Sydney College of the Arts

The University of Sydney

Bachelor of Visual Arts (Honours)

2017

BACHELOR OF VISUAL ARTS RESEARCH PAPER

# 'NO SCIENTIFIC ACCOUNT ESCAPES BEING STORY-LADEN': TECHNOLOGY, CULTURE, AND EXPERIENCE IN THE POSTINTERNET

by

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**Photomedia** 

October 2017

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## Foreword

I would like to thank David Haines, my supervisor this year, for his guidance and especially his patience while I sent him a brand new essay plan roughly once a week during the July-August period... Enormous thanks to David for helping me corral all my thoughts into order. Every meeting has been a pleasure.

To Oliver Watts, my professor for the theory elective *Theorising Street Art* in 2015, and Julie Rrap, my professor for the studio elective *Image/Object in Photomedia* in 2016 — those classes set something alight inside me intellectually and it has been my privilege to channel that inspiration this year.

Finally, I owe so many thanks to my parents. For exposing me to science and technology so early, for always trusting me to use it the way that was best for me; for modelling determination, and fierceness, and fairness, and kindness. Thank you.

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#### Introduction

My practice investigates relationships between technology, culture, and experience. I am particularly interested in paradigm shifts resulting from technological advances. Rather than seeking to produce universal models for understanding those shifts, I hope instead to contribute to the ever-expanding cultural and scientific tapestry of reconceptualisations of the physical world in response to techno-cultural shifts in the way we experience ourselves and our surroundings. I offer these contributions from my perspective as a digital user and participant in a global culture saturated by digital information technologies.

In this research paper I use the term *postinternet* to describe this global culture and the phenomena derived from it. Postinternet art and dialogues examine the contextual pervasiveness of the internet and its associated technologies (including the technologies that enable the internet, for example digital computing, and technologies enabled by the internet, for example social media).<sup>2</sup> They are described as *post*- internet not so as to indicate that their perspectives postdate the internet, but rather to indicate that their perspectives postdate the widespread adoption of cyber information technologies into everyday life for many societies worldwide.

In my first chapter, I demonstrate the fluidity of the Western notion of physical space by offering a brief overview of the reconceptualisations it underwent from the dawn of the modern through the postmodern, including contributions by Newton, Einstein, Harvey, Lefebvre, and Bordieu. I place special focus on telecommunications as technologies that revolutionised our understandings of the physical world by virtualising elements of it.

Chapter two explores *remix*, a technique central to my practice. By contextualising remix within its techno-cultural history, and studying postinternet remix artworks including my own series *Could Anything Be Sweeter Than Desire in Chains / Please God No French Manicures* (2016) and *Involuntary Sculptures* (2016–), and works by Sheida Soleimani and

<sup>&</sup>lt;sup>1</sup> *Technoculture* is not defined in standard dictionaries but has some popularity in academia. It refers to the interactions between, and politics of, technology and culture. See: Penley, Constance, and Andrew Ross, eds. *Technoculture*. Vol. 3. U of Minnesota Press, 1991.

<sup>&</sup>lt;sup>2</sup> Wallace, Ian. "What Is Post-Internet Art? Understanding the Revolutionary New Art Movement." *ArtSpace* (2014). Published electronically March 18 2014. http://www.artspace.com/magazine/interviews\_features/post\_internet\_art.

Petra Cortright, I illustrate my experience of remix as a powerful technique for refiguring cultural paradigms through information technologies.

In the studio, I use a combination of manual and computational remix techniques to produce *photomanipulation* works that reflect my experiences within the postinternet era. *Photomanipulation* techniques modify or transform a photograph, resulting in images that could not have been constructed using only a traditional camera.<sup>3</sup> Manual describes processes performed by humans, and *computational* describes processes executed algorithmically.<sup>4 5</sup> I use the term *computational photomanipulation* to identify visuals that could not have been constructed without intervention by computational processes. For example, I composed my Involuntary sculptures (2016–), Caesura (2016), Plots (2016–2017), and Elevated landscapes (2017) series by passing digital photos through virtual image-manipulating machines I built using code segments and app templates posted publicly to online programming forums. Works created using those machines carry identifying traces of the computer's hand (jpeg artefacts: pixelation) as well as identifying traces of the photographic artist's hand that remain visible despite manipulation (shutter speed; the camera's physical location). All of those traces signify virtual mediations of physical bodies and spaces. As a photomedia artist, many of my investigations intersect with photographic theory issues, notably photographic "truth" and indexicality.6

Computational photography describes computer imaging processes which enhance or extend the capabilities of traditional digital photography. Accomplished computer scientist and computational photography specialist Shree K. Nayar explains: 'a computational camera uses novel optics to capture a coded image and a computational module to decode the captured image to produce new types of visual information'. I will discuss computational

<sup>&</sup>lt;sup>3</sup> *Photomanipulation* functions as both a noun and an adjective. See: Ingledew, John. "Manipulation." Chap. 2 In *Photography*. London: Laurence King Publishing, 2005.

<sup>&</sup>lt;sup>4</sup> "Computation." Merriam-Webster.com. Accessed September 22, 2017. https://www.merriam-webster.com/dictionary/computation.

<sup>&</sup>lt;sup>5</sup> The same definition explains that computers are devices able to receive, affect, and reproduce information.

<sup>&</sup>lt;sup>6</sup> I am referring to photography's "truth claim"—the 'truth claim of traditional photography (and to some extent cinematography) which has become identified with Charles Peirce's term "indexicality" as discussed in Gunning, Tom. "What's the Point of an Index? or, Faking Photographs." *Nordicom Review* 25, no. 1-2 (2004): 39-50.

<sup>&</sup>lt;sup>7</sup> Zhou, Changyin, and Shree K. Nayar. "Computational Cameras: Convergence of Optics and Processing." *IEEE Transactions on Image Processing* 20, no. 12 (2011): 3322-40.

<sup>&</sup>lt;sup>8</sup> Nayar, Shree K. "Computational Cameras: Redefining the Image." *Computer* 39, no. 8 (2006): 30-38.

photography, its cultural implications, and my responses to those implications further in the third chapter of this essay, which considers virtual and algorithmic agency in the postinternet.

I conclude this paper by discussing why my Honours investigations represent a meaningful step forwards for my practice. The diversity of lenses through which I examine my practice—ranging from historical to visual analysis, personal speculation, humour, politics, and feminist thought—reflects not only the shape of my practice, which sees me producing many artworks within a handful of series exploring diverse issues at any given time. It also mirrors the blossoming network of information exchange in the postinternet: the cloud, in its vastness, ceaselessness, and simultaneity.

# 1. Science and culture in collaborative production

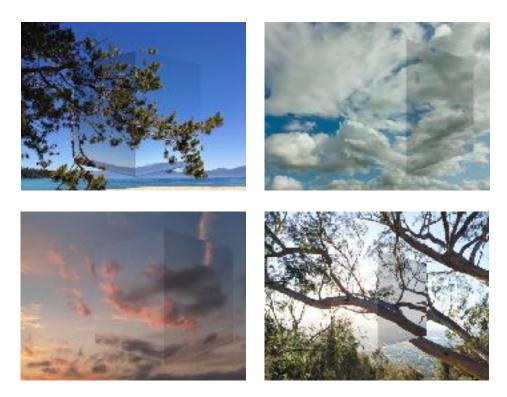


Figure 1. Truth cubes, 2014. Digital images, series of 16. 75 x 56 cm, 300dpi.

