

This thesis represents partial submission for the degree of Doctor of Philosophy at the Royal College of Art. I confirm that the work presented here is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

During the period of registered study in which this thesis was prepared the author has not been registered for any other academic award or qualification. The material included in this thesis has not been submitted wholly or in part for any academic award or qualification other than that for which it is now submitted.

A handwritten signature in black ink, appearing to read 'Anna Hughes', written in a cursive style.

ANNA HUGHES

03/09/2023

WORD COUNT: 39273

ANNA HUGHES

# SICKNESS IN CYBERSPACE:

SENSUAL ENCOUNTERS IN DIGITAL MEDIA TOWARDS A RADICALLY EMBODIED FUTURE



# ABSTRACT

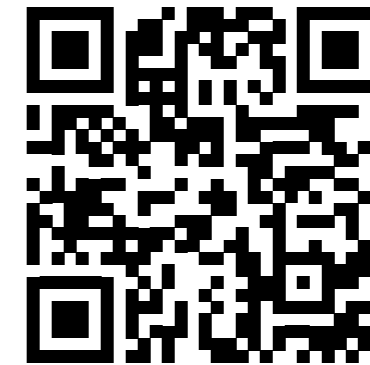
This thesis accentuates the potential of sensuality in digital media. Drawing from the experience of adopting a more accessible digital practice after becoming sick, I highlight the enabling aspects of digital making and its subsequent encounters. My sick perspective gives me the heightened embodied knowledge of feeling the presence of my embodiment in cyberspace through symptoms, and I produce digital expressions of this once-invisible stance of being in two places at once. My software gives me an accessible mode of expression, and I argue that this understanding of embodiment in cyberspace theorises a more caring and abundant way of living with digital media. Finding ways to live symbiotically as a body with digital media counters the logic of competition enforced within a neoliberal society, a problem that foregrounds this research. Without this incessant need for competition and qualitative comparison, the sick and disabled can thrive without being othered, and my digital renders can resonate with others beyond being dismissed as a representational copy of this world.

I ask, how can I emphasise the sensuousness of cyber-embodiment while resisting making a representation that occludes the corporeal body? Can a sick/disabled perspective that embraces the difference and pleasure of non-normative embodiments enhance a new materialist understanding of cyberspace, and how does this differ from virtual disembodied emancipation or neoliberal versions of disabled liberation? What production techniques have the potential to instigate affective encounters, and how might this computationally enabled fictioning contribute to the sociopolitics of cyberspace?

To carry out this project, I bring together new materialism, cyberfeminism and crip/disability theory. I look to thinkers such as Rosi Braidotti, Karen Barad, Simon O'Sullivan, Laboria Cuboniks (Xenofeminism), and Alison Kafer. I place an emphasis on matter and how it continuously moves and changes, giving me a generative understanding of how cyberspace operates with corporeal life, asserting that space and our relation to distance can change and subvert Euclidean geometry, especially facilitated by digital media. In practice, I evidence the enabling aspect of finding an essential mode of expression through digital media as a means of "travel" as a sick person. I make a digital hand that assists me in navigating this digital world. With the digital hand, I draw out methods for accentuating the materiality and affects of digital media beyond representation through a focus on variances in the intensities of sensation. Using 3-D rendering, video editing, and music production software, I embrace the textures, vibrancy, rhythms, viscosities and flows of being a body. I express my embodiment as a sick person and prove the vital knowledge a sick body can bring, all while giving insight into how bodies can live with each other in cyberspace and beyond it.

# ACCOMPANYING MATERIAL

<https://annafhughes.co.uk/PORTFOLIO>



This webpage hosts the artwork submitted. The artwork is presented in among the following text, so there is no need to view this webpage before reading.

# ACKNOWLEDGEMENTS

Many thanks to my supervisors Melanie Jackson, Tai Shani. Also to thank staff Johnny Golding, Gemma Blackshaw and Rachel Garfield. A thank you to Abi Palmer, Benedict Drew (Matt's Gallery), Maggie Roberts (Orphan Drift) and Johanna Hedva for image permissions. Finally, a special thank you to Nella Flemming and Bertie, Tom Duggan and Sid.

