Digital Media and (Syn)aesthetics: Performativity of Embodied Code

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If you are deciding which to give priority to - whether visual perspective or physical experience - then always trust the body; because touch is an older sense than eyesight. The experience of the body is more authentic, not yet encumbered by aesthetics.

Jan Švankmajer

Abstract

This thesis works to investigate the use of digital media in performance theory and practice to establish new ways of conveying information. Using Lev Manovich take on digital new media, Andy Lavender's network model of cultural production in the wake of new technologies and Chiel Kattenbelt's definitions of Intermediality I begin devising a theoretical framework and terminology for digital culture in performance theory. I then consider the corporal engagement in postdramatic theatre of Hans - Thies Lehmann to find how non-semantic audiovisual stimuli in postdramatic theatre is defined and used. Here I use Maaike Bleeker's work on corporal literacy, Joseph Machon's notion of (syn)aesthetics and the sociopolitical approaches of feminist scholars such as Donna Haraway in somatechnics. This provides a perspective on the use of body in relation to digital technology in our performative cultural. Then I offer dramaturgical analysis of two case studies, the VR video game SUPERHOT and the performative installation The Automated Sniper, in order to examine the application of digital media in performance theory. Using my developed theoretical framework in analyzing the case studies, I argue that the binary nature of digital media invites the pluralities and opposing contradictions inherent in performance theory's terminology and conception, to form a network of interconnected nodes. These nodes of intermediality, post humanism, (syn)aesthetics, corporality and spatial staging are all major factors in how digital media is used in theatre, and how it has changed the way it can be used as a (re)presentative tool to convey information.

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Introduction

While having her audience in a hypnosis state of attention, Screenslaver the villain of Pixar studio's *Incredibles 2*, describes our current state of entertainment as a brainless desire to replace true experience with simulation.

You don't talk, you watch talk SHOWS. You don't play games, you watch game SHOWS. Travel, relationships, risk; every meaningful experience must be packaged and delivered to you to watch at a distance so that you can remain ever-sheltered, everpassive, ever-ravenous consumers who can't bring themselves to rise from their couches, break a sweat, and participate in life.1

The power of this moment of meta-reference, lies in the comparability of us as the audience, with the digitally rendered characters hypnotized by the images on a digitally rendered screen. This dependence on digitally rendered imagery is not restricted to entertainment only; but it is safe to say that education, communication, business – to name a few - and exchange of information in general, is vastly influenced by our technological advancements in this digital era. As this influence gradually reforms information from a physical and corporeal into a digital and binary paradigm, both the technology that provides such transformation and the media that produces, transmits and engages with information, must be subject of analysis. This is to examine (and possibly foresee) if the nature of information would undergo any fundamental change. This impact of mediation on our lives is the preeminent discussion in Sarah Kember 's book Life after New Media, where she suggests that an analytical understanding of new digital media is essential:

Mediation becomes a key trope for understanding and articulating our being in, and becoming with, the technological world, our emergence and ways of interacting with it,

¹ Quotes from "Incredibles 2,", http://www.imdb.com/title/tt3606756/quotes/qt4066730.

as well as the acts and processes of temporarily stabilizing the world into media, agents, relations, and networks.²

Like Kember and Screenslaver, I too believe that digital technology and its consequential mediation, have brought colossal changes in our world view. Thus, I believe by analyzing how these mediums have evolved and used the possibilities and opportunities brought forth by digital technologies, a more direct approach towards the nature of a binary world view can be obtained.

In a binary and digital system, data which is information in digital form, can be identified and manipulated by means of an interface. Consequently, the human body could be considered as such interface, through which the mind or intellect communicates with the surrounding environment and tries to understand it. A mixture of sensory and cognitive receivers transmits the information from the exterior bodily sectors to the brain, in order to make sense of the 'outside' or 'unknown.' Although this is a simplified explanation of the complex innerworkings of human nervous system and psyche, it is a starting point for a comparative analysis of certain brain functionality with digital interfaces. In her book (Syn)Aesthetics: Redefining Visceral Performance, Josephine Machon defines (Syn)aesthetics as a derivative of 'synesthesia' and 'aesthetics'. This term provides a discourse that defines simultaneously the impulse and processes of production and the subsequent appreciation strategies which incorporate reception and interpretation. This paradigm allows specific recreation possibilities of sensations and consequently logical concepts through visual, physical, verbal, aural, tactile, haptic and olfactory means. This experiential nature of (syn)aesthesia, provides a more intuitive process of understanding through personal experiences, which yields a more satisfying perception than analyzing what

² Sarah Kember and Joanna Zylinska, *Life after New Media: Mediation as a Vital Process*, First MIT Press paperback edition (Cambridge, Massachusetts London, England: The MIT Press, 2015).: xv.

J. Machon, (Syn) Aesthetics: Redefining Visceral Performance (Palgrave Macmillan UK, 2009), 13.

something *means* and consequently implements 'other kinds of knowing.' The uncertainty and deformed nature of this 'other kind of knowing' has been the subject to numerous artistic discourses that try to introduce a (syn)aesthetics effect of certain artworks – specifically the new digital art - in reshaping the experience of the environment. Using this paradigm of adopting corporal sensation to convey logical concepts provided by (syn)aesthetics, we could investigate Screenslaver's alleged desire to replace true experience with simulation.

In this thesis, I try to build upon these ongoing discourses, by challenging the conventional concept of the purely mental engagement of humans with digital media. In order to investigate the physical, corporal and sensual interplay of digital media and human beings, I explore the dramaturgical applications of digital art using (syn)aesthetics theories. Hence, the main research question I attempt to answer is: How can digital media be used in performative art - through the (syn)aesthetics applications of the body – to create new perceptions on physical reality? To answer this question, one must first determine what new digital media is, and what makes it different from the physical. What form of cognitive difference has been observed between the reaction of the brain towards a physical and a digital phenomenon? If such interactions result in a chain of synesthetic communications, could it be argued that the way man interacts with the digital is of a trans-sensual nature? The methodology of this thesis consists of three parts and therefore this paper will consist of three chapters. For establishing the theoretical framework, I gather the essential concepts and theories regarding digital media, its defining characteristics, and how they are used in performative arts, in the first chapter. I dive into the theories and concepts by Lev Manovich, Andy Lavender and Chiel Kattenbelt concerning the new digital media and its applications specifically in performing arts through intemediality - to find the physical nodes in the relationship between 'media' and 'technology'. This biological nature of the processes of new media is also evident in the work of philosophers such as Martin Heidegger and Bernard

Stiegler; where they explore the relationship between "media" and "technology" to advance a proposition that mediation is an intrinsic condition of being-in, and becoming-with, the technological world. Since I suggest that the traces of a trans-sensory and trans-logical application is to be seen in the new digital media, in the second chapter a thorough understanding of Josephine Machon's (syn)aesthetics and the way it is used in performing arts is used to map out the functionality of (syn)aesthetics in digital media. Furthermore, the role of corporality as one of the major defining attributes in the notion of postdramatic theatre established by Hans - Thies Lehmann⁵ is examined; this is to articulate how perception is performed and how theatre performance involves complex processes of selection and combination of sensory input. Using Lehmann's ideas of the performative use of body in postdramatic theatre, and Maaike Bleeker's research on embodied interactions in digital culture, I examine the dramaturgical choices of using new digital media and (syn)aesthetics as a corporal tool of performativity. In order to further support my answers to these questions, in the third and final part of this paper, I perform dramaturgical analysis on two case studies. A dramaturgical analysis consists of examining the choices made by the creators regarding the composition, spectator positioning and context of the work at hand. Through a comparative analysis I was able to see how the developed theoretical framework resonates with these choices, in order to conclude various forms of adopting corporal sensation to convey logical concepts using (syn)aesthetics. And finally, in conclusive summary, I offer a brief reflection upon my research, and offer considerations for future research trajectories.

