.: Spectromorphology: Explaining Sound-Shapes. In *Organised Sound*, 1997, Vol. 2, No. 2, p. 110.
30   SCHAFER, R. M.: *The New Soundscape: A Handbook for the Modern Music Teacher.* Scarborough : Berandol Music, 1969, p. 43.

just the forests and fields passing outside the train, but the sound of the rails too – and a barrier to the transduction of some parts of that world, that world yet removed from the tests of touch.

Nulltopia of Console

The earliest nulltopic moments involved situations of physical defeat – the stars we cannot influence; the trains we cannot keep up with; the stage we ought not to tread upon. Nulltopia appeared in the absence of experimental intervention. In contrast, the game console is a technology of robust nulltopia, affording experimentation while suspending disbelief, through a form of 'ranged touch'[31] whose prosthetic sensors are discontinuous – fingers, hitboxes, brushing the scenery while lacking need or capacity to protrude across the window's threshold.

Of interactivity robust and limited, the console[32] of perspective, sound, movement renders not only images but ecologically inspired models. Objects onscreen present, help make present, an imaginary world by interacting with some fidelity to remembered ecologies. Through, among other frameworks, physical interrelationships assigned via physics engine, luminary interrelationships assigned via graphics processor, and reverberations processed by audio modules, the virtual world worlds, appearing not just in images and sounds, but a schema for the behaviour of images and sounds; images and sounds promising plural potentials surplus to what the console presently or ever actualizes.

Understood as technology, the console facilitates impressive high-fidelity transference of relational systems, training player reflexes, decisions. Toward ethics mitigating traumatic or violent-making play, much has been said about 'bleed' between worlds.[33] Less has been said about the losses associated with non-transference. As player sits in home theatron, orchestrating the acts of an onscreen avatar, they pursue actualization without satisfaction. The dissociation, where, for example, an avatar becomes well-adapted to its surrounds, while its player's health deteriorates, emerges from the difference in affordances between the real and imaginary. Where images change as fast as needed to entertain, real progress unfolds slow, halting, and painful. Nulltopia admits some emotional, sensory, affective transference, but food, water, shelter, and many other underpinnings of health do not make the crossing, turning actualizations across nulltopia into private goods, difficult to share outside the imaginary (an avatar cannot bake cookies for its player's friends, only for other avatars) and riven from many needs of the human body. Mind saps matter. Non-transferable, consequence-impermanent triumphs form a recipe for addiction – in their triumphs, and in their privations. No subjectivity-immersing technology can remedy the incompleteness nulltopia imposes through time gazing across the screen, that hides what it demands from audience and spectator.

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31   COOK, M., TWEET, J., WILLIAMS, S.: *Dungeons & Dragons Players Handbook: Core Rulebook 1 v.3.5.* Renton, WA : Wizards of the Coast, 2003, p. 141.
32   Remark by the author: We used the term 'console' in order not to generalize beyond games, which involve a screen and loudspeakers. An alternative term 'platform' might include unexpected counterexamples from virtual or extended reality that do not involve nulltopia.
33   MASSUMI, B.: *Parables for the Virtual: Movement, Affect, Sensation.* Durham, NC : Duke University Press, 2002, p. 46.; For more information, see: SHAW, I., WARF, B.: Worlds of Affect: Virtual Geographies of Video Games. In *Environment and Planning A: Economy and Space,* 2009, Vol. 41, No. 6, p. 1332-1343.

Immersion at the End
of Nulltopia

Where nulltopia defeats some forms of transfer, the pursuit of immersive design can be understood as the attempt to eliminate nulltopia. Designers of training simulators hope that, in visually and auditorily enveloping participants in simulation worlds, they can better convey the experiences of imagined scenarios, and thus better teach transferable lessons. Simulators have met with especial success in aviation, where the mechanics of a vehicle prove easier to simulate than the experience of a free-range human body – and where the rigorous training rituals of pilots construct and protect the value of the simulator as a representation of aviation. The spectre of a *Matrix*[34]-like totally immersive world, however, appears in forbidding contrast, as a simulation that less corresponds to the real than overwrites.