# CONTENTS

## PREFACE

BEING SICK p.11

## INTRODUCTION

QUESTIONS p.15

A QUICK INTRODUCTION TO THE DIGITAL HAND p.18

TERMS p.18

AUTO THEORY p.22

A METHODOLOGY OF WORKING WITH p.22

CONTEXT p.24

SYNOPSIS p.24

**ARTWORK INTERLUDE: I HOPE YOU ARE WELL p.33**

## 1

### DIGITAL-DIGITS

THE HAND MODEL p.44

POINTING: TOWARDS REPRESENTATION AND THE SIMULACRA p.45

SURFACE DIMENSIONS: MEANING-MAKING p.48

DEAD RENDERS: ED ATKINS' LIFELESS OBJECTS p.52

**ARTWORK INTERLUDE: SICK WAVES p.63**

## 2

### SEVERED HANDS

FLESHING OUT A DISEMBODIED HAND:

DIGITAL EMANCIPATION AND EMBODIMENT p.72

DISEMBODIED BODIES: VIRTUAL EMANCIPATION p.72

DISABLED CYBORGS p.86

FICTIONAL HANDS p.92

BEING SPLIT IN TWO: CARTESIAN DUALISMS p.93

NEOLIBERAL MODELS OF DISABILITY p.95

**ARTWORK INTERLUDE: I CAN FEEL IT p.101**

## 3

### REMOTE TOUCHING

ABJECT HORROR: EXPERIMENTS IN GORY TEXTURES p.114

DIGITAL TOUCH p.120

**ARTWORK INTERLUDE: QUIET MY BODY'S INCESSANT MATTERING p.127**

## 4

### HYPER-MOBILITY AND CONNECTIVE TISSUE

EXCESSIVE MOVEMENT p.136

REACHING OUT AND CONNECTING USING A PROSTHETIC HAND p.138

SICKNESS AS A SUBJECT p.143

ART AND ACCESS p.146

CRIP CLAP BACK: FLEXIBILITY AND AGENTIAL IDENTITY p.148

HYPERMOBILITY p.153

**ARTWORK INTERLUDE: VISCOUS FEEDBACK p.155**

## 5

### A SICKLY CYBERSPACE

PREDICTING THE FUTURE p.164

COMPUTER GRAPHICS, GEOMETRY AND COMPUTATIONAL HANDS p.165

NONLINEAR SYSTEMS/ALTERNATIVE LOGICS p.168

CRIP, HYBRID WORLDING: AI, FICTIONING, LOOPS, REPETITION, ASSEMBLAGES AND CYBERSPACE p.171

MAKING A SICK WORLD p.180

RHYTHM AND STRUCTURE p.183

### OUTRO

WHEN THE SICK RULE THE WORLD MORTALITY WILL BE SEXY p.190

### CONCLUSION

TOUCHING MY SICK BODY AT A DISTANCE p.192

BEING SICK IN CYBERSPACE p.193

ORIGINAL CONTRIBUTION p.193

PRESENTATION p.195

QUESTIONS p.195

**BIBLIOGRAPHY p.204**



# List of Images

1. Anna Hughes, *Blender Experiment #1*, Digital image, 2023.
2. Anna Hughes, *Blender Experiment #2*, Digital image, 2023.
3. Anna Hughes, *Digital Hand #1*, Digital image, 2023.
4. Anna Hughes, *I Hope You Are Well* (Still), Digital animation, 2020.
5. Anna Hughes, *I Hope You Are Well* (Still), Digital animation, 2020.
6. Anna Hughes, *I Hope You Are Well* (Still), Digital animation, 2020.
7. Anna Hughes, *Blender Experiment #3*, Digital image, 2023.
8. Anna Hughes, *Digital Hand #2*, Digital image, 2023.
9. Anna Hughes, *Blender Experiment #4*, Digital image, 2023.
10. Anna Hughes, *Sick Waves* (Still), Digital animation, 2021.
11. Anna Hughes, *Sick Waves* (Still), digital animation, 2021.
12. Anna Hughes, *Blender Experiment #5*, Digital image, 2023.
13. Anna Hughes, *Digital Hand #4*, Digital image, 2023.
14. Johanna Hedva, 'GLUT', 2021, <http://glut.website/>.
15. Anna Hughes, *I Can Feel It* (Still), Digital animation, 2021.
16. Anna Hughes, *I Can Feel It* (Still), Digital animation, 2021.
17. Anna Hughes, *I Can Feel It* (Still), Digital animation, 2021.
18. Anna Hughes, *I Can Feel It* (Still), Digital animation, 2021.
19. Anna Hughes, *Blender Experiment #6*, Digital image, 2023.
20. Anna Hughes, *Digital Hand #5*, Digital image, 2023.
21. Anna Hughes, *Quiet My Body's Incessant Mattering* (Still), Digital animation, 2023.
22. Anna Hughes, *Quiet My Body's Incessant Mattering* (Still), Digital animation, 2023.
23. Anna Hughes, *Blender Experiment #7*, Digital image, 2023.
24. Anna Hughes, *Digital Hand #6*, Digital image, 2023.
25. Anna Hughes, *Screenshot of the Digital Hand's 'Skeleton'*, Digital image, 2022.
26. Abi Palmer, *National Health Shrine*, Collective, Edinburgh, Mixed media installation, 2019.
27. Anna Hughes, *Viscous Feedback* (Still), Digital animation, 2023.
28. Anna Hughes, *Viscous Feedback* (Still), Digital animation, 2023.
29. Anna Hughes, *Viscous Feedback* (Still), Digital animation, 2023.