First, to uphold with the vast opportunities brought forth by technology in respect to (syn)aesthetics in art, the VR first-person shooter video game SUPERHOT is chosen for analysis. SUPERHOT introduces one simple element to the first-person shooter experience:

⁴ Kember and Zylinska, *Life after New Media*, 1.

⁵ Hans-Thies Lehmann, *Postdramatic Theatre* (New York: Routledge, 2006).

time is static, and moves forward only when the player moves. Through this virtual reality experience, the audience not only can perceive time in a different kinesthetics manner - the sensation of controlling time with one's movements - but also by using the software/hardware paradigm as euphemism in narrative, the game challenges the player's control over his mind, body and decisions. Investigating the way *SUPERHOT* addresses these concepts using specific dramaturgical choices in gameplay, audio-visual design and narrative, further develops the observations of this thesis.

Second case study is the performance *The Automated Sniper*, directed by Julian Hetzel. In this intermedial performance, with different stages of audience interaction with a remote-controlled technology, i.e., a paintball gun, Hetzel tries to point out the increasing disregard of certain values, feelings and human empathy with the dominance of technology. By addressing the audience directly, *The Automated Sniper* corporates the actual presence, decisions and physical agency of the audience in its narrative and structure in order to emphasize on the sense of segregation, present in engaging with new media. Analyzing the choices regarding this (syn)aesthetic engagement of actors and the audience with this digital technology, and how they are used to convey desired messages, supports the assumptions made in this thesis.

Chapter 1: Digital Media

Since the beginning of the modern era, Humanity Studies have been the forefront of contemplating on cultural and philosophical implications of how the information is produced, processed and spread. In a cultural sense, as Karen Barad suggests, art and more importantly the representative art such as theatre, cinema, video games and more recent interactive mediums, are a window into understanding applied ideas and theories of interactions, *intraactions* and general exchange of information.⁶ With the advent of interactive interface of digital culture, the successor of centuries of technological advancements, the way that we manage our time and our exchanges as participants within a culture has been changed and redefined. In the discussion of complex storytelling in contemporary cinema, Warren Buckland states "In today's culture, which is dominated by the new media, our experiences are becoming more obscure and fragmented every second. Accordingly, the stories that attempt to represent these experiences will be as complex and vile." Since it is possible to define this interface with a more precise definition than simply 'manipulating' data or 'playability' of a computer game, a clear explanation of this interactive culture is needed. To do so, the conditions that allow the interaction to occur must be examined.

1.1 Technology and Digitization

Digitization did not happen at once or as a separate leap in our technological advancements; but rather it was another expansion on the line of succession of its previous cultural, technological and economic developments. Following on the work of the Russian economist Kondratieff and his theory of cultural "waves" to describe long term cycles of

⁶ Karen Barad, "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter," *Signs: Journal of Women in Culture and Society* 28, no. 3 (March 2003): 815.

⁷ Warren Buckland, ed., *Puzzle Films: Complex Storytelling in Contemporary Cinema* (Chichester, West Sussex, U.K.; Malden, MA: Wiley-Blackwell, 2009), 15.

economic activity, Malecki and Moriset advise a tabulation for revolutionary consequence of the new digital paradigm. In their list of waves of development, they include digital technologies and their evident cultural impact as the fifth Kondratieff wave: The industrial revolution, age of steam power and railways, age of electricity, age of mass production, and our age of microelectronics and computer networks. A similar tabulation is evident in Steve Dixon's compendious book *Digital Performance*, where he and co-contributor Barry Smith propose that the contemporary practices of digital performance are not in fact a genuine result of technological possibilities, but rather directly influenced by historical precedents such as the performative dimension emergent in early 20th-century culture. In their approach "there runs a parallel, and in many ways complementary discourse, that challenges and attempts to undermine dominant postmodern and deconstructive critical positions on cyberculture in general, and digital performance in particular." Similar to their predecessors, these technological advancements have not only brought new possibilities of production and distribution, but they have always revolutionized the structure of our social and individual life.

Andy lavender describes digitisation as "not simply a matter of technological advancement. It is profoundly cultural in its applications, not least since it makes information more quickly accessible, easier to handle and more swiftly adaptable." In his essay 'Digital Culture', Lavender formulates the importance of digital advancements on various cultural institutions and paradigms, such as performance studies. Using Charlie Gere's words, he suggests that digital technology "defines and encompasses the ways of thinking and doing that are embodied within that technology, and which make its development possible. These

⁸ Edward J. Malecki and Bruno Moriset, *The Digital Economy: Business Organization, Production Processes and Regional Developments*, 1 edition (London; New York: Routledge, 2008), 26.

Steve Dixon and Barry Smith, Digital Performance: A History of New Media in Theater, Dance, Performance Art, and Installation, Leonardo (Cambridge, Massachusetts London, England: The MIT Press, 2007), 7.
 Sarah Bay-Cheng, ed., Mapping Intermediality in Performance, Media Matters (Amsterdam: Amsterdam University Press, 2010), 126.

include abstraction, codification, self-regulation, virtualization and programming." ¹¹ Looking around in our daily lives, we see more than ever (even more so than the times when the aforementioned texts were written) that almost all aspects of our individual and collective lives are in one way or another, dependent on digital technology. Our phones are now not only a communication device of a worldwide network, but also watches, alarm clocks, calendars, calculators, cameras, music players, news outlets, GPS devices and with the advent of social media, they encompass one (important) branch of our identity. Hence, it is evident that digital technology underpins a revolutionary turn to cultural production as well. Using the case of mobile phones, Lavender conveys his theory of cultural production and digital reach:

This tendency to inter-articulation (here, personal gadget and private identity) underlies one of the characteristics of digitalisation – an ongoing drive to convergence across devices and applications. This can be seen in the uses to which a device is put – Apple's iPhone, for instance, is simultaneously a music player, web browser, games console, location finder, camera and telephone. Convergence also applies to the modes by which information is presented. Klinenberg and Benzecry, for example, note that "News companies can repurpose 'content' ... across platforms, adapting a single digital file to suit a newspaper article, Internet publication, or teleprompter script. This is a significant transformation ... since it changes the meaning of cultural products."¹²

Lavender, Klinenberg and Benzecry see this result of inter-articulation and convergence inherent in digital media, as a fundamental transmutation of how cultural products are engaged with. Contemporary theatre and performance practice, being essentially a cultural production, is evidently under the impact of this convergence as well; and it can be seen in

¹¹ Bay-Cheng, 127. ¹² Bay-Cheng, 129.

the restructuring of time, space, process and forms of creation, presentation and representation in postdramatic theatre. Thus, I will use contemporary postdramatic theatre, as a cultural product, to examine the current state of transmutation of our perception of the outside world; this provides another stage to the line of succession of cultural, technological and economic developments of our history.