Space is defined as 'a boundless three-dimensional extent in which objects and events occur and have relative position and direction'. Space becomes *place* as a result of social processes that humanise space by assigning it subjective value; that 'particularise' it relative to other space. We experience space physically through our *bodies*. Bodies are a type of place defined as a 'mass of matter distinct from other masses,' or the 'organised physical substance of' a thing or organism. 11

I first began investigating ways in which a postinternet lens impacts our understandings of physical space through my photo-manipulated *Truth cubes* (2014) series, which see various "natural" spaces reflected in the surfaces of a digitally rendered cube floating within each image. Crisp, saturated, and tonally balanced, all the images carry coded signifiers of digital photography. The believable textures and depths of each space are exposed as only illusionary, however, when stretched across the impossibly smooth surfaces

<sup>&</sup>lt;sup>9</sup> Merriam Webster, "Space." *Merriam-Webster.com*. Accessed September 7, 2017. https://www.merriam-webster.com/dictionary/space.

<sup>&</sup>lt;sup>10</sup> Gieryn, Thomas F. "A Space for Place in Sociology." *Annual Review of Sociology* 26 (2000): 463-96. http://www.jstor.org/stable/223453.

<sup>&</sup>lt;sup>11</sup> Merriam Webster, "Body." *Merriam-Webster.com*. Accessed September 7, 2017. https://www.merriam-webster.com/dictionary/body.

of each weightless cube. Each cube interrupts the illusion of photographic truth within the image and, in doing so, challenges the modern Western perception of photography as means of technological representational victory over "natural" space. A series totalling sixteen images, in their proliferation and diversity the works communicate my feeling that this erosion of the photographic truth claim due to virtual mediation is pervasive within global postinternet culture. The series marked my first efforts to create visual representations of postinternet reconceptualisations of space and place. Although I lacked the topical knowledge to articulate that at the time, I alluded to it in my artist's statement:

'I chose natural spaces for my images because I am interested in the theoretical implications of the abilities afforded to us by digital technologies to capture and alter, infinitely and even effortlessly, something we have so long believed to be so powerful.'12

In that artist's statement, my focus oscillated between technology's impact upon our notions of nature, and technology's impact upon our notions of space. I felt as though the works alluded to the transformation of both of those notions, but lacked the tools to articulate why, or what kind of relationship existed between nature and space, if their conceptualisations were both subject to technology's influence.

I will identify that relationship, and others between space, place, and body as notions shaped in part by technology, in this chapter. First, I will present a condensed history of the conceptualisation of space, outlining seminal shifts and illustrating how they complement advances in technology and culture. I will then offer an overview of how telecommunications technologies prompted reconceptualisations of space as a sociocultural as well as physical experience, and how notions of place and body subsequently advanced.

In the West, the classical conceptualisation of space reigned from ancient Greece until the seventeenth century.<sup>13</sup> In the seventeenth century, following the Renaissance popularity of revisiting and responding to classical philosophies, space emerged for the first time as a central and hotly contested issue in western European philosophy.<sup>14</sup> Gottfried Leibniz and

<sup>&</sup>lt;sup>12</sup> From my artist's statement for *Truth cubes*, June 2014.

<sup>&</sup>lt;sup>13</sup> Bentley, Arthur F. "The Factual Space and Time of Behavior." *The Journal of Philosophy* 38, no. 18 (1941): 477-85. doi:10.2307/2017117. p. 477.

<sup>&</sup>lt;sup>14</sup> Bentley, "The Factual Space and Time of Behavior." p. 477

Isaac Newton presented competing theories of space, Leibniz positing that space is *relational* (merely a phenomenon imposed upon objects) while Newton held that space is *absolute* (an object itself, 'without regard to anything external'). The Newtonian theory of absolute space remained the dominant spatial theory in philosophy and the natural sciences until the eighteenth century when philosophy accepted the Kantian notion of space as a sensibility that is subjective and integral to all human experience, rather than a concept understood through the senses alone. The Mainstream western philosophical and scientific conceptualisations of space remained divided until the turn of the 20th century, when Albert Einstein's theories of relativity engendered widespread conceptual reconstructions of space and time, united by Einstein as *spacetime*, 'in terms of relativity for science and realism for philosophy'. The space is a spacetime, in terms of relativity for science and realism for philosophy'.

Political scientist Ronald Inglehart identifies the design of grand theories such as the aforementioned to be to 'account for everything that has happened in the physical world from the birth of the universe to the present moment'. <sup>19</sup> It follows from this that theorists must be sensitive to cultural and technological shifts, and indeed every paradigm shift in the way we understand space can be linked to the cultural climate and technologies of its era. Classical notions of space including those in Aristotle's extremely influential text *On the Heavens* (350 BCE) drew on the practical astronomical knowledge which was central to ancient Greece's seafaring culture; Galileo's contributions to space theory, too, are grounded in his experiences as a mariner in another society who valued foreign travel and seafaring abilities as the source of their fortune. <sup>20</sup> <sup>21</sup> Leibniz, Newton, and Kant's attempts to secure space as omnipresent reflected the Enlightenment desire to synthesise religious and scientific ideas. <sup>22</sup> <sup>23</sup> Meanwhile,

<sup>15</sup> Rynasiewicz, "Newton's Views on Space, Time, and Motion."

<sup>&</sup>lt;sup>16</sup> Lucas, John Randolph. Space, Time and Causality. p. 149. ISBN 0-19-875057-9.

<sup>&</sup>lt;sup>17</sup> Warburton, Nigel. "Rose-Tinted Reality: Immanuel Kant." Chap. 19 In *A Little History of Philosophy*, 111. New Haven: Yale University Press, 2011.

<sup>&</sup>lt;sup>18</sup> Baker, John Tull. "Some pre-critical developments of Kant's theory of space and time." *The Philosophical Review* 44, no. 3 (1935): 267-282.

<sup>&</sup>lt;sup>19</sup> Inglehart, Ronald. "Introduction." In Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies. Princeton: Princeton University Press, 1997. p. 21.

<sup>&</sup>lt;sup>20</sup> Aristotle. *On the Heavens*. Cambridge: Harvard University Press, 1960.

<sup>&</sup>lt;sup>21</sup> Machamer, Peter. "Galileo Galilei." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Summer 2017 Edition.

<sup>&</sup>lt;sup>22</sup> Look, Brandon C. "Gottfried Wilhelm Leibniz." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Summer 2017 Edition.

<sup>&</sup>lt;sup>23</sup> Goldie, Mark. "Review: The Newtonians and the English Revolution, 1689-1720 by Margaret C. Jacob." *History* 63, no. 208 (1978): 308.

Einstein's theories were predicated upon existing works commissioned to further enable the development of electronics as mass consumer items.<sup>24</sup>

The uptake of Einstein's theories of relativity into the mainstream coincided with intense socio-cultural transformations resulting from the absorption of telecommunication technologies such as the telegram, radio, and telephone into popular consciousness and day-to-day operations. Until the popularisation of those technologies, space and time were commonly assumed to coincide with one another; the popular credibility of this assumption diminished as modern culture became increasingly centred around (and circulated via) telecommunications. Set ven G. Jones articulates this as the period when 'the telegraph broke the connection between communication and transportation' by enabling messages that 'move independently of and faster than transportation'. This shift paved the way for new debates in the ensuing decades which regard space as a topic of interest within the humanities, 'leading to the redefinition of its nature in phenomenological terms that overcame [the science-philosophy] duality in favour of integration [of scientific and philosophical notions]'.28

David Harvey's theory of *time-space compression* contextualises the aforementioned remote real time communications as early examples of virtual experiences. Time-space compression describes any phenomenon that alters the qualities of, or relationship between, space and time.<sup>29</sup> Building upon Marxist theories of the "annihilation" of physical space by real time in the modern, Harvey's theory demonstrates the ability of technologies to engineer new experiences of space, place, and the body.<sup>30</sup> These experiences are virtual in that they do

<sup>&</sup>lt;sup>24</sup> Einstein's theory of relativity as published in "Zur Elektrodynamik bewegter Körper" (1905) was 'stimulated' by Max Planck's theories on black-body radiation, which had been 'commissioned by electric companies to create maximum light from light bulbs with minimum energy'. (Wagner, Roger; Briggs, Andrew. "The Works of the Lord: Quantum Quandaries." Chap. 49 In *The Penultimate Curiosity: How Science Swims in the Slipstream of Ultimate Questions*. Oxford: Oxford University Press, 2016. p. 368.)