30. Anna Hughes, *Blender Experiment #8*, Digital image, 2023.
31. Anna Hughes, *Digital Hand #7*, Digital image, 2023.
32. Anna Hughes, *Screenshot of the Digital Hand in 'Edit' Mode in Blender*, Digital image, 2023.
33. Benedict Drew, *Dyspraxic Techno*, Courtesy of Matt's Gallery, Mixed media installation, 2017.
34. Maggie Roberts (Orphan Drift), *Conscious Exotica*, Mixed media installation, 2018.
35. Anna Hughes, *I Can Feel It* (Installation Shot), Unruly Encounters, Southwark Park Gallery, London, Digital animation, 2022.
36. Anna Hughes *Viscous Feedback* (Installation Shot) Earthwise, Beaconsfield Gallery, London. Digital animation, 2023.
37. Anna Hughes, *Viscous Feedback* (Installation Shot), Tuesday, ICA. Digital animation, 2023.
38. Anna Hughes, *Quiet My Body's Incessant Mattering* (Installation Shot), Hopscotch, Copeland Gallery, London, Digital animation, 2023.
39. Anna Hughes, *Blender Experiment #9*, Digital image, 2023.



2. Anna Hughes, *Blender Experiment #2*, Digital image, 2023.

# PREFACE

## // BEING SICK

This project has grown simultaneously with my becoming sick. My first acute symptoms began the summer before I started this project: they arose as a mysterious burning pain in my abdomen. This was 2018 my first glimpse at just how fragile the UK's NHS was becoming before such strain was to be put upon it by the pandemic of 2020 and government policy. I learned quickly that suffering was not recognised as an emergency. Imminent death seemed to be the only marker of immediate need: another death makes the statistics look worse. I knew that waiting times were inevitable, but I also found that there were huge inconsistencies in diagnosis and treatment, especially for anything deemed a rare or neglected condition. I was forced to research my own condition. This made doctors recoil in their chairs: another person who has googled their symptoms and now thinks they have cancer! Finding a diagnosis took me four years. The time it took for diagnosis did not include all the signs I had from birth and all the bodily differences along the way. I had always been sick: all the pain, "accident-proneness," flexibility and general sickliness were missed signs.

The only clinic that specialised in my condition was shut with an indeterminate reopening date during the pandemic. The clinic, to date, has not been reopened, and it seems unlikely that it ever will.<sup>1</sup> My local rheumatology department had already misdiagnosed me and was also refusing to give me a second opinion. I finally gave in and borrowed the money to pay to see a private rheumatologist, and I was promptly diagnosed with the genetic disorder *Hypermobile Ehlers-Danlos*

<sup>1</sup> The webpage for the hypermobility clinic once in University College London Hospital has since been removed, the only information is a line on this page stating that it has been shut indefinitely. See: 'Rheumatology', University College London Hospitals NHS Foundation Trust, accessed 21 August 2023, <https://www.uclh.nhs.uk/our-services/find-service/medical-specialties-1/rheumatology>.

*Syndrome (hEDS)*. This syndrome results in faulty connective tissue through lacking a particular protein called “filaggrin.” A problem with connective tissue affects practically every part of the body. The most prevalent symptom of *hEDS* is flexible joints, and these joints become unstable and injure easily. The list of other symptoms is long; from this first pain, this list of symptoms started to spread exponentially throughout my body. People with *hEDS* are more likely to develop certain other conditions, so I was also diagnosed with *Postural Orthostatic Tachycardia Syndrome*. Despite having two different syndromes, all the different clusters of symptoms work together to produce an assemblage of intense sensations.