1.2 Digital Culture

Before turning to the relationship between digitality and artistic production in performance studies, let us consider more closely the suffusion of the digital in the contemporary culture. In his book *The Language of New Media*, the digital domain theoretician, Lev Manovich, introduces five exclusive features of the digital media that define the exemplar of the outcomes of digital culture:¹³

- I. Numerical representation
- II. Modularity
- III. Automation
- IV. Variability
- V. Transcoding

The first feature describes the use of binary code that uses the digits 0 and 1 in endless difference and dependence, in order to structure information. This plays a vital role in converting old media (analogue, physical or material) into digital media, which also signifies that all new media objects are essentially mathematical and numerical allegories and can be controlled and modified by algorithms. The second feature refers to the distinct and fragmented units of an object. In digital media, the binary base of images, sounds, frames, and codes, provides completely independent elements that are both object-oriented and of

¹³ Lev Manovich, Roger F. Malina, and Sean Cubitt, *The Language of New Media* (MIT Press, 2001).

various nature; which can be separately arranged, changed or removed all together. Automation refers to software; the pre-programmed algorithms and patterns that provide control of the functions and components of the object for the ordinary audience. For example, consider the Photoshop software. In working with Photoshop, without the need for a deep knowledge of programming science - or an understanding of the numerical and modular nature behind it - the elements and the arrangement of different images can be changed in order to create a completely new object. Variability means that the new media object is not a fixed and unchangeable whole; it can exist in various (even infinite) forms and continue to change. When an object's algorithm is presented in a way that provides different outputs for different data, we will encounter interactive processes that will never stop transforming. Manovich also shares this characteristic with the values of the post-industrial society. Where individuality is more valuable than collective merging. The new media encourages that every choice of the user or audience - and subsequently their interests and motivations - is unique and valuable. Applications of this digital logic in a broader and more cultural level, lead to the fifth feature; Transcoding refers to the evolutionary process in which human beings incorporate their traditional representative culture with computer coding. By creating different digital objects and constantly changing them from a code system to another, ideas and different cultural paradigms evolve from a semantic and/or linguistic nature to the ontology and epistemology of computers. Although the notion of interactivity in postdramatic theatre is of a different nature than the applications that the new digital media provide, it cannot escape the digitalization process of 'transcoding.' However, by incorporating interactivity of digital media, with the performative interactivity implemented by postdramatic theatre, this process of transcoding can be analysed.

In addition to the five aforementioned features, the particular nature of the binary provides a metaphor for the proliferating interrelations within digital culture. Lavender

argues that in describing the inherent terminology of systems, protocols and operations of digital culture, each term is meaningful by way of its definition according to its opposite. ¹⁴ However, by dualistically examining and comparing the interrelations and reconstructions of these terms and concepts across various digital paradigms, the need for a more flexible model would be evident. Lavender describes this simultaneously shapeless form with no end or boundary as the network. ¹⁵ The network model comprises of a set of interconnected nodes. A node is a point of interest that both forms the entirety of network and fails to exist without it; there is no center in network, just a connection of coexisting nodes. This produced coherence in the face of fragmentation, provides a more distinct understanding of Manovich's features of digital media. In the network, being of digital essence, the nodes are binary and coded, they are modular and separate, yet connected as one so they can be automated, and each node can be manipulated to reshape the network. But the most important benefit of the network model is in its inherent compliance with the notion of 'transcoding.' To examine the importance of transcoding in the network model, I will investigate the interrelation between digital culture and performance, known as Intermediality.

1.3 Intermediality

In theatre, being a hybrid art form, there have always been various approaches – in theory and practice - for incorporating the aesthetics of other art forms such as, painting, music, poetry, etc. As Hans-Thies Lehmann has articulated in his book *Postdramatic Theatre*, these arguments have been contradicted, evolved and reshaped throughout the twentieth century. In his essay 'Intermediality in Performance and as a Mode of Performativity', Chiel Kattenbelt recognizes 'the performative turn' in the arts as the starting

¹⁴ Bay-Cheng, Mapping Intermediality in Performance, 132.

¹⁵ Bay-Cheng, 132.

point for this paradigm shift in performance theory. As the terms performativity, performance and intermediality are used in various different disciplines such as literary and cultural theory, aesthetics, linguistic philosophy, anthropology, etc. an indication of the accent emphasized by Kattenbelt is essential. This notion of performativity is as a reformulation of the performative aspects of the arts, in order to reinforce the expressive or imminent qualities of the aesthetic experience for both the audience and the artist. Using Erika Fischer-Lichte's discussions in her book *Ästhetik des Performativen*, Kattenbelt states:

She characterises this turn as a shift in which two relationships are newly determined: the relationship between subject and object and the relationship between the material and corporal nature (Material- und Körperhaftigkeit) of the elements and their sign character (Zeichenhaf- tigkeit). The performative turn is a delimitation (Entgrenzung) of the arts because it occurs in performance and as performances (Aufführungen), as events, which do not exist on their own, that is to say, independent of their producers and perceivers. On the contrary, they only exist in the creative activity of the artist and in the experience of the observer, listener or spectator. In other words, the dichotomies noted here (subject/ object, signifier/signified, etc.) more or less lose their "polarity" and "sharpness of distinction." ¹⁶

This independency of producer, product and perceiver, is the key correlating element between Intermediality in postdramatic theatre and Lavender's network model. Kattenbelt's work emphasizes on the importance of terminology and the conception of 'performance', 'performativity' and the 'performative turn' in examining the role of digitalization in intermediality of contemporary theatre. Building on Umberto Eco's definition of performativity, which "refers to a situation in which objects, bodies, actions and events are shown by – and, as a result, function as – intentional signs in the perspective of (a) possible

¹⁶ Bay-Cheng, 33.

world(s) or situation(s),"¹⁷ he provides evidence that intermediality is about staging of media. As the object of these intentional signs of a performative utterance, practical relevance and justification of this *staged* media would be primarily related to it taking place in the here and now; it requires to be carried out and presented and consequently, needs to be perceived in that very moment. My use of intermediality revolves around this particular contraction between the inherent recorded and anterior nature of digital media, and the imminent flow of performative utterance.

The earliest need for the use of the word 'live' in relation to performance, was to provide a distinction between live and recorded sound. The technology necessitating this need was not gramophone, but radio. According to Philip Auslander, at the beginning of the historical process by which recorded performances came to replace live ones, the distinction may have been difficult at first, specifically for gramophone and kinematograph - people running away from the Lumière film theatre when they see the projected image of a train coming towards them - but with identifying the source of the sound or image, the audience would accept the recorded nature of the information. However, as Auslander puts it:

The need to make that identification arose as an effective response specifically to radio, a communications technology that put the clear opposition of the live and the recorded into a state of crisis. The default definition of live performance is that it is the kind of performance in which the performers and the audience are both physically and temporally co-present to one another. But over time, we have come to use 'live' to describe performance situations that do not meet those basic conditions. With the advent of broadcast technologies - first radio, then television - we began to speak of 'live broadcasts.' 18

¹⁷ Bay-Cheng, 30.

¹⁸ Philip Auslander, *Liveness: Performance in a Mediatized Culture*, 2nd ed (London; New York: Routledge, 2008), 59.

A 'live' performance emerged from the technological possibilities of immediate telecommunication of information. This new form of mutual presence, along with its utterly apparent absence in cinema, gave rise to one of the most important aspects of theatre, in its revival as postdramatic theatre. When television, became the most popular, widespread and accessible platform of 'live' performance, theatre practitioners and scholars began praising the immediate temporal and physical shared presence of actor and audience. In postdramatic theatre, the mission is no longer (re)presentation of information or even sensations – as is in television and cinema – but rather an providing an intense experience of reality. Through this shift in performativity of theatre, the use of dramatic (stage) time – considered apt for cinematic form - was declined, and the unnoticeable temporal and physical gap between the audience and the actor was praised over the simulated real time of television. This resulted in a phenomenon that Cormac Power describes as 'auratic presence' derived from the word aura. "Aura is a term with mysterious connotations, referring to a presence which is above the ordinary, an abstract quality that can be attached to people, names, objects or places which have more significance than appearance might suggest." 19 While a fictional liveness is concerned with *making* presence, this auratic presence refers to *having* presence. In addition, another meaning associated with the term 'live' has been introduced with the emergence of the internet. Before the ability of being online, a live telecommunicative experience was explicit to certain media – TV, radio, etc. – but along with internet, specifically social media, being 'online' has provided an individual experience of mediatized 'liveness'. This shift, in regards to the transcoding feature of the digital media, has changed the perception of the temporal and physical notion of shared presence. However, postdramatic theatre tries to

¹⁹ Cormac Power, *Presence in Play: A Critique of Theories of Presence in the Theatre*, Consciousness, Literature & the Arts 12 (Amsterdam; New York: Rodopi, 2008), 47.

challenge and analyse this shift, by emphasizing on the mutual bodily interactions of audience and actor, dominant in a theatre experience.