<sup>&</sup>lt;sup>25</sup> Shorter, J. M. "On Coinciding in Space and Time." *Philosophy* 52, no. 202 (1977): 399-408. http://www.jstor.org/stable/3749540.

<sup>&</sup>lt;sup>26</sup> Jones, Steven G. "Introduction." In *Virtual Culture: Identity and Communication in Cybersociety*, edited by Steven G. Jones. Thousand Oaks: Sage Press, 1997.

<sup>&</sup>lt;sup>27</sup> Carey, James W. *Communication as culture, revised edition: Essays on media and society.* Abingdon: Routledge, 2008. p. 203-204.

<sup>28</sup> Gómez, Marisa. "Reconceptualising Body, Space and Place: Telepresence and Mobile Media in Art." In *Imachine: There Is No I in Meme*, edited by Tania Honey. Oxford: Interdisciplinary Press, 2014.

<sup>&</sup>lt;sup>29</sup> Harvey, David. "Time-space compression and the postmodern condition." *Modernity: Critical Concepts* 4 (1999): 98-118.

<sup>&</sup>lt;sup>30</sup> Harvey, "Time-space compression and the postmodern condition."

not entail alterations of the physical world, but do offer the *sensation* of physical changes.<sup>31</sup> For example, the telephone does not move physical sound waves vast distances at high speed, nor does it fold physical space like a rug to shorten the distance those sound waves must traverse to reach the other end of the phone line; it merely transmits a projection of the voice, creating the virtual sensation of physical closeness to its source.

In recent decades theorists have engaged increasingly with the 'spatial turn,' which advocates a notion of space (pioneered by Henri Lefebvre) as a concept that should be accounted for through sociological and psychological study as well as physical study, on the basis that it is continuously produced and reproduced through social structure and agency, action, and experience.<sup>32</sup>

As types of space, canonical notions of *place* and *body* were necessarily impacted by the spatial turn. More nuanced considerations of place as a social phenomenon emerged, investigating the formational and affective impacts of diverse factors, including architecture, politics, and memory, upon places.<sup>33</sup> These considerations imply a solution to the confusion I experienced while writing my statement for *Truth cubes*, regarding the relationship between nature, space, and technology:— "nature" is a descriptive identifier of areas of space as particular *places*; notions of place are based upon our *experiences*; we interpret our experiences through a *cultural* lens; culture is informed in part by *technology*; so our notions of nature and space are necessarily interlinked with technological advances.

Also in the latter part of the twentieth century, the body's status as a notion shaped by social and ideological as well as physical factors was cemented in the humanities.<sup>34</sup> Spatial theories of the body as a field of lived experience are consolidated by subsequent theories such as Pierre Bordieu's concept of *habitus*—the effects, scars, or 'lasting dispositions' upon the body and its behaviour which reflect the lived experiences that inflicted them—and

<sup>&</sup>lt;sup>31</sup> Lévy, Pierre. "Projections." Chap. 2 In Becoming Virtual: Reality in the Digital Age, 38-39. New York: Plenum Press, 1998.

<sup>&</sup>lt;sup>32</sup> Warf, Barney; Arias, Santa. "Introduction: The Reinsertion of Space in the Humanities and Social Sciences." In *The Spatial Turn: Interdisciplinary Perspectives*, edited by Barney Warf and Santa Arias. New York: Taylor & Francis, 2008.

<sup>&</sup>lt;sup>33</sup> Gieryn, "A Space for Place in Sociology."

<sup>&</sup>lt;sup>34</sup> Warf and Arias, "Introduction: The Reinsertion of Space in the Humanities and Social Sciences."

feminist geographies, which examine how oppressive structures and traumas cause people with different lived experiences to understand geographical space in different ways.<sup>35</sup> <sup>36</sup>

From this history, it follows that new technologies should continue to enable reconceptualisations of the physical world, and follows from this that our current era of ever-accelerating technological growth (computer scientist and futurist author Ray Kurzweil likens this 'acceleration of acceleration' to 'climbing a mountain and receiving a jetpack') and resultant cultural shifts should be triggering an explosion of attempts to create further reconceptualisations.<sup>37</sup> And indeed, my and many other contemporary artists' practices endeavour to reconceptualise notions within their shifting techno-cultural landscapes. In the following chapters I will explore the techniques through which I have been chasing that endeavour.

<sup>&</sup>lt;sup>35</sup> Wacquant, L. "Habitus." In *International Encyclopedia of Economic Sociology*, edited by J. Becket and Z. Milan. London: Routledge, 2005.

<sup>&</sup>lt;sup>36</sup> Rose, Gillian. "Feminism and Geography: An Introduction." In *Feminism and Geography: The Limits of Geographical Knowledge*, 1-16. Cambridge: Polity Press, 1993.

<sup>&</sup>lt;sup>37</sup> Kurzweil, Ray. "The Accelerating Power of Technology." In TED2005, 00:22:56: TED, 2005.



Figure 3. Hito Steyerl, Tank Textures, 2015. Image source: http://bb9.berlinbiennale.de/business-is-creativity/

## 2. Remix: 'from publishing to participation'38

In the previous chapter I described my *Truth cubes* series, and its foundational shortcomings resulting from my limited understanding of the territory I was seeking to explore through those works. Several months after completing *Truth cubes*, I was introduced to theories that present hip-hop's techniques of remixing and repurposing musical artefacts as means of reconceptualising existing political and cultural paradigms, as communicated through texts by Katina Stapleton and Luke Dickens.<sup>39 40</sup> Those texts have had a lasting impression upon my practice, having offered a methodological framework within which to

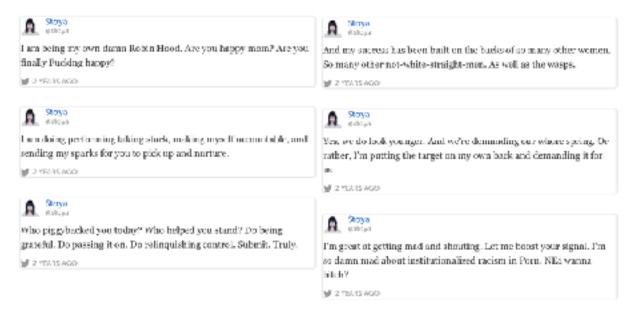
<sup>&</sup>lt;sup>38</sup> Flew, Terry. New media: An introduction. Oxford: Oxford University Press, 2007. p. 19.

<sup>&</sup>lt;sup>39</sup> Dickens, Luke. "The Geographies of Post-Graffiti: Art Worlds, Cultural Economy and the City." London: University of London, 2009.

<sup>&</sup>lt;sup>40</sup> Stapleton, Katina. "From the Margins to Mainstream: The Political Power of Hip-Hop." *Media, culture & society* 20, no. 2 (1998): 219-34.

situate *Truth cubes* and the works I have produced since my practice, like hip-hop practices, seeks to reconceptualise existing paradigms by transforming or remixing the cultural artefacts that signify them. *Truth cubes* is a series of early attempts to question space and place through a postinternet lens, seeking to destabilise familiar conceptualisations of the relationship between nature and technology through the juxtaposition of their visual signifiers.