The etymology of *immersion* invokes the metaphor of a fluid. Total non-immersion in one substance is immersion in something else, such as a swimmer experiences when diving from a state of immersion in air to a state of immersion in water. Nulltopia, as surface, can be conceptualized as an obstruction of flow. Fortuitously, such flow aversity, like that of the miraculous proscenium, keeps aesthetic responses aesthetic, by defeating the transference of some noxious stimuli from fiction to reality. Further, nulltopia makes criticism of images more comfortable than criticism of real, in-your-face characters, who, walking out of Hollywood's silver screen, would often come angry and well-armed. In contrast, R. Ebert asks: what role would critics have for VR movies, *vrovies*?[35] Where movies already have much power to move spectators, vrovies would acquire additional tools to defeat critical stances, critical reservations. Where marginalized movie spectators have developed survival strategies, like what b. hooks[36] calls the *oppositional gaze*,[37] the vrovie promises to intensify the battles of marginalized audiences for representation and survival.

Total immersion, no vestige of nulltopia, is identity with the experience of a body in a world, complete with memories, pains, and the object permanence of physical consequences – total birth, death, limits of memory, and everything between. It would be tempting to say that we already have total immersion; but anyone who has encountered nulltopia, of dream or screen, has enjoyed its glimmer of alterity. In a difference theory of meaning, where "differences carry signification"[38] and "a map is not the territory it represents",[39] non-identity is a condition of representation; total immersion means incomparability, impossibility of discourse, beyond magical interventions like The Matrix's 'red pill'. All discussed experiences of immersion rely on some surface, contact with which potentiates reference. By obstructing flow, by differentiating, nulltopia facilitates discourse, metaphors instead of what we might call *holophors*, the whole transport, impossible, figured in *Star Trek*'s transporter[40] and holodeck,[41] of objects from world to world.

34   WACHOWSKI, L., WACHOWSKI, A. (Directors): *The Matrix*. [DVD]. Burbank, CA : Warner Bros., 1999.
35   EBERT, R.: *The Chilling Film Concept of Virtual Reality*. Released on 21st June 1992. [online]. [2022-07-31]. Available at: <https://www.rogerebert.com/roger-ebert/the-chilling-film-concept-of-virtual-reality>.
36   Remark by the author: An American author, bell hooks, is known for stylizing her name in all lowercase to emphasize her message instead of her name.
37   HOOKS, B.: *Black Looks: Race and Representation*. 2nd Edition. New York, NY : Routledge, 2014, p. 115-132.
38   SAUSSURE, F. D.: *Course in General Linguistics*. New York, NY : Philosophical Library, 1959, p. 118.
39   KORZYBSKI, A.: *Science and Sanity; An Introduction to Non-Aristotelian Systems and General Semantics*. New York, NY : The Science Press Printing Company, 1933, p. 58.
40   BUTLER, R. (Director): *Star Trek*. *Episode 1: The Cage*. [TV]. New York, NY : NBC, 1966.
41   SCANLAN, J. (Director): *Star Trek: The Next Generation. Episode 12: The Big Goodbye*. [TV]. Los Angeles, CA : Paramount Domestic Television, 1988.

Yet while much does not flow across nulltopia, what does flow, flows fast. In videogamified gambling, nulltopia lubricates money loss.[42] In video vehicle control, nulltopia facilitates feats of agile piloting (or crashing).[43] In video role-playing games, nulltopia facilitates the exploitive pattern of extensive grinding,[44] in which boredom takes over where physical fatigue once motivated change of chore. Perhaps the most fearsome thing about nulltopia is the comfort of gazing into it, of the flowing subjectivity of an unmoving subject, the sense of being taken away, made patient, by a locomotive whose exhaustion lacks nervous fibres.

Conclusion

Where interactive fiction is often considered using a metaphysical structure composed of four parts – player, avatar, real world, and imaginary world – this essay posits five: player in real world; avatar in imaginary world; and, between two worlds, nulltopia. Where utopia is nowhere, a fiction, nulltopia has place but not content, not even fictive content. Where space is practiced place, nulltopia is practiced through partial traversal, but not occupation. Where actualization is the enaction of what is imagined, desired, sought, or impelled toward, nulltopia is a partial barrier to actualization, potentiating an *etiolated actual*, a satisfaction in cultivating fictional resources.