Using Kattenbelt and Auslander's driving elements of both the aesthetic construction and phenomenal effect of intermedial form, Lavender suggests three models of the relation between digitality and Intermediality:²⁰

- Hierarchical (dominant / dominated), in which one medium or mediating effect is preeminent.
- 2. Inter-relational, but structured by (and opening up) spaces, gaps and 'fissures.'
- 3. Hybridised, and producing effective (affective) inscription through (new) mergings.

The first model is the position Auslander takes in *Liveness: Performance in a Mediatized Culture*, as he makes a distinction between the 'liveness' as a mediated sense of presence and the immediate temporal and physical shared presence in a performance. The second position was taken by Freda Chapple and Kattenbelt in their introduction to *Intermediality in Theatre and Performance*. It is characterised by the notion of the 'in-between', suggesting segregation and opposition, which Kattenbelt later problematises, preferring to argue that increasingly the inter-relation of media entails productive fusion rather than separation.

Further establishing his network model, Lavender prioritises the hybridised relation over the former two. He argues that the interrelated (hybridised) elements and phenomena inside (forming) the network, coincides with the circumstances needed for Power's auratic presence. This merging of performance, performer, audience, stage and the intermedial digital elements - as a series of interconnected nodes - into this coexisting network, results in a plurality of representation in a state of mutual presence:

²⁰ Bay-Cheng, *Mapping Intermediality in Performance*, 133.

The network is not (only) abstract and remote, but (also) inhabited and experienced. Productive doublings and connections abound. [...] coherence is produced in the face of fragmentation, gathering through plurality. Media are both distinct and synthesised. Bodies are involved and apart. An intermedial dramaturgy 'inscribes' presentation with mediatisation, form with feeling, and evokes the always-other in the here-and-now of performance.²¹

Lavender incorporates the three models of intermediality into his notion of 'network' in order to converge the inter-relations of digital media and performance. This is one of the consequences of the performative turn, where contradicting and separate notions of producer, product and perceiver, demanded exploring their connections when experiencing a shared sense of presence.

So far, we have explored the influences of technology and digital media on our culture, through the medium of postdramatic theatre. Now that we have established the intermediality in postdramatic theatre as a tool for staging a contradicting sense of 'liveness,' we can begin to examine this intermedial dramaturgy of presentation with mediatisation. To do so, I will investigate the role of performer and audience and their corporal engagement with this representational network, consisting of coexisting digital/binary and physical/material nodes.

²¹ Bay-Cheng, 134.

Chapter 2: (Syn)aesthesia

Although our lives have been profoundly transformed by our interactions with technology, its impact on our physical body – specially our brains – is mostly overlooked. A wide range of information we used to store in our brains are now offloaded into our devices; contacts, appointments, addresses, schedules and many more. In many ways, we have delegated what used to be done by one internal organ to a new external organ. This frees up brain's resources for other operations that matter more, or that technology can not quite perform yet. However, this not only effects our collective and individual lives, but also our very brains. Not just the way we think, perceive and communicate things, but the physical organs in our body. In a study conducted by University of California Irvine's Stark Lab, Gregory D. Clemenson, Caden M. Henningfield and Craig E. L. concluded that the spatial exploration of a virtual video game environment, can impact the size and connectivity of hippocampus – brain structure mostly related to forming arbitrary associations - and lead to an improvement in hippocampal-dependent memory.²² This means that unlike popular belief that videogames are likely to improve certain skills because of repetition of tasks and gained experience, what they actually do is changing the very brain structure related to those skills. Another mostly neglected aspect of our relationship with technology is our growing empathy towards this inanimate part of our lives. One could argue that the reason for this unusual quality of care and attention, spawns from the potential major inconvenience caused by losing these instrumental aspects of our daily lives. Yet it is evident that we have made such strong attachments to technology, that they have influenced the empathy and social circuits of our brains. Boxie was a robotic camera voiced by a 7-year-old boy built at MIT Media Lab, that had a goal of actively capturing a story about its environment and the people within it.

²² Gregory D. Clemenson, Caden M. Henningfield, and Craig E. L. Stark, "Improving Hippocampal Memory Through the Experience of a Rich Minecraft Environment," *Frontiers in Behavioral Neuroscience* 13 (2019), https://doi.org/10.3389/fnbeh.2019.00057.

Creators Alexander Reben and Joseph Paradiso wanted to "develop an autonomous method for capturing structured cinéma vérité style documentaries through an interactive robotic camera, which was used as a mobile physical agent to facilitate interaction and story gathering within a ubiquitous media framework."23 The result of using Boxie, was increase in the number of participants and their willingness to share intimate information. Another example is the argument presented by Kate Darling, Palash Nandy and Cynthia Breazeal at the 24th IEEE International Symposium on Robot and Human Interactive Communication; in their study they explore the role of empathy by examining how humans respond to a simple and tiny robotic object, a hexbugs, when asked to strike it. By measuring the effects of robot's characteristics and their level of engagement on people's hesitation to strike the robot, they evaluated the relationship between hesitation and people's trait empathy. Their results show that giving a robot movement, a name, and a personal backstory tends to increase its anthropomorphic effect, which can lead to an emotional connection with humans.²⁴ It is important to note that in both of these examples, the key element in providing this empathetic relationship is performativity. As our relationship with technology becomes stronger and its impact on our physical activity spreads, theorists are bound to be concerned about the extent of this influence. Two and a half thousand years ago, a similar concern about a new technology was shown by the Greek philosopher, Socrates: The negative impact of the widespread use of writing on people's minds. He believed that writing would, to quote his student Plato, "create forgetfulness in the learners' souls, because they will not use their memories; they will trust to the external written characters and not remember of themselves."²⁵ Socrates was right and written language did fundamentally change our brains;

²³ Alexander Reben and Joseph Paradiso, "A Mobile Interactive Robot for Gathering Structured Social Video," in *Proceedings of the 19th ACM International Conference on Multimedia - MM '11* (the 19th ACM international conference, Scottsdale, Arizona, USA: ACM Press, 2011), 1.

²⁴ Kate Darling, Palash Nandy, and Cynthia Breazeal, "Empathic Concern and the Effect of Stories in Human-Robot Interaction," 2015, 770–75, https://doi.org/10.1109/ROMAN.2015.7333675.

²⁵ Plato, Delphi Complete Works of Plato (Illustrated) (Delphi Classics, 2013), 1150.

yet it is also one of the foundations of everything human civilization has accomplished. After all, one of the defining characteristics of being human, is that our body is not the boundary of our reach, and our brain is not the boundary of our mind. However, if we are to prove Socrates wrong (again), we must tread carefully when it comes to our relationship with technology and how it can influence our culture and even our very bodies; fortunately, scholars in various fields of humanities have not neglected this concern.