This newfound clarity enabled me to identify and learn from other artists using remix methodologies to reimagine notions through a postinternet lens including Nik Hanselmann, whose performance *bodyfuck* (2009–2010) presents a postinternet perspective on human mobility by translating webcam-captured bodily movements into code (remixing programming with dance methodologies), and Hito Steyerl, whose *Texture* series uses 3D scanning to montage textures collected at Freedom Square in Kharkiv, Ukraine in the style of computer game texture samples (remixing federal surveillance with game industry techniques), with the effect of alluding to the *gamification* of contemporary combat.<sup>41</sup> <sup>42</sup> <sup>43</sup>



**Figure 2.** A selection of Stoya's tweets, presented as Twitter does in reverse-chronological order (to be read bottom to top, right column then left). The tweets have been deleted from her Twitter account but remain published elsewhere online. Image source: https://storify.com/ardalby71/stoya-s-free-thinking-journey

<sup>&</sup>lt;sup>41</sup> 'bodyfuck is an implementation of brainfuck that uses a camera as input. Moving to the left or right shifts the pointer forward or back, moving up or down increases or decreases the current register, and outstretching arms outputs the value of the current register. bodyfuck accepts no input upon execution nor is there currently a way to delete a mistake. Programming with bodyfuck can be very punishing.' Hanselmann, Nik. "Bodyfuck: Gestural Brainfuck Interpreter." Accessed September 17, 2017. http://nik.works/project/bodyfuck/.

<sup>&</sup>lt;sup>42</sup> Kemper Art Museum, "Artwork Detail | Tent / Texture II, Kharkiv | Kemper Art Museum." Kemper Art Museum, http://kemperartmuseum.wustl.edu/collection/explore/artwork/14544.

<sup>&</sup>lt;sup>43</sup> A major criticism of unmanned drone combat is that it *gamifies* actual killing. *Gamification* is defined as 'the process of adding games or gamelike elements to something (such as a task) so as to encourage participation.' Merriam-Webster, "Gamification." *Merriam-Webster.com*. Accessed October 15, 2017. https://www.merriam-webster.com/dictionary/gamification.

A notable series that emerged from my studio investigations during the period while I was digesting hip-hop theory readings is *Could Anything Be Sweeter Than Desire in Chains / Please God No French Manicures* (2016), a glitch art series produced using *datamoshing* (a digital remix technique).<sup>44</sup> The images juxtapose two discordant social media identities of "pop porn star" Stoya: boudoir photos from her industry porn days, and tweets from the April 2016 Twitter rant that preceded her departure from corporate porn to become an independent director.<sup>45</sup> In the rant, Stoya is furious at the industry: at the agents within it who punished her for accusing one of the industry's biggest names of raping her; and at herself, for complying with the industry's institutional racisms and misogynies for so long without contest.<sup>46</sup> I identified with the contrast between the placidity of Stoya's industry photos and the roiling fury of her tweets, and felt that juxtaposing the two could be an effective way to communicate not only a feminist coming-of-age story I personally relate to, but also the postinternet replacement of 'linearity [of time] with simultaneity and multiplicity' of events and information.<sup>47</sup>

I created *Could Anything Be Sweeter Than Desire in Chains / Please God No French Manicures* by inserting the text of Stoya's subversive tweets into the image data of porn from her industry days. The complete series of fourteen digital images sees photos of Stoya rent and scrambled, the shallow tones of each softbox-lit bedroom shoot lost amidst blinding neon stripes of digital error. Curves of hot roller curls, balconette bras, and lipsticked mouths agape punctuate vibrant grids of pixel mess. The discord between Stoya's virtual identities is reflected through glitch: a narrative of destruction, a timeline beginning with a whole image of Stoya as the industry's model starlet and ending after she has torn that illusion to pieces. Just as hip-hop narratives speak directly and specifically to politically disenfranchised

<sup>&</sup>lt;sup>44</sup> *Datamoshing* is described as 'a practice whereby audiovisual artists actively downgrade the quality of digital images'. Brown, William, and Meetali Kutty. "Datamoshing and the Emergence of Digital Complexity from Digital Chaos." *Convergence* 18, no. 2 (2012): 165-76.

<sup>&</sup>lt;sup>45</sup> Goodman, Lizzy. "Stoya Said Stop: Stoya on James Deen and Fixing the Porn Industry." *New York Magazine*, 2016.

<sup>&</sup>lt;sup>46</sup> Stoya does not mention the rape accusations explicitly in the rant, but they are important context for understanding the tweets: in November 2015, Stoya accused her ex-partner and frequent co-star James Deen of rape. For more information, see: Grant, Melissa Gira. "How Stoya Took on James Deen and Broke the Porn Industry's Silence." *The Guardian*, December 5 2015. https://www.theguardian.com/culture/2015/dec/04/how-stoya-took-on-james-deen-and-broke-the-porn-industrys-silence.

<sup>&</sup>lt;sup>47</sup> Sonvilla-Weiss, Stefan. "Good Artists Copy; Great Artists Steal: Reflections on Cut-Copy-Paste Culture." In *The Routledge Companion to Remix Studies*, 54-68. Abingdon: Routledge, 2014.





**Figure 4.** L: So I'm carving vulgar graffiti about the patterns of trust. Into your cage wall rigid generalization. Smash smash smash? Actually, chip. Digital image, 2016. 40 x 26 cm.

R: I am an incitement to nothing more complicated than masturbation. Parse my fucking metaphor. Digital image, 2016. 40 x 26 cm.

communities, this narrative speaks to a postinternet audience—an audience who know the cultural meaning of glitch as transformative destruction.

That series, Hanselmann and Steyerl's works, and hip-hop are all facets of *remix culture*: a culture of 'endless hybridisation in language, genre, content, technique,' and more through combination and manipulation of existing materials.<sup>48</sup> DJ and remix studies theorist Eduardo Navas presents 'the concept of *remix* as a type of cultural binder,' 'a form of discourse,' and identifies remix culture as 'a culture that is very self-aware of the recycling of material and immaterial things'.<sup>49</sup> Researchers Knobel and Lankshear explain that while 'remix is as old as human cultures, and human cultures are themselves products of remixing,' 'remix practices have been greatly amplified in scope and sophistication by recent developments in digital technologies'.<sup>50</sup>

Remix as we know it, called *modern remix* in remix studies, is a necessarily modern and postmodern practice not only because its production depends upon technologies that have only been around for the past century, but crucially because modern remix seeks to manipulate the signifiers and artefacts of *popular* consciousnesses: 'established [media]

<sup>&</sup>lt;sup>48</sup> Knobel, Michele, and Colin Lankshear. "Remix: The art and craft of endless hybridisation." *Journal of Adolescent & Adult Literacy* 52, no. 1 (2008): 22-33.

<sup>&</sup>lt;sup>49</sup> Navas, Eduardo. "Preface." In Remix Theory: The Aesthetics of Sampling. Wien: Springer, 2012.

<sup>&</sup>lt;sup>50</sup> Knobel and Lankshear, "Remix: The art and craft of endless hybridisation." p. 22.

conventions' are the 'raw material' modern remix reshapes.<sup>51</sup> Modern remix emerged as a way of affording consumers renewed agency over their cultural surroundings as mass media mushroomed globally. Soviet recuts of American Hollywood films 'to give them a sharper class commentary' are identified as the earliest published modern remixes; many more early modern remix works were created or shown in Germany as leftist or antiauthoritarian subversions of Nazi media.<sup>52</sup> Modern remix in music first emerged in the 1960s and 70s through the Jamaican dancehall scene, where local mixers used multitrack mixing to reintegrate the traditional African rhythms that survived slavery and colonialism into anthems against efforts to undermine Jamaica's *People's Party.*<sup>53</sup> Contemporary readings of midcentury remix align it with the Situationist technique of *détournement*, which 'turns expressions of the capitalist system and its media culture against itself'.<sup>54</sup>

Modern remix also became a central methodology in avant-garde practice. Media scholar Stefan Sonvilla-Weiss suggests that avant-garde remix is best understood as 'an attempt to develop a new aesthetics that echoed the progressing subjectivisation in industrialised cities'. Femix communicated—and, through its process of montage, mirrored—the pace and simultaneity of sequences of events characteristic of the modern city with natural fluency.