Nulltopia bounds the extent and qualities of transference from an imaginary world, which, like a thought experiment or rehearsal, benefit from limited consequence. While moments of superheated immersivity characterize engagement with many great digital games, such moments eventually give way to the power shutting off, the console cooling down, and a revitalized player attendance to a real world in which the best lessons of the fictive hope to find application. Digital games are, among other things, a form of distributed hypothetical reasoning, amid scenarios whose audiovisual fidelity becomes socially constructed as impressive only in their subsequent absence; when, as a limit of consequence, nulltopia facilitates leaving the thrall of the fantastic. To echo M. Foucault's encomium for heterotopia:[45] in a society without screens, multiverses, and their plural adventures, will be lost, leaving a metaverse, and its governmentality, in their place.

BIBLIOGRAPHY

1 Hour 20 Minutes of Relaxing Minecraft Parkour (Nostalgia, Scenery, No Ads). Released on 24th December 2018. [online]. [2022-07-31]. Available at: <https://www.youtube.com/watch?v=n_Dv4JMiwK8>.

ANDREWS, H.: Liminality. In WRIGHT, J. D. (ed.): *International Encyclopedia of the Social and Behavioral Sciences*. London : Elsevier, 2015, p. 131-137.

BODEN, M. A.: *The Creative Mind: Myths and Mechanisms*. London : Psychology Press, 2004.

BUTLER, R. (Director): *Star Trek*. *Episode 1: The Cage.* [TV]. New York, NY : NBC, 1965.

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42   See also: SCHULL, N. D.: *Addiction by Design: Machine Gambling in Las Vegas*. Princeton, NJ : Princeton University Press, 2012.

43   NAGATA, G.: *Why Michael Bay Hired a 19yo Drone Pilot for Ambulance! FPV Drones Pushed to the LIMIT!*. Released on 8th April 2022. [online]. [2022-07-31]. Available at <https://www.youtube.com/watch?v=1Ka88r5bTuY>.

44   For more information, see: ZAGAL, J. P., BJÖRK, S., LEWIS, C.: Dark Patterns in the Design of Games. In YANNAKAKIS, N., AARSETH, E. (eds.): *Proceedings of the Foundations of Digital Games*. Chania : FDG, 2013, p. 39-46. [online]. [2022-07-31]. Available at: <https://my.eng.utah.edu/~zagal/Papers/Zagal_et_al_DarkPatterns.pdf>.

45   FOUCAULT, M.: Of Other Spaces. In *Diacritics*, 1986, Vol. 16, No. 1, p. 27.

CD PROJEKT RED: *The Witcher 3: The Wild Hunt.* [digital game]. Warsaw : CD Projekt, 2015.

CONSALVO, M.: There Is No Magic Circle. In *Games and Culture*, 2009, Vol. 4, No. 4, p. 408-417. ISSN 1555-4120.

COOK, M., TWEET, J., WILLIAMS, S.: *Dungeons & Dragons Players Handbook: Core Rulebook 1 v.3.5*. Renton, WA : Wizards of the Coast, 2003.

CSIKSZENTMIHALYI, M.: *Beyond Boredom and Anxiety: The Experience of Play in Work and Games*. San Francisco, CA : Jossey-Bass, 1975.

DE CERTEAU, M.: *The Practice of Everyday Life*. Berkeley, CA : University of California Press, 1988.

DELEUZE, G.: *Difference and Repetition*. New York, NY : Columbia University Press, 1994.

DELEUZE, G., GUATTARI, F.: *What Is Philosophy?*. New York, NY : Columbia University Press, 1994.

EBERT, R.: *The Chilling Film Concept of Virtual Reality*. Released on 21st June 1992. [online]. [2022-07-31]. Available at: <https://www.rogerebert.com/roger-ebert/the-chilling-film-concept-of-virtual-reality>.

FOUCAULT, M.: Of Other Spaces. In *Diacritics*, 1986, Vol. 16, No. 1, p. 22-27. ISSN 0300-7162.

FROMSOFTWARE: *Dark Souls*. [digital game]. Tokyo : Namco Bandai Games, 2011.

GOUGH, J.: End Poem. In MOJANG: *Minecraft.* [digital game]. Stockholm : Mojang, 2011.

GREENBERG, C.: Towards a Newer Laocoon. In *Partisan Review*, 1940, Vol. 7, No. 4, p. 296-310. ISSN 0031-2525.

HOBBES, T., SMITH, W. G. P.: *Hobbes's Leviathan: Reprinted from the Edition of 1651*. Oxford : Clarendon Press, 1909.

HOOKS, B.: *Black Looks: Race and Representation*. 2nd Edition. New York, NY : Routledge, 2014.