2.1 Somatechnics, Post Humanism and Cyborg

One of the sociopolitical approaches towards this intertwined network of reciprocal inter-relations between human body and technology is the concept of somatechnics. As stated by Nikki Sullivan and Samantha Murray in their book Somatechnics: Queering the Technologisation of Bodies, the term 'somatechnics' - combining in one word the constitutive interaction of bodies (soma) and technologies (techne) - "offers a unique way into thinking the cultural milieu, particularly the politics of embodiment."²⁶ It explores how everchanging technologies affect our daily experience and understanding of questions of subjectivity and identity, of bodies and power. This concept is situated in a broad realm of feminist interdisciplinary inquiries into contemporary understandings of human embodiment and subjectivity. Post humanities are a part of those debates. And even though they form a diverse field, the ranging approaches within post humanities develop distinctive theories, methodologies, and ethics. In general, post humanities constitute a transdisciplinary field of knowledge production that addresses relations, and mutual constitution of, human embodiment and subjectivity with nature, culture, non-human animals, environment, technologies, and more. In post human and somatechnics debates, essence and boundaries of human embodiment and subjectivity are questioned, even to the degree of asking if and have

²⁶ Samantha Murray, Somatechnics: Queering the Technologisation of Bodies (Routledge, 2016), 13.

we ever been human? Thus, using these terms - whose meanings are deviating and occasionally contradictory – in performative studies, might complicate the nature of the debate. However, as Ralf Remshardt states in his introduction to a posthuman performance paradigm, these terms "can become an interpretive matrix [...] that resonates constructively with the multiplicity of intermedial performances and allows for a liberatory sensibility that can serve to reimagine the body, spectation, and performance." One approach of somatechnics in questioning the endorsed subjectivity and identity of bodies and power in Western culture, is through the ironic mythology of Donna Haraway's 'cyborg'. In her attempt to penetrate the intricate paradigm of Western dualisms that structure and entrap us, Haraway suggests adopting a fusion with technology; the end result of which, a cyborg, is "resolutely committed to partiality, irony, intimacy, and perversity; it is oppositional, utopian, and completely without innocence." Building on Haraway's utopian outcome of deploying the cyborg in our ontology and politics, Remshardt extends his theory of posthuman performance:

It may also give us our performance, to the degree that we extend Haraway's boundary-dissolving cyborg metaphor to the stubborn binaries of performance discourse: presence/absence; fiction/reality; performer/spectator; liveness/mediation. Deployed in performance theory – as for instance by Steve Dixon and others – posthumanism signals the new confluence of physical materiality with performative consciousness resulting from immersive virtual reality environments, telepresence, distributed performance and so on, which increasingly trouble the traditional notions of embodiment and presence.²⁹

²⁷ Bay-Cheng, Mapping Intermediality in Performance, 135.

²⁸ Donna Jeanne Haraway, *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 151.

²⁹ Bay-Cheng, Mapping Intermediality in Performance, 136.

The way Remshardt deploys the cyborg metaphor in performance theory is reminiscent of both Lavender's use of network model to reconstruct the interrelations between paradoxical and contradictory systems, protocols and operations of digital culture, and Kattenbelt's description of the use of Intermediality in performance. In addition, the questions and concerns of both somatechnics and post humanism are evocative of those of the performative turn. In all of these methods, the essential phenomenon in achieving this simultaneously shapeless form with no end or boundary, is the fusion of seemingly fundamentally opposite elements into co-existing nodes within a network. Using this paradigm, I will examine the (syn)aesthetic corporal relationship between the performer, the technology and the audience in an intermedial performance network. This provides a practical use of Lavender's network model that brings all the aforementioned theories of contradicting concepts into a fusion of coexisting structure.

2.2 Corporal Engagement in Performance

In her article 'Corporeal Literacy: New Modes of Embodied Interaction in Digital Culture', Maaike Bleeker uses the term 'corporal literacy' to describe theatrical practices that "create situations in which communication happens through several sensory modalities at once."³⁰ These practices choose to use bodies to perform perception in certain ways rather than others; more specifically, to examine how our bodies perceive and make sense. Here literacy, which has been mostly associated with the quality or state of language and text, refers to "aspects of the cultural condition or 'mind-set' called literacy." Through Walter Jackson Ong's insights, Bleeker uses corporal literacy to challenge the problematic opposition of mind/culture versus body/nature. Writing and print have caused profound

³⁰ Maaike Bleeker, "Corporeal Literacy: New Modes of Embodied Interaction in Digital Culture," n.d., 38. ³¹ Ibid, 39.

changes to the primordial oral mind, while technological advances in mediatisation, challenge these linear protocols and cognitive processing that reading and writing demand, so as not to return to nature, but to observe how these technologies gave rise to a new kind of self. A self that emerges as 'mind' in the effect of interaction of human bodies with the outside. Thus, the body becomes a sensory tool for realizing reality. Postdramatic theatre, being concerned with providing an experience of reality, uses the concept of 'corporeality' to achieve this. In his article 'A phenomenological account of the playing-body in avatar-based action games', in order to examine the player's relationship to the avatar, Paul Martin uses the notion of 'body as spectacle' in performance and dance theory. Adopting Antonin Artaud's 'hieroglyphs', Patrice Pavis' 'descriptive discourse,' Jane Desmond's 'kinesthetic semiotics,' John Martin's 'metakinesis,' and Susan Leigh Foster's draw on the concept of 'empathy,' Martin suggests that the spectator must also employ an internal cognitive movement, in order to respond to the performer's intention and understand what he/she is trying to convey:

Here, the imaginary movement performed by the audience is a 'means of perception'; that is, watching the dancer moving is not in itself the important perceptual act but only a first step in the excitement of 'muscular sympathy' that is the central perceptual act in dance appreciation. Anyone can see movement, but it is only the audience member who engages in inner mimicry that perceives movement through muscular sympathy.³²

In other words, the observer not only imagines him/herself performing the movements of the performer, but also internally experiences the sensation and emotion that motivated and originated those movements. Since this 'muscular sympathy' is provoked by a visual stimulus, but educes sensations in other senses, it can be viewed as a (syn)aesthetic apparatus of performance.

³² Paul Martin, "A Phenomenological Account of the Playing- Body in Avatar-Based Action Games," n.d., 15.

In her book (Syn) Aesthetics: Redefining Visceral Performance, Josephine Machon defines (syn)aesthetics as a derivative of 'synaesthesia' (the Greek syn meaning 'together' and aesthesis, meaning 'sensation' or 'perception').³³ It is also a medical term describing a cognitive and neurological condition in which, when one sense is stimulated, it automatically and simultaneously causes a stimulation in one or more other senses. An individual may perceive colours, tangible shapes or words for certain sounds, tastes or a sensation perceived by another part of the body. In addition, Machon employs "within this portmanteau word, the definition of 'aesthetics' as the subjective creation, experience and criticism of artistic practice ... [to] encompasses both a fused sensory perceptual experience and a fused and sensate approach to artistic practice and analysis." ³⁴ This term provides a discourse that defines simultaneously the impulse and processes of production and the subsequent appreciation strategies which incorporate reception and interpretation. This paradigm allows specific recreation possibilities of sensations and consequently logical concepts through visual, physical, verbal, aural, tactile, haptic and olfactory means. "Synaesthesia defines a human capacity for perception which shifts between realms; between the sensual and intellectual; between the literal and lateral."35 When in Postdramatic theatre - and postmodern art in general - the experience is of more value and attention, in comparison to text, meaning and ideology, an alternative method of appreciation of the aesthetics is predominant. A method in which "a quality of perception is activated and felt, affecting both perception and cognition in the immediate moment, the traces of which are rekindled in the corporeal memory of any subsequent recall and analysis."³⁶ Producing a quality of perception, simulated by the fusion of senses through physical experience, is an important dramaturgical tool, linked to performativity, liveness and use of agency in postdramatic theatre. The

³³ Josephine Machon, (Syn) Aesthetics: Redefining Visceral Performance, 2011, 13.

³⁴ Ibid. 14.

³⁵ Machon, (Syn) Aesthetics, 2011, 15.

³⁶ Machon, 16.

argument builds upon the notion of intuition overpowering logic in terms of speed, accuracy and authenticity. Using Cytowic's words, Machon argues:

The experiential nature of synaesthesia that evidences 'the force of intuitive knowledge' is crucial in affirming how immediate, personal experience 'yields a more satisfying understanding than analysing what something "means" and accepts, celebrates even, 'other kinds of knowing.'³⁷

Here, Machon values experience over (re)presentation of experience; and instead of literal participation of the audience in an experience, she recommends (syn)aesthetics, much like Martin's 'muscular sympathy,' as a way of conveying experience through body. While the idea of nonverbal representation has been the dominant means of perception in postdramatic theatre, the emergence of digital media, specifically simulations and virtual reality, have included a more physical and bodily engagement of the audience in such performances.