This cultural history is supported by the technological history of remix tools and media. The timeline of modern remix history mirrors patterns of increased accessibility and control over media artefacts: for example, the proliferation of independent and experimental remix films in Europe during and after WWII coincides with the development of 'lightweight, compact, durable' cameras and portable editing equipment, and the births of dancehall and subsequently hip-hop would not have been possible without the development of magnetic tape, which enabled easier editing, and the portable tape recorder, which enabled home

<sup>&</sup>lt;sup>51</sup> Grant, Barry Keith. "Approaching Film Genre." In *Film Genre: From Iconography to Ideology*. New York City: Wallflower Press, 2007. p. 8.

<sup>&</sup>lt;sup>52</sup> McIntosh, Jonathan. "A history of subversive remix video before YouTube: Thirty political video mashups made between World War II and 2005." *Transformative Works and Cultures* 9 (2011).

<sup>&</sup>lt;sup>53</sup> Chang, Jeff. "Sipple out Deh: Jamaica's Roots Generation and the Cultural Turn." In *Can't Stop Won't Stop: A History of the Hip-Hop Generation*, 21-41. New York City: St. Martin's Press, 2005.

<sup>&</sup>lt;sup>54</sup> Holt, Douglas, and Douglas Cameron. *Cultural strategy: Using innovative ideologies to build breakthrough brands*. Oxford: Oxford University Press, 2010. p. 252.

<sup>&</sup>lt;sup>55</sup> Sonvilla-Weiss, Stefan. "Good Artists Copy; Great Artists Steal: Reflections on Cut-Copy-Paste Culture." In *The Routledge Companion to Remix Studies*, 54-68. Abingdon: Routledge, 2014.

recordings.<sup>56</sup> Developments in modern remix techniques continued to follow developments in production technologies, notably electronic multimedia recording, increased access to materials and instructions for self-built editing machines, and home computing.

The internet has enabled exponentially more media mutations than analogue technologies by connecting communities of users eager to share 'spontaneous improvisation and dialogue' on a global scale, in real time, at all hours.<sup>57</sup> While the early net (*Web 1.0*) saw many online artists harnessing the novel power of the web to publish static content or schedule events of synchronous collaboration, as the blogosphere materialised in the advent of Web 2.0, artists increasingly used the internet as a platform for enabling asynchronous and serial collaboration.<sup>58</sup> <sup>59</sup>

Asynchronous and serial collaboration have been vastly more popular in the Web 2.0 era; this shift from the personal websites and plaintext forum interactions of Web 1.0 to the blogging, commenting, and multimedia interactions of Web 2.0 is described by Terry Flew as the shift 'from publishing to participation'.<sup>60</sup> The value of the web for asynchronous collaborators is the guarantee that if you post content in the right place, it is sure to spawn reproductions. As a young teenager, all of my introductions to creative practice took this shape, often during hours stolen on the family computer in the middle of the night, editing found works using Adobe Photoshop and posting them to the art-sharing website deviantART.com in the hopes that my work would engender subsequent "edits".

I engaged in asynchronous collaboration to create the photo-remix works in my *Involuntary Sculptures* (2016–) and *Plots* (2016–2017) series. I created both series by

<sup>&</sup>lt;sup>56</sup> Monaco, Paul. "The Technological Origins of Direct Cinema." In *The Sixties, 1960-1969*, 202-03. Berkeley: University of California Press, 2003.

<sup>&</sup>lt;sup>57</sup> Sonvilla-Weiss, "Good Artists Copy; Great Artists Steal: Reflections on Cut-Copy-Paste Culture."

<sup>&</sup>lt;sup>58</sup> For examples of net artists whose studio output included static web-published content, see *Deep ASCII* by Vuk Ćosić (1998) and *jodi.org* by Jodi (1996). For examples of net artists whose studio output included events of synchronous collaboration scheduled online, see *Can You See Me Now?* by Blast Theory (2001) and Vincent Makowski's *Chatroom Plays* (2002).

<sup>&</sup>lt;sup>59</sup> 'Synchronous forms of communication [...] are utilized by musicians for whom real time encounters support spontaneous improvisation and dialogue [...] Wikipedia exemplifies an asynchronous form of collaborative communication. The main principle is quite simple: one person edits a media object created by another person, who in return re-edits the newly generated version. At any point in time there is only one version of the media object that is continuously worked upon by the community. The collective work of Wikipedia has become a reliable information resource, built on the voluntary work of thousands of individuals whose contributions are reliant on peer review, version tracking, and chronological order.' Sonvilla-Weiss, "Good Artists Copy; Great Artists Steal: Reflections on Cut-Copy-Paste Culture"

<sup>60</sup> Flew, New media. p. 19.



Figure 5. Involuntary Sculptures 1 of 12, 2016. Xerographic print, 841 x 1189 mm.

applying digital functions written and shared by programmers on the code review and collaboration site *GitHub.com*. In both cases, the code I used had been shared and edited on GitHub by developers seeking to fix its imperfections to ready it for formal publishing. I worked the "imperfect" code as-is into photo editing iOS app templates (which are easy to find via a Google search), installed the apps to my iPhone, and ran my photos through them. I created my *Involuntary Sculptures* series using an auto-detect blemish correction tool. The blemish corrector, a sampler, replicates textures from a designated area of an image onto another area of that image.

*Involuntary Sculptures*, originally a series of unassuming photographic portraits taken in natural light and ordinary settings, sees its subjects refigured into muddy, quasi-human bodies through textural chop-and-change. Through their integration of digital scrambling into the familiar figures, environments, and amateurish composition of the photographs, the works reflect the same postinternet breakdown of photographic truth which I sought to represent through my *Truth cubes*, but with a broadened focus on machine intervention into photography as well as digital intervention.<sup>61</sup> I achieved this by printing my *Involuntary* 

<sup>&</sup>lt;sup>61</sup> Regarding amateurish composition: the photos are not posed, and they are of lone figures facing the camera and in the middle of apparent interactions with the photographer. This is a popular composition of social media profile pictures in my experience.

*Sculptures* using a plan printer. Plan printers are not designed to print large expanses of ink, nor broad tonal ranges, so the resulting A0 prints index the machine's hand through lines and arcs of faded space that mirror the machine's movements across the paper. The resulting works are explicit indexes of the machines that wrought them but not of the subjects of the original photographs, in a departure from the indexicality of analogue photography, which is necessarily indexical of its subjects.<sup>62</sup>





**Figure 6.** L: *the summit*, 2016 (reprinted 2017). R: *the valley*, 2016 (reprinted 2017). Inkjet prints, 297 x 420 mm. Both figures are rendered from photos taken using an iPhone camera. When presented as projected videos, I positioned the same figures upon black backgrounds.

Plots, another series through which I explored photographic truth as a technologically outdated notion, sees digital photos rendered in three dimensions using coordinates based on the RGB colour code of each pixel (e.g. 'rgb(0, 0, 0)', 'rgb(0, 153, 76)'). The height of each plotted coordinate corresponds to a pixel's brightness, determined through addition of all its 3 RGB coordinates (white scores highest as it is 'rgb(255, 255, 255)'), so the shape of each render mirrors its tonality and colour. That function, too, had been posted for feedback on GitHub. It produces craggy, bulging landscapes by stretching the grains of each image. For exhibition, I projected videos and stills of the renders as they appeared in the app, rotating untethered in empty space, onto actual surfaces. In the statement I submitted describing the project, I explained:

'In this projected form [the works] achieve only a weak illusion of concretion. They are immediately recognisable as digital renders; they defy the laws of physics that dictate how actual objects look and move. Actual objects follow those laws: in the space of time, as light and weather and their surroundings affect them, they follow set narratives for movement and decay. *Plots* demonstrates no such narratives.'63

<sup>&</sup>lt;sup>62</sup> Analogue photography is necessarily indexical of its subjects due to the physicality of analogue photography's exposure process, whereby light from the photographed scene reacts directly with the film inside the camera.