KORZYBSKI, A.: *Science and Sanity; An Introduction to Non-Aristotelian Systems and General Semantics*. New York, NY : The Science Press Printing Company, 1933.

LAKOFF, G., JOHNSON, M.: *Metaphors We Live By*. Chicago, IL : University of Chicago Press, 2008.

MASLOW, A.: A Theory of Human Motivation. In *Psychological Review*, 1943, Vol. 50, No. 4, p. 370-396. ISSN 0033-295X.

MASSUMI, B.: *Parables for the Virtual: Movement, Affect, Sensation*. Durham, NC : Duke University Press, 2002.

MATTHEWS, H.: The Street as a Liminal Space: The Barbed Spaces of Childhood. In CHRISTENSEN, P., O'BRIEN, M. (eds.): *Children in the City: Home Neighbourhood and Community*. London : Routledge, 2003, p. 119-135.

MILGRAM, P., KISHINO, F.: A Taxonomy of Mixed Reality Visual Displays. In *IEICE Transactions on Information and Systems*, 1994, Vol. E77-D, No. 12, p. 1321-1329. ISSN 1745-1361.

MOJANG: *Minecraft.* [digital game]. Stockholm : Mojang, 2011.

NAGATA, G.: *Why Michael Bay Hired a 19yo Drone Pilot for Ambulance! FPV Drones Pushed to the LIMIT!*. Released on 8th April 2022. [online]. [2022-07-31]. Available at <https://www.youtube.com/watch?v=1Ka88r5bTuY>.

NEWEN, A., BRUIN, L. D., GALLAGHER, S.: 4E Cognition: Historical Roots, Key Concepts, and Central Issues. In NEWEN, A., BRUIN, L. D., GALLAGHER, S. (eds.): *The Oxford Handbook of 4E Cognition*. Oxford : Oxford University Press, 2018, p. 3-16.

NEWMAN, S., WEBBER, C. E., WILSON, D. (Creators): *Doctor Who (series)*. [TV]. London : BBC, 1963-2022.

SAUSSURE, F. D.: *Course in General Linguistics*. New York, NY : Philosophical Library, 1959.

SCANLAN, J. (Director): *Star Trek: The Next Generation. Episode 12: The Big Goodbye.* [TV]. Los Angeles, CA : Paramount Domestic Television, 1988.

SCHAFER, R. M.: *The New Soundscape: A Handbook for the Modern Music Teacher.* Scarborough : Berandol Music, 1969.

SCHULL, N. D.: *Addiction by Design: Machine Gambling in Las Vegas*. Princeton, NJ : Princeton University Press, 2012.

SHAW, I., WARF, B.: Worlds of Affect: Virtual Geographies of Video Games. In *Environment and Planning A: Economy and Space*, 2009, Vol. 41, No. 6, p. 1332-1343. ISSN 0308-518X.

SMALLEY, D.: Spectromorphology: Explaining Sound-Shapes. In *Organised Sound*, 1997, Vol. 2, No. 2, p. 107-126. ISSN 1355-7718.

SODERMAN, B.: *Against Flow: Video Games and the Flowing Subject*. Cambridge, MA : MIT Press, 2021.

STANG, N. F.: Kant's Transcendental Idealism. In ZALTA, E. N. (ed.): *The Stanford Encyclopedia of Philosophy*. Stanford, CA : Metaphysics Research Lab, Stanford University, 2022. [online]. [2022-07-31]. Available at: <https://plato.stanford.edu/archives/spr2022/entries/kant-transcendental-idealism/>.

VIRILIO, P.: *Speed and Politics*. Los Angeles, CA : Semiotext(e), 2006.

WACHOWSKI, L., WACHOWSKI, A. (Directors): *The Matrix*. [DVD]. Burbank, CA : Warner Bros., 1999.

ZACKS, J.: *Flicker: Your Brain on Movies*. New York, NY : Oxford University Press, 2014.

ZAGAL, J. P., BJÖRK, S., LEWIS, C.: Dark Patterns in the Design of Games. In YANNAKAKIS, N., AARSETH, E. (eds.): *Proceedings of the Foundations of Digital Games*. Chania : FDG, 2013, p. 39-46. [online]. [2022-07-31]. Available at: <https://my.eng.utah.edu/~zagal/Papers/Zagal_et_al_DarkPatterns.pdf>.