These corporal engagements – in contrast to inactive engagement of 'muscular sympathy' – are mostly related to a certain form of (syn)aesthetics called 'kinesthetics.'

In her book *Syn-Aesthesics of Digital Art*, Katharina Gsöllpointner describes the term 'Kinesthesia' as "a sense mediated by receptors located in muscles, tendons, and joints and stimulated by bodily movements and tensions" She assumes this term with regards to synesthesia as the merging of the senses, to accumulate her ideas of integration of sensory, semantic and social perception:

Kinesthesia therefore serves as a good example of the multimodal constitution of all sensory domains. It can be observed as overall existent across all other sensory modalities – no matter if vision, audio, smell, taste, touch or the proprioceptive senses,

³⁷ Machon, 20.

³⁸ Katharina Gsöllpointner, "Syn-Aesthetics of Digital Art," in *Digital SynesthesiaA Model for the Aesthetics of Digital Art* (Berlin, Boston: De Gruyter, 2016), 13, https://doi.org/10.1515/9783110459937-003.

kinesthetic features of motion, direction, position, speed, rhythm, acceleration etc. can be found in seeing, hearing, smelling, tasting, touching and feeling.³⁹

What Gsöllpointner suggests, is that through actual physical activity, changes in cognitive and perceptive qualities of the brain can occur. This application opens a new area of 'means of perception,' in regard to the basis of digital art aesthetics; which have always, and from the very beginning onward, contained fundamental features of motion in terms of the alteration of space and time for an object or body. The VR technology has been developed specifically to challenge this notion of perception, through transforming the audience from a passive spectator, to an active participant in the centre of the presented world, who can choose where to go, what to engage and how to change it. When the audience becomes part of the space, part of the staging, and part of the performance — which recommended by the network model as well — a fundamental shift in spatial theatrical relations is evident.

In his article 'Spatiality', Birgit Wiens suggests, since Peter Brook's seminal definition of the empty space as a landmark in the ensuing debate, "performance scholars have recognized the importance of space and spatial relationships in reconceptualizing theatre as a performative phenomenon, and theorists have developed a more precise vocabulary to discuss the multiple dimensions of the way space figures in performance." These discussions, revolve around the architectural conditions of the theatre, set design and scenography, sociocultural context and space as a dramatic tool. In recent years, however, new spatial models have revised the conceptions of theatrical space. Through transcoding, digital media and global telecommunication networks, have led to the increase of interconnections - 'live' and 'real-time' contact between spatially and geographically separate individuals - which in turn, challenge the concepts of, and experiences within, actual

³⁹ Ibid, 18.

⁴⁰ Bay-Cheng, *Mapping Intermediality in Performance*, 91.

and virtual space."⁴¹ By obtaining these technological advancements of virtual space and telecommunication, postdramatic theatre morphs its performative and spatial notions into a new type of stage; the 'intermedial stage.' To emphasize on the importance of this 'discursive instrument' Wiens uses Chiel Kattenbelt's words:

If the expression "all the world is a stage" is (or seems to be) no longer just a metaphor, but on the contrary a characteristic feature of our mediatized culture, then we really do need a stage on which the staging of life can be staged in such a way that it can be deconstructed and made visible again.⁴²

Intermedial stage uses the contradictions of live broadcast with auratic presence, and online immediacy with direct bodily interactions, to not only simulate the advantages and disadvantages of our cyborg-like integration with technology, but also to indicate that 'stage' is no longer constrained simply to the radius of the here and now. This discrepancy with some of the basic premises of the Theatre Studies, specifically 'corporeal co-presence', has led scholars to supplementing the subcategory of 'medial space', "the digitally generated spaces in which theatre is composed" in order to resolve theoretical complications of this paradigm shift. Wiens disregards this separation of so-called spatial categories and deems the question of intermedial space in our mediatizing culture, unresolved. She goes on to suggest:

This means that media spaces have to be examined not only in terms of their semiotic and phenomenological characteristics, but also in terms of their technological ramifications and culture-specific usage. This affects the media tools as well as the software that is being implemented and, as far as this can be analysed, the technological infrastructure.⁴⁴

⁴¹ Bay-Cheng, 91.

⁴² Ibid. 94.

⁴³ Ibid, 95.

⁴⁴ Ibid. 96.

Wiens' concern with 'medial space' stems from her hierarchical model of intermediality, where she finds the dominance of technology over performativity - with regards to space - problematic. However, in the hybridised approach of intermediality, the definition, impact and role of 'medial space' is coherent with its performative counterpart. In addition, the interactivity of simulations and virtual reality, develops the need of creating space from scratch. As Barbara Bolt suggests in her book *Carnal Knowledge*, "in simulated environments, we are returned to the known and the familiar rather than being offered new perceptions or new ways of perceiving." It can be assumed that the experience of simulated reality is not as much a means of creating new or abstract ideas of 'being', but rather technological re-coding of our physical reality. Furthermore, as it was argued earlier, the idea of transferring the information received by the mind, through bodily and spatial interactions, into a digital and binary language will lead to a shift in re-discovering the perception of information.

Regarding the accelerative rate of technological advances of digital media, and widespread accessibility and co-dependency of such a medium in our lives, it is not implausible to assume that one day, the production, process and transmission of information will be considered solely a digitally mediatized phenomenon. However, as post humanism and somatechnics scholars suggest, such transformation can be seen as another step in the co-evolution of human and technology. This is achieved via metamorphosis of our contradicting ideas, concepts, beliefs and even experiences into a network of coexisting nodes of being. One example of this network is experienced in postdramatic theatre. Through muscular sympathy, (syn)aesthetic and corporal perceptions, auratic presence, and the spatial turn in stage definitions, the role of the spectator evolves from a mental receiver of (re)presentational

⁴⁵ Estelle Barrett and Barbara Bolt, *Carnal Knowledge: Towards a "New Materialism" Through the Arts* (I.B.Tauris, 2013), 9.

information, into an active sensory perceiver node inside a network, or in this case a performance. In the following section I will discuss these applications through analysing the dramaturgical choices made in my case studies.

Chapter 3: Case Studies

Dramaturgy is the process of analyzing, evaluating and contemplating on the various elements present in a performance in order to give a comprehensive plan on what effects these choices and element will have on the spectator. By presenting these findings, dramaturge and the writer/designer/director/actor will take part in a communicative collaboration of ideas to achieve the desired outcome of every detail of the performance in the mind of the majority of the audience. Corresponding to Sigrid Merx and Liesbeth Groot Nibbelink's use of dramaturgy, as indicated in their essay 'Presence and Perception: Analyzing Intermediality in Performance,' when speaking of dramaturgy, we speak of the cohesion of different theatrical means, organized in time and space, and how in their interaction produce meaning for the spectator and consequently 'make sense.'46 In other words, it is to determine what does a choice or element 'mean' and what is 'experienced' by it? This approach forms a triad, with flow of information in between: 'Composition' - how the performance is presented - 'spectator,' and 'context' - how the world outside the performance is addressed/represented. Accordingly, a dramaturgical analysis consists of interrogating composition, context, and spectatorial positioning of the work at hand. Using this method to analyze my case studies thus, I am able to take into consideration the role digital media plays in the creation of meaning - or the way it shapes the overall dramaturgical effect of each case -, as well as the way it simulates (syn)aesthetic corporal perceptions in the spectators, as it is being staged as an auratic presence. Merx and Nibbelink argue that dramaturgical analysis of intermedial work requires focus on composition as well as spectatorial address; since intermedial performance quires a uniquely flexible position of its audience. It is exactly this flexible positioning of the audience that is of interest regarding the way digital media function as a performative tool.