<sup>63</sup> From my artist's statement for *Plots*, November 2016.



Figure 7. A recent mockup of my degree show display, rendered using SketchUp.

Although I completed *Involuntary Sculptures* and *Plots* according to the assessment prompts of an undergraduate elective class to "explore how sculptural ideas can stretch the function of an image," their methodologies reflect my continuing interest in the way techno-cultural habits prompt reconceptualisations of physical phenomena.

Both times I exhibited *Plots*—for assessment and, months later, at Sydney College of the Arts' student gallery *DedSpace*—my installations needed to be cost-efficient and able to be deinstalled quickly, so I made do with materials that matched those requirements: stands, boxes, mannequins, and black tablecloths found or borrowed from undergraduate studios. In doing so, I sacrificed part of the impact I had originally envisaged the project achieving: due also to space limitations and the risk of visitors tripping over projector cables crossing footpaths, I was unable to present *Plots* as a series of interactive *projection-augmented models*. During my research for *Plots*, I came across studies by various research groups striving to create projection-augmented models ('non-immersive, coincident haptic and visual displays that use a physical model as a three-dimensional screen for projected visual information') which address the shortcomings of 'conventional measures of presence [that] have been defined only for displays that surround and isolate a user from the real world.'<sup>64</sup> I was fascinated by those publications and felt disappointed that I was unable to utilise their findings through *Plots*, so I am excited to implement them through my degree show installation this year.

<sup>&</sup>lt;sup>64</sup> Stevens, Brett, Jennifer Jerrams-Smith, David Heathcote, and David Callear. "Putting the Virtual into Reality: Assessing Object-Presence with Projection-Augmented Models." *Presence: Teleoperators and Virtual Environments* 11, no. 1 (2002): 79-92.

I am currently designing a standing frame to suspend a translucent print in such a way that it can be viewed from all angles; visitors will be able to walk around it; including angles that see it overlay nearby wall-mounted works. I hope this will apply the technique of immersing displays within spaces through which people move (as opposed to immersing people within displays, as is the traditional practice in many forms of display including cinemas and virtual reality rollercoasters) which projection-augmented model studies demonstrate to be an effective way to improve perceived *object-presence*, and reflect my experience of the art object in postinternet remix culture, being not so much an isolated product of creative practice as a means to infinite subsequent creative responses and iterations.<sup>65</sup> I hope my choice to display a translucent print as opposed to a projection will improve safety and, thus, interaction with the piece.

Sheida Soleimani's photographic series *National Anthem* (2014–2015) is a collection of vibrant, polished photographs documenting the artist's sculptural installations of images sourced from her "deep ongoing database" of Western tweets about her parents' native Iran. 66 The images of tortured hostages and execution footage, low-res and rich with the scars of digital reproduction through their journeys across social media, are installed amidst intricate paper structures and patterned fabrics, toys, and symbols of Iranian culture and wealth, reflecting a distinct duality in the way Iran is perceived between East and West. Soleimani's works demonstrate the mutability of meaning and impact of artefacts according to their cultural context and medium of delivery, and relative irrelevance of their author's intention, figuring "The Death of the Author" as a political issue in the postinternet era. 67

Petra Cortright, another American artist, uses Adobe Photoshop to assemble fragments of online-sourced images into painterly compositions. Demonstrating The Death of the Author in the postinternet through her transformative remixing of found images, her looped video

<sup>&</sup>lt;sup>65</sup> The notion of object-presence measures 'the subjective experience that a particular object exists in a user's environment, even when that object does not.' See: Stevens, Brett, and Jennifer Jerrams-Smith. "The sense of object-presence with projection-augmented models." *Haptic Human-Computer Interaction* (2001): 194-198.

<sup>&</sup>lt;sup>66</sup> Rao, Mallika. "These Twitter-Sourced Collages Paint a Dark Portrait of Today's Iran." *Huffington Post* (2015). http://www.huffingtonpost.com.au/entry/sheida-soleimani-collages\_n\_6527596.

<sup>67 &</sup>quot;The Death of the Author" is a 1967 essay and concept by theorist Roland Barthes. 'Roland Barthes' landmark essay, "The Death of Author" demonstrates that an author is not simply a "person" but a socially and historically constituted subject. Following Marx's crucial insight that it is history that makes man, and not, as Hegel supposed, man that makes history, Barthes emphasises that an author does not exist prior to or outside of language. In other words, it is writing that makes an author and not *vice versa*. [...] Thus the author cannot claim any absolute authority over his or her text.' From Keep, Christopher; McLaughlin, Tim; Parmar, Robin. "Death of the Author." *The Electronic Labyrinth* (1993-2000). http://www2.iath.virginia.edu/elab/hfl0226.html.



Figure 8. National Anthem, 2014–2015. Digital image, 540 x 818 px. Image source: http://

series *Vicky Deep In Stripper Valley* (2012) situates "NSFW" gifs of women pole dancing and stripping within lurid digital fantasy scenes.<sup>68</sup> In static series including *RUNNING NEO-GEO GAMES UNDER MAME* (2013), Cortright riffs on traditional painterly techniques through digital media: she creates her designs on a small desktop monitor but prints them at enormous scales, and applies bevelling effects to mimic impasto texture in her digital images but prints them, tongue in cheek, on super-flat superfine photo paper.<sup>69</sup> I wonder, looking at magazine shoots of Cortright in her studio, if her arrangement of a small bookshelf and modest computer desk in the centre of her otherwise empty spacious painter's studio (light from a large panel of windows streams across two precisely-hung prints on canvas) is another wry statement about painting in the postinternet era. A 2015 interview with Cortright captures her

<sup>&</sup>lt;sup>68</sup> "NSFW" is a web slang acronym standing for "Not Safe For Work." It describes content that may be identified as inappropriate to be displayed in a work environment, including content depicting sex, violence, and illegal activity.

<sup>&</sup>lt;sup>69</sup> Of Cortright, curator Aaron Lister says: "While challenging the idea of what painting can be, Cortright doesn't have an antagonistic response to what's gone before—she loves the language and romance of painting, she believes in beauty, but approaches it all through internet-based processes of making and presentation. She gives painting and the nature of aesthetic experience a system upgrade." Quoted in Artists Alliance, "Running Neo-Geo Games under Mame | Petra Cortright." *artists alliance* (2017). http://artistsalliance.org.nz/events/running-neo-geo-games-under-mame-petra-cortright/.

excitement about working digitally, and reflects a blasé attitude—which I share, and identify as typical among artists who are digital natives—towards notions of authenticity and originality:

"I'm interested in that kind of transformation. That's the thing about digital work — it's so flexible. It can be morphed in so many different ways. It could be a printed piece or it could be made into a video." This is one of the reasons her type of art has taken a while to find its place in the market — authentification [sic] becomes impossible. "Almost everything that I make is unique. Yes, it can be reproduced, but that's not really what art ownership is," offers Cortright. "In terms of the market, it's about having a certificate of authenticity. It's such an abstract thing."" 70

It may seem that through their emphasis upon reapplication of media, my works, *National Anthem*, and Cortright's digital photo-paintings, as well as remix culture at large, lend themselves to a culture that has outgrown authentic production and instead, in its ability to access and mine its entire known history at any given moment, is only capable of response and reproduction. Rather than evidence of a phasing-out of production and authenticity as phenomena, however, this merely indicates a phasing-out of production and authenticity as notions predicated upon archaic understandings of space as absolute.<sup>71</sup> In this understanding it would seem, as Manuel Castells suggests, that by enabling new experiences of such integral human notions as space and place on a global scale, the 'Network' does indeed 'absorb all our cultural logics.'<sup>72</sup>

<sup>&</sup>lt;sup>70</sup> Riefe, Jordan. "From the Browser to the Gallery: Petra Cortright's 'Post-Internet' Art." *The Guardian* (2015). Published electronically 22 July 2015. https://www.theguardian.com/artanddesign/2015/jul/22/petra-cortright-post-internet-art-los-angeles-exhibit.