What seemed like a one-off event or emergency became a durational form: my body continues to be sick. I have to accept my sick body as my new self. At first, I resisted making any adjustments to my lifestyle and work. This resulted in more pain and symptoms. I had been so deeply conditioned by a childhood steeped in new-labour’s neoliberalism in the 90’s/2000’s. Neoliberalism taught us that disability was something that could be overcome and should not hold someone back from achieving. Aspiration was a mantra. My mother is also very sick: she was diagnosed with a particularly aggressive form of *Rheumatoid Arthritis* when I was young. My mother instilled in me a sense of needing to carry on because she had to. In reality, we still struggled. Being a single disabled mother of two children without any private wealth, a stable home or employment was extremely difficult. Our aspirations were always on the horizon...one day, we could buy whatever we wanted. The belief that willpower could defy structural inequality that my mother inherited hurt me later in life. Regardless of being too unwell, I continued working part-time while undertaking a full-time PhD and I continued making art as I once had. I did not feel entitled to postpone a residency I had committed to. After surviving the long London tube journey to the gallery with a heat pad strapped around my waist in a heatwave, I lay on the cool polished-concrete floor waiting for a cocktail of painkillers to reach maximum effect; I wrestled with large sculptures during this

short window of maximum relief as my body still burned. I used my own hands to make work as they protested greatly. I could not keep all this up. I had resisted bringing myself into this research or changing my methods to something less strenuous than the sculptural project I had originally proposed, but I was beginning to realise I needed to change my approach drastically. My sickness entered this project and made choices for me. I could not escape my body’s influence on this project and its methodology. Everything I do is informed by sickness. When the *Covid-19* pandemic struck, I was forced to stop working part-time and think about how I could make artwork without space. I have to admit I thrived in this time (or at least, I thrived as much as I could with an untreated/misdiagnosed illness and the fear that the world was dying). I could attend all the online lectures and seminars I wanted. I learnt to use the software program *Blender* through a *Youtuber* named *Blender Guru*.<sup>2</sup> I sought out other sick and disabled artists and activists online, like Johanna Hedva<sup>3</sup> and Abi Palmer.<sup>4</sup> I joined online support groups. Through these interactions and advice from other sick people, I eventually found others who were sick just like me, and I found the correct diagnosis to pursue. Beyond diagnosis, I learnt management strategies and what treatment to seek from doctors. All this computational activity saved me.

---

<sup>2</sup> ‘Blender Guru - YouTube’, accessed 18 February 2022, <https://www.youtube.com/>.

<sup>3</sup> See page 68 for text on Johanna Hedva's artwork.

<sup>4</sup> See page 135 for text on Abi Palmer's artwork.

---

# INTRODUCTION

This thesis explores the heightened sense of embodied sensuality that comes with chronic illness, and the experience of shifting to a digital practice after becoming sick/disabled during this PhD. The experience of chronic illness and disability gives me a framework to explore possibilities for digital media, particularly from an embodied perspective, all while considering the sociopolitics of marginalised bodies. Difference needs to be included within an understanding of an embodied cyberspace to make digital spaces both accessible and conscious of their impact on corporeal bodies and the planet at large. This project is not just about making digital media better for marginalised bodies; through this practice, I argue the possibilities for learning from and valuing the perspective of bodies who feel excessively.

## //QUESTIONS:

1. How can I emphasise the sensuousness of cyber-embodiment while resisting making a representation that occludes the corporeal body?

This question fundamentally explores the relationship between digital media and what we deem “real life.” In chapter one I give the example of Ed Atkin’s writing around his practice, and how he describes the process of “loss” when something enters the digital realm.<sup>5</sup> Cyberspace, by this logic, is considered a separate, representational world in competition with the “real world,” but what if something fundamentally changes or adapts when entering digital space, and what if the “original” thing no longer, or, has never existed? Having lost bodily mobility, my digital practice functions differently from my previous sculptural processes, but it could be said my digital images have been made to compensate for a loss. Without access to the thing that is lost while entering digital space, why should digital media always be compared to “real life” and why should it be seen as any less a

---

<sup>5</sup> See page 50 for a detailed analysis of Atkin's attitude towards rendered bodies.



part of my reality? Digital media is a material part of my new reality, albeit further complicated by my choice of producing a figurative hand as an "avatar." Ultimately, this figuration acts as a provocation, drawing the viewer into this seemingly uncanny mimesis yet twisting expectations by highlighting the sensual affects that circulate beyond the visible figure of a digital image.