⁴⁶ Bay-Cheng, Mapping Intermediality in Performance, 218.

3.1 SUPERHOT

My first case study is the videogame SUPERHOT, an independent first-person shooter game, published in 2016 by a company of the same name.⁴⁷ Due to its design, narrative and articulation, it is deemed by many critics as one of the most innovative first-person shooter games ever. 48 At first glance, it is obvious that this is not an ordinary shooter game, since not only the design is very basic – in contrast to the 'as real as possible' trend of the market - but also gameplay lacks a definite story or dramatized motives; it is simply eliminating red enemies. However, SUPERHOT introduces one simple element to the first-person shooter experience: 'Time moves only when you move.' The main challenge of the game is that time is static, and moves forward only when the avatar moves. Such a fundamental difference with what one experiences in life and even other games is the most important element of spectatorial address of the game. This is more palpable in the Virtual Reality version of the game, which will be the object of my analysis, as it permits and requires the audience to control time with their corporal movements. This is not just an interesting and innovative way of challenging the conventional gameplay of first-person shooters, but rather serves as a dramaturgical choice, since it coincides with the narrative structure as well. Although the game itself suggests it has no plot nor reason, the narrative structure of the game is based on meta-reference experience. In both versions of the game, information regarding the narrative progression of the game are presented through a simulated environment similar to the platform the player is using to play the game – a chatroom in normal version and a VR set in VR version. This is to further absorb the audience in an individual experience. As if this is not a game they are playing, but rather another moment in their lives. This is achieved through various small details in tasks done by the audience. For example, the normal version

⁴⁷ "SUPERHOT - Time Moves Only When You Move," SUPERHOT, accessed October 30, 2018, https://superhotgame.com/.

⁴⁸ https://www.terminals.io/product?pid=123&news_id=80

starts with a chat conversation where your college recommends to you a game called SUPERHOT; as it were likely to happen in your real life that someone mentions the game to you. And the VR version has many instances where you have to take off a simulated VR headset in the game and put it back on, as you did when you started the game. These details are to put the audience in a state of limbo between what is real and what is simulated in the game. This becomes more interesting given the fact that the visual design of the game is so basic and nonlife-like that this belief of 'real world as a simulation' stems purely from the way you interact with the game. This effect is defined by video game theorist Ian Bogost as 'procedural rhetoric.' He describes this term in his book Persuasive Games: The Expressive Power of Videogames as "a general name for the practice of authoring arguments through processes. [...] Arguments are made not through the construction of words or images, but through the authorship of rules of behavior, the construction of dynamic models."⁴⁹ The dramaturgical choice of using basic world design, combined with an environment of contradicting instances of what is simulated and what is real, puts the audience in a position to better understand the game's contextual message. With further progression in the narrative, the game itself starts talking to the audience; and while the conversation cannot be influenced by the player, the narrative goes so far as to keep the feel of the conversation as real as possible. SUPERHOT threatens the audience to leave the game and not to continue, and by taking over the control of the game system, and even the player's personal computer (your attempts to pause the game fail), it makes a rather convincing argument; to the point where the player has to stop playing the game and promise never to continue again. The narrative of the game begins precisely from this moment on, because as it is revealed further, the goal of the game is a confronting journey of self-discovery, and only ones who really want to and dare can continue. If one chooses to continue playing the game, SUPERHOT challenges the

⁴⁹ Ian Bogost, Persuasive Games: The Expressive Power of Videogames (MIT Press, 2010), 28–29.

player's beliefs over choices, individual identity, personal and cultural differences, the role of the system, the nature of the mind and its modes of action, through a journey of surviving waves of red enemies while controlling time with the player's movement.



Figure 1: SUPERHOT, *SUPERHOT* (2016). The audience interacts with the game through a platform similar to the one they are using to play it. In this screenshot of the PC version, the audience is having a chat conversation with the game about its nature. An example of self-reflective elements of the game.

The game's arguments are not only conveyed through on-screen messages or audiovisual representations, but more importantly the kinesthetic and corporal sensations. While the game fills the player's mind with doubt of being in a simulation or not, it provides the power of controlling time with movement. These two combined put the player in a state of open-mindedness towards their state of being. This new and strange sensation could be one example of the potential that Barbara Bolt saw in VR technology as a new way of perceiving. Recognizing this kinesthetic applications of VR in *SUPERHOT* in achieving a new way of perceiving, it can be argued that a physical, bodily control over something universally agreed upon as the passage of time, challenges our attitude towards how mind works in relation to the body it inhabits and controls, and the environment it flourishes in.



Figure 2: SUPERHOT, *SUPERHOT* (2016). The basic design of the game is in contrast with its feel of a real experience. The gameplay consists of killing (via punching, shooting or throwing stuff at) red enemies and dodging their attacks, whilst your movements control the passage of time. Source: https://www.theverge.com/2016/12/7/13859038/oculus-touch-vr-launch-games-review

This experience of challenged way of perception is also reflected in the narrative aspect of *SUPERHOT*, where it emphasizes that mind and body are part of a software/hardware paradigm in control of a system. A system the game encourages us to confront, to understand and be a part of. In the end of the game, the player is ordered to kill themselves; to let go of the body they inhabit and be part of the system. When the players try to do as commanded, the game doesn't allow it and simply states that inhabiting this idea itself is enough to feel connected with the system. The act of moving one's hand to the head in order to shoot oneself, after hours of using the same muscles, gestures and movements to kill red enemies, is the kinesthetic equivalent of accepting expendability of one's body. Keeping in mind Lavender's network model in digital media and Remshardt's cyborg metaphor deployed in performance theory, we can observe the interconnectedness of the dramaturgical choices regarding audio-visual elements, narrative clues, procedural rhetoric, kinesthetics and corporal sensations in achieving a new way of perceiving in *SUPERHOT*.

3.2 The Automated Sniper

My second case study is the performance *The Automated Sniper*, directed by Julian Hetzel and premiered in 2017 at Something Raw Festival, Frascati Theater in Amsterdam.⁵⁰ What makes the prizewinning performance *The Automated Sniper*, winner of the VSCD Mime Award 2017 noteworthy, is that it presents "the meaning of war physically tangible and also delivers an extraordinary ode to the (survival) power and the necessity of Art"51 as written in the report of the jury of this award. The Automated Sniper, as a prime example of postdramatic theatre, has no narrative structure but a progression in theme and premise. This performative installation presents a stage with features indicating a futuristic gaming room, with both the control room and the execution room present. At the beginning, the visible space appears to be inside and closed off. Upstage and stage right we see a massive white wall, about 2.5 meters high, with a white floor as well. This architectural decoration resembles half a box, but since the box is open on the side of the audience, they become part of the performance space. Stage left, outside of the gaming zone, there is a big door leading to another room, which is invisible to the audience, but of which, we later on observe a virtual existence projected on the white wall. The stage is filled with random objects with no apparent purpose in the performance – at first – and two male actors walk elegantly between the objects. The actors go on to create 'art installations' using these items, and present their manifesto as artists. This is the first part of the six consecutive parts of the play, designed in a way that the performance itself be perceived as a video game, in which, the audience is the protagonist and the actors are the enemy. An invisible narrator calmly instructs some voluntary participants to gain control of a paintball gun hanging from the ceiling, from the back staged 'game room' area, using a joystick and monitor. The three participants are told to

⁵⁰ "The Automated Sniper," *Julian Hetzel* (blog), accessed August 25, 2019, http://julian-hetzel.com/projects/the-automated-sniper/.