<sup>&</sup>lt;sup>71</sup> In absolute space, which implies absolute time, production could occur as as event isolated from its historical, cultural, and geographical contexts. More recent theories of spacetime as relative, and produced by social as well as physical phenomena, do not support this notion. On the contrary, they support a notion of production that occurs in collaboration with all other known instances of production. It follows from this that *authenticity* of production is unimportant, in a remix culture, compared to such empirically observable elements of production as influences or impact. See footnote 59 for an excerpt explaining Barthes' articulation of this notion of production though his essay "The Death of the Author".

<sup>&</sup>lt;sup>72</sup> Castells, Manuel. *The rise of the network society: The information age: Economy, society, and culture. Vol. 1.* Hoboken: John Wiley & Sons, 2011.

## 3. De-catastrophising the virtual



Figure 9. Elevated landscapes 1 of 6, 2017. Digital image, 4608 x 3072 px.

At the beginning of this year, I located a thread of interest that had persisted through my prior studio investigations: *emotional* responses to widespread virtualisation. The nature of virtuality is that it cannot directly contact actuality, but as I have demonstrated in previous chapters, widespread changes in the way we *feel* about ourselves and our surroundings through technology can trigger "real" changes by influencing actual behaviours. This year I have developed works based on introspection of my feelings following perceptual shifts I have experienced as a participant in postinternet culture.

I developed my *Elevated landscapes* (2017) series in the early months of this year, as a way of examining the discomfort I felt after learning about computational photographic processes.<sup>73</sup> I fell in love with photography as a child on family outings, for its affordance of control over a world I perceived as hostile and furiously volatile (years later, I would receive a diagnosis of comorbid anxiety and depression which explains that perception; it only went unchecked until my late teens because I worked so exhaustively to keep it private).

<sup>&</sup>lt;sup>73</sup> In my introduction, I defined computational photography as computer imaging processes that produce images which enhance or extend the capabilities of traditional digital photography.

Photography remained one of my major hobbies throughout adolescence; growing up into a multimedia information culture, it enabled me to narrate out my mental illness from social media and, as a result, my family and friends' awarenesses to a large degree. Due to this, I have long known photographs as narrative as opposed to "true" or impartial artefacts; but I have also felt a deep sentimentality for photographs as narrative indexes of occasions and periods during which I functioned the "right" way according to my self-punishing sensibilities. I treasured those indexes during periods of severe anxiety and suicidal ideation as proof that some days, I did hold agency over my mental health, and as reassurance that someday soon, I could hold that agency again. Learning that computational photography—utilised by my current micro four-thirds camera and smartphone—does not entail the same indexicality, or politics of production, as the early digital photography I grew up using was an unsettling discovery that unseated my conviction of narrative control through photography.

This conflicting interplay of feelings is articulated from a political perspective by Hito Steyerl as she considers computational photography in her essay *Proxy Politics: Signal and Noise*, switching at breakneck speed between seductive optimism ('extremely interesting software'... 'this type of photography is speculative and relational'... 'not only relational but also truly social'... 'it might be fitted with a so-called dick algorithm to screen out NSFW content') and bare pessimism ('it makes unforeseen things more difficult'... 'it might report you or someone from your network to the police, PR agencies, or spammers'... 'of course this network is not neutral'... 'you could end up airbrushed, wanted, taxed, deleted, or replaced in your own picture').<sup>74</sup> In other words, to reference 'technological representational victory over "natural" space' as I described in my first chapter, computational photography implies a shift from a perceived *human* representational victory to an *algorithmic* representational victory over "natural" space. Earlier this year I realised that unknowingly, for as long as I have been using computational photography, I have relinquished narrative control to the camera.

My contemplations following that shift in my understanding of photography manifested through my practice in the photo remix series *Elevated landscapes*, which I composed by layering 3D renders (I used the same RGB coordinate graphing machine as in *Plots*) of photos from my February visit to Yosemite National Park into their corresponding original photos. This technique partially explodes the original images, their features

<sup>&</sup>lt;sup>74</sup> Steyerl, Hito. "Proxy Politics: Signal and Noise." *e-flux* 60 (2014).

deconstructed and pierced by digital peaks in a reflection of my release of narrative control to algorithmic function.

Computational photography represents an increase of algorithmic agency over global culture and consciousness that is also supported by Web 2.0 technologies such as targeted ads and news feeds, which curate our online experiences based on our browsing and purchasing histories with transformative effects upon our knowledges of offline as well as online life.<sup>75</sup> While there are certainly dangerous possibilities associated with increased algorithmic agencies, a range of pessimistic theories that apply the notion of *built-in obsolescence*—originally a product design term—to the human body in the digital age have already been outdated.<sup>76</sup> This year I have responded to some of these pessimisms through my series of photo-remix collages *Scrub up nice* and stop-motion video *Isolation superhighway*, both of which present an optimistic perspective on postinternet existence as seeing a mutually beneficial integration of virtuality and actuality.

The anxieties of theorists such as Simon Penny regarding an impending widespread loss of kinaesthetic and somatosensory awarenesses and interactive skills among digital artists hold more retro-futurist charm for me than truth, now that haptic devices (smartphones, tablets, laptops with trackpads) have eclipsed non-haptic consumer electronics.<sup>77 78</sup> Haptic devices offer actual tactile interaction with virtual digital media. I assembled my *Scrub up nice* collages using the popular retouching app FaceTune, which enables users to zoom, crop, draw, shrink, sample, and distort high resolution images in real time according to the movement and pressure of their fingers on the screen of their touchscreen device. Although drawing using a haptic device demands different skills and sensitivities from drawing using

<sup>&</sup>lt;sup>75</sup> For further information on targeted ads and news feeds, which are applications of algorithmic content curation, see: Lazer, David. "The rise of the social algorithm." *Science* 348, no. 6239 (2015): 1090-1091.

<sup>&</sup>lt;sup>76</sup> Built-in obsolescence is defined as 'the policy of deliberately limiting the life of a product in order to encourage the purchaser to replace it.' Criticisms of built-in obsolescence often go hand-in-hand with criticisms of capitalism. Dictionary.com, "built-in obsolescence." *Collins English Dictionary - Complete & Unabridged 10th Edition.* HarperCollins Publishers. http://www.dictionary.com/browse/built-in-obsolescence. Accessed October 16, 2017.

<sup>&</sup>lt;sup>77</sup> While 'futurism is sometimes called a 'science' bent on anticipating what will come, retrofuturism is the remembering of that anticipation.' Guffey, Elizabeth, and Kate C. Lemay. "Retrofuturism and Steampunk." *The Oxford Handbook of Science Fiction*: p. 434. Oxford: Oxford University Press, 2014.

<sup>&</sup>lt;sup>78</sup> Penny, Simon. "The Virtualization of Art Practice: Body Knowledge and the Engineering Worldview." *Art Journal* 56, no. 3 (1997): 30-38. doi: 10.2307/777834.

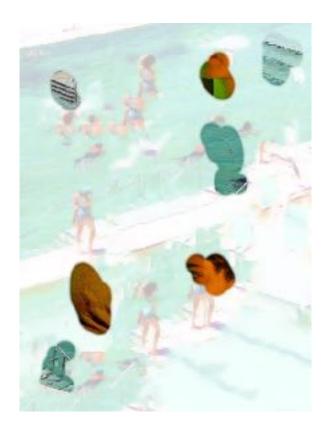




Figure 10. L: Scrub up nice 1, 2017. R: Scrub up nice 2, 2017. Digital images, 3270 x 4960 px at 300dpi.

actual media, this shift does not represent an 'eradication' of kinaesthetic skills as Penny suggests.<sup>79</sup>

With Sergei Eisenstein's adage 'montage is conflict' in mind, which presents the ideas that result from montage as important new informations that mark a complete departure from their source materials, in recent months I have been montaging images chosen by random selectors across Flickr (flrig.beesbuzz.biz), deviantART (deviantart.com/random/deviation), and my local files, constructing new sensations from the images through remix.<sup>80</sup> This is a role reversal of the process used by algorithmic collage artists such as Super Artilect (superartilect.tumblr.com), through which the content selection process is input manually based on an established notion or sensation (for example: "break" or "acceptance" or "boys"), then the collage process is executed algorithmically. By positioning algorithmic artists as cultural influencers through emulation of their methods, *Scrub up nice* communicates the optimism I feel regarding the encroachment of algorithmic agency upon culture through widespread virtualisation.

<sup>&</sup>lt;sup>79</sup> Penny, "The Virtualization of Art Practice: Body Knowledge and the Engineering Worldview," 30.

<sup>&</sup>lt;sup>80</sup> Eisenstein, Sergei. "Collision of Ideas." *En Film: A Montage of Theories*. Ed. Richard Dyer McCann. New York: EP Dutton & Co (1966): 34-37.

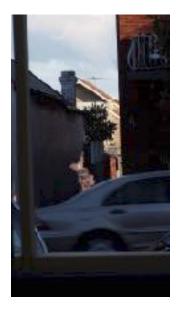






Figure 11. Stills from Isolation superhighway.

Meanwhile, I devised *Isolation superhighway* to present a sympathetic attitude towards virtually mediated bodies, but following its completion I feel its impact may be more ambivalent than optimistic. The thirteen-second looped video is, in many ways, a moving iteration of an *Involuntary Sculpture*. Not only did I use the same unfinished blemish correction machine that produced my *Involuntary Sculptures* to render the figures in each frame of *Isolation superhighway*; the video also shows the same technique of juxtaposing digital shapes and textures into compositionally and thematically unassuming locations in the actual world.

While designing *Isolation superhighway* and rendering each of its frames, I imagined the end result could present virtual bodies as benign agents existing and functioning alongside actual bodies. I imagined it disagreeing with Domingo Sánchez' statement that 'now [in the postinternet] the body is obsolete. And that's why it has been modified, dissected, metamorphosed,' on the grounds that my experiences of modifying, dissecting, and metamorphosing bodies have, on the contrary, invariably reinforced my conviction of the body's centrality within the sphere of human experience.<sup>81</sup> My experience is not of a 'dualism of cyberculture' between 'the mortal and heavy flesh' and 'the ethereal body of information', but instead of a functional integration of actual and virtual that only appears split due to the duality between places dominated by actuality, and places dominated by virtuality—and this

<sup>81</sup> Sánchez, Domingo Hernández, ed. Arte, cuerpo, tecnología. Vol. 5. Salamanca: Universidad de Salamanca, 2003. p. 10. Quoted by Gómez in "Reconceptualising Body, Space and Place: Telepresence and Mobile Media in Art."

locational duality grows more outdated every day, as digital electronics become increasingly portable, rechargeable, affordable, and generally compatible with "flesh"-life.<sup>82</sup> (Every day, the notion of the "computer room" retreats a little further into history.)

So I have been surprised that following its assembly, I have felt that *Isolation* superhighway communicates a very different kind of sympathy towards virtuality: it presents a virtual body as integrated and agential within actuality, reaching towards contact with actual agents. But in the knowledge that the virtual cannot touch the actual—by definition, it can only 'tend towards' it—I realised that *Isolation superhighway* presents virtual bodies as eternally lonely.<sup>83</sup> At that point, I reminded myself that any projection of loneliness onto virtual bodies cannot be verified. But that is the nature of virtuality: we cannot verify precisely what it contains, as Lévy's example of the tree being virtually present in the seed demonstrates (because there is no guarantee the tree will ever become actualised from the seed; there is only an empirical guarantee that the tree was once a seed, and it is that understanding that allows us to imagine the virtual tree within the actual seed).<sup>84</sup> We can only create virtualities based on actualities, and so webs of feedback loops emerge between the two. For this reason, I am reluctant to indulge theories such as Dery, Sánchez, and Penny's that identify conversions or absorptions of actual processes or things into the virtual as *losses*. The virtual is borne of the actual, and vice versa, so any uptake into the virtual does not cease to be accessibly ours; it merely exists as accessible by us abstractly, for the moment, as opposed to physically.

<sup>82</sup> Dery, Mark. Escape velocity: Cyberculture at the end of the century. New York City: Grove Press, 1996.

<sup>&</sup>lt;sup>83</sup> Lévy, Pierre. "The Actual and the Virtual." Chap. 1 In Becoming Virtual: Reality in the Digital Age, 21-35. New York: Plenum Press, 1998. p. 23.

<sup>84</sup> Lévy, "The Actual and the Virtual," p. 23.

#### **Conclusion**

It seems to me that the practices of the sciences—the sciences as cultural production—force one to accept two simultaneous, apparently incompatible truths. One is the historical contingency of what counts as nature for us: the thoroughgoing artificiality of a scientific object of knowledge, that which makes it inescapably and radically contingent. You peel away all the layers of the onion and there's nothing in the centre. And simultaneously, scientific discourses, without ever ceasing to be radically and historically specific, do still make claims on you, ethically, physically, The objects of these discourses, the discourses themselves, have a kind of materiality; they have a sort of reality to them that is inescapable. No scientific account escapes being story-laden.<sup>85</sup>

I began this year imagining my Honours investigations would draw me further into specific technical knowledges; I imagined using this year to improve my programming skills and ultimately produce more technically complex software-derived artworks. On the contrary, it has seen me shift focus more specifically and intensely inwards, mining my own experiences of the postinternet. My readings of feminist geographies earlier in the year, while contemplating postinternet landscapes, inspired those exercises by emphasising to me the *intellectual* as well as political importance of lived experience.<sup>86</sup>

Learning the history of spatial theory has been important in informing my practice as it has helped me ground my efforts to contribute to that legacy within their appropriate academic and artistic contexts; as I will demonstrate in chapter one, my early attempts to represent my experiences of virtual mediations of the physical world lacked coherency and direction due to a lack of such grounding. Hip-hop theories afforded my practice direction and contextualise my techniques within the techno-historical context of remix culture, and examination of variously optimistic and pessimistic responses to cyberculture helped me articulate my own feelings as a subject of the postinternet. By no means has this year offered a solution or end to my curiosity regarding postinternet enquiry and studio practice; on the contrary, I am excited to improve my technical programming knowledge (as I hoped I might

<sup>85</sup> Donna Haraway in conversation in Penley, Constance, Andrew Ross, and Donna Haraway. "Cyborgs at large: interview with Donna Haraway." *Social Text* 25/26 (1990): 8-23.

<sup>&</sup>lt;sup>86</sup> For further reading, see: McKittrick, Katherine. Demonic Grounds: Black Women and the Cartographies of Struggle. Minneapolis: University of Minnesota Press, 2006.

throughout Honours) and explore technology, culture, and experience in the postinternet as interlinked elements of my everyday life as well as highly contested areas of contemporary theory.

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