^{51 &}quot;The Automated Sniper."

shoot at the white wall, destroy the actors' installations, and then the actors themselves with paintballs. Through the spatial rules of *The Automated Sniper* the audience is introduced and embraced to an environment of virtual and safe entertainment, in which they are invited to participate, via a live female voice-over. However, each part (level) makes the performance more physical, more cynical and more Kafkaesque. The tension of *The Automated Sniper* culminates in the penultimate part or level, where a professional gamer from Iraq, named Saeed, gaining control over the paintball gun via Skype, unleashes hell on the actors and the stage. At this point, images of a real droid bombing are dissolved in Saeed's image in order to emphasize the correlations of gaming and warfare. The audience, previously being in position of the controller, watches from the perspective of the sniper, as if in that moment, the box is not a place of game execution, but the control room, and the audience is simultaneously carrying out and witnessing the violence.



Figure 3: Frascati Theater Amsterdam in collaboration with ism&heit, *The Automated Sniper* (2017). By the time the third participant goes backstage to gain control of the gun, the white stage, the artworks and the actors are covered with paint; preparing the audience for a consequential end. Source: https://www.monty.be/nl/programma/automatedsniper

In this performance, Hetzel suggests that violence in a safe environment, such as gaming or a theatre stage, can be a reminder of both the violent culture we live in and how ignorant we have become of real violence in the world. While Skyping with Saeed, we understand that, for him, gaming is a way of escaping the dangers of war, which ironically, advocates how such simulations of the same violence can have different outcomes. But in the final stage, as his image freezes and is replaced by actual footage of remote-controlled missiles, the audience is struck by the inevitability of the ignorance caused by this detachment, which is the nature of technology, both in our daily lives and modern warfare.

To examine the kinesthetic applications of digital media/technology in *The Automated* Sniper, we must first put the audience in three main categories. First group are the three members of the audience chosen to go to the gaming room and take control of the gun. Second, are the audience members who volunteered to participate but were not chosen; and third are the audience members who were not willing to participate and indulged in being mere spectators. Obviously, the latter two groups form a spectrum since the reasoning behind their choice is far too complex to categories. The first group experienced literal corporal engagement with the performance. They were instructed to perform tasks, were praised for their success and presented as vital elements of the show. Ignoring the minor instances of participants who took the stage to express their own opinions about the performance's approach – as Hetzel mentioned some examples in a private Q&A meeting in Utrecht University in autumn of 2018 – the majority of the participants had the same reactions: They were nervous and had trouble controlling the device, they were mostly hesitant in performing the tasks and needed to be reassured by the narrator that no one will be harmed. Typically, these reactions would have decreased by the final participant, since pressure of anticipation is lessened after multiple episodes; however, the escalating manner of level/part progressions, foreshowed that the final part/level would be the most intense part, since the participant

would have to shoot the living human actors. This resulted in the last part to be the most intense and the third participants showed the most hesitance and least accuracy in hitting their targets. All of the dramaturgical choices, from the closed off gaming room and the reassuring female instructor, to the white wall and use of projection technology, generates a corporal experience for the participants as both an enforcer of violence, and a spectacle for the other audience members. The important thing to recognize here is that this double experience is presented through digital technology of screen projection. The participant cannot see their targets physically, and they do not have eyes of the audience on them, nor can see them at all. Nonetheless, the reality of their actions and their witnesses are acknowledged. By not sharing this space, it gives more intensity to its liveness. This indirect experience of reality is the key factor in drone and virtual warfare; and Hetzel creates this environment to demonstrate the contradicting outcomes of using this technology. The second group of participants, who were interested in having control over the paintball gun but were not given the chance to, mostly experience what can be called a vicarious participation. Not only they imagine experiencing part of the anxiety and pressure they would have endured if chosen, but they imagine themselves holding the controller and make decisions that do not necessarily coincide with what happens on stage. This is an example of Paul Martin's notion of 'muscular sympathy,' where the corporal experiences of a participant in the control room – which is only visible through a projection – is experienced by other members of the audience in their unique way. Hetzel uses this collective participation and corporal involvement of his audience, to create a bond with Saeed. As the audience has vicariously (and for the case of the first group literally) experienced controlling the gun, the projected image of Saeed does not feel as a window to another continent, but exactly here, as one other audience. Thus, Saeed's digital presence, is perceived as an auratic presence. And the final impact of this state of corporal identification with the person controlling the gun, is when Saeed, being a pro video gamer, flawlessly and

brutally covers the stage with paint bullets. The performance has been building up to this moment, when a middle eastern video gamer (artist) attacks the western art scene, while the audience members are emotionally, sensually and kinesthetically experience this outrage. Being the least engaging, the third group would not experience the kinesthetics effects of the performance as much as the first two; however, after the final level, another sub textual message of the performance is uncovered; which is the decrease of empathy as a result of using digital media and virtual technology in warfare. The juxtaposed image of Saeed on actual droid bombing footage is the final node on this network of audiovisual elements that have put the audience in a physical state of engagement with violence; end result of which is their incapability of stopping it. Even though they were not physically engaged as much as the first two groups, the third group participate in feeling like an idle bystander as well, if not more. Since they chose to be mere spectators, they experience the former levels as bystanders, and by the end of the performance, their choice of neglect towards inflicted violence on stage, has transformed into a feeling of indifference and neglect in the real world. This is another example of using meta-reference to convey a new way of perception to the audience. The dramaturgical choices in *The Automated Sniper* provide an environment for the audience to engage corporally with digital technology of the performance on various levels and forms, and eventually demonstrates that the same procedure is used to numb us into ignorance and neglect towards international violence.

Conclusion

Manovich's vision of cultural merging with digital new media via 'transcoding' is reaching a debatable reality. So is Haraway's metaphor of 'cyborg' in a cultural sense. We are becoming one with our technological devices and reform our reality into a network of intertwined and interrelated nodes of being human and machine. This has not been just another consequence of the advent of digital media, but rather another step in a long line of succession in our race's history. Just as writing, print, photography and moving pictures have reshaped our understanding of the world. Investigating this cultural shift through theatre studies discourses, I was able to find applications of this new model in postdramatic performance theory and practice. Intermediality, post humanism, (syn)aesthetics, corporality and spatial staging were all major factors in how digital media is used in theatre, and how it has changed the way it can be used as a (re)presentative tool to convey information. The fundamental principle in integrating these factors is the coherence produced in the face of fragmentation, gathering through plurality.

Through this research I have created a theoretical framework of digital media and (syn)aesthetic applications in performance studies and analyzed two case studies of using digital media in performative art work, to showcase this effect of binary paradigm of technology on cultural production and perception. Through dramaturgical analysis of case studies, using my developed theoretical framework, I found that the binary nature of digital media invites the pluralities, dualities and opposing contradictions inherent in their terminology and conception to form a network of interconnected nodes. When this interconnectedness is experienced through corporal engagement and (syn)aesthetics, the audience become a 'node' within this network. The contradicting nature of a node, which simultaneously forms the entirety of network and fails to exist without it, conveys new perceptions and 'other kinds of knowing' that are entirely different from regular audiovisual

or linguistic representations, we are accustomed to. This was evident in the way dramaturgical choices in both case studies tends to build an environment of complete corporal emergence and engagement of audience within their performative network. Thus, answering my research question: How can digital media be used in performative art - through the (syn)aesthetics applications of the body – to create new perceptions on physical reality?

In order to develop this research, I propose that further attention is required regarding the applications of digital media, specifically virtual and augmented reality, in social studies. Even though my research was on performative influences on the audience, the end result suggests that they can be used in other contexts, particularly since social media platforms are used regularly by billions. Performance theory is already used in new media science as a way of manipulating the engagement of the users. If these new ways of perception and corporal influences can be used through other performative outlets – news agencies, apps, election polls, etc. – it is noteworthy to analyze how they are used, and whether we should be concerned about their consequences.

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