2. Can a sick/disabled perspective that embraces the difference and pleasure of non-normative embodiments enhance a new materialist understanding of cyberspace, and how does this differ from virtual disembodied emancipation or neoliberal versions of disabled liberation?

Digital media opens up new possibilities for marginalised bodies to assemble and create alternative systems to dominant structures of patriarchy. Cyberfeminists and theorists such as Legacy Russell<sup>6</sup> and Laboria Cuboniks<sup>7</sup> offer me a theoretical and tactical framework to align with given their advocacy of alternative uses of cyberspace beyond capitalist uses. However, the concerns of the corporeal body can be neglected in these spaces of digital emancipation that focus on ephemerality as a response to bodily exploitation, repression and marginalisation. A sick adaptation of cyberfeminism ensures that marginalised bodies are included in this cyber-emancipation. My digital provocations work with the sensuality, mess and needs of bodies, continuously learning from and attempting to affect the corporeal using digital methods in a digital-bodily feedback loop. From a sick, cyberfeminist perspective, there is no escape and no leaving behind of bodies but a continual attempt to enable, enhance and adapt with the corporeal through technological means.

“Positivity” can prove a problem for disabled communities when it individualises singular achievements or adaptations. Where positivity stems from neoliberal imperatives of individualism

<sup>6</sup> See page 79 for text on Legacy Russell's writing.  
<sup>7</sup> See page 75 for Laboria Cubonik's Xenofeminism.

at the expense of social support, it denies the absence of infrastructure which is critical for many disabled and chronically ill people. My research criticises ableism and negativity about disability, arguing the importance of embodied disabled perspectives. However, I focus on the agency that stems from multiplicity, connectivity and dependency instead of championing disabled exceptionalism. I focus on generating bodily resonances with the movement, rhythms and intensities of my digital embodiments; these images move from figuration to abstracted matter away from obvious binaries between positive/negative through this material ambiguity.

3. What production techniques have the potential to instigate affective encounters, and how might this computationally enabled fictioning contribute to the sociopolitics of cyberspace?

I look to other artists and digital creators who embrace computational software and video to develop techniques specifically for this medium. For example, the ASMR creator *ASMRMagic*<sup>8</sup> and artists Johanna Hedva,<sup>9</sup> Maggie Roberts (Orphan Drift),<sup>10</sup> and Danielle Brathwaite-Shirley.<sup>11</sup> Computational software can produce and manipulate forms, as well as put together multiple things or moments, and produce a particular aesthetic. Practices such as digital art and ASMR are not intended as an imitation of a sensual experience, and accepting their independence gives those who need or prefer these alternatives respect and consideration.<sup>12</sup> These digital practices do not fall short of any assumed “original,” they are creative modes of sensual expression which utilise new technologies. Software can also help me with structural and time-based issues relating to the work: linearity is difficult for me being neurodivergent, but structure is important for carrying a narrative. The

<sup>8</sup> See page 116 for text on Youtube channel ASMRMagic.  
<sup>9</sup> See page 68 for text on Johanna Hedva's artwork.  
<sup>10</sup> See page 161 for text on Maggie Robert's of Orphan Drift's artwork.  
<sup>11</sup> See page 171 for text on Danielle Brathwaite-Shirley's artwork.  
<sup>12</sup> See page 116 for text on ASMR.

program *Blender* and other AV software, use a timeline that allows for diachronic production, pairing the capabilities of this software with an understanding of fictioning helps me play around with linearity, past, present and future while producing movement.<sup>13</sup> Movement is crucial for a project that seeks compatibility with the body, and finding creative and flexible means to work with time allows for a greater understanding of being a body. Fictioning as a methodology is also important in this project centred around illness and disability from a political perspective, because it allows for shifts between existing realities and future possibilities, learning from embodied experiences while advocating for a better way forward.

### //A QUICK INTRODUCTION TO THE DIGITAL HAND



3. Anna Hughes, *Digital Hand #1*, Digital image, 2023.

<sup>13</sup> See chapter 5 for writing around futurity and technology.

The digital hand guides me through the entirety of this project. It has become a way to move easily; I use the digital hand as an extension into the virtual. Through this digital hand, I have extended my embodiment: it has allowed me to gain agency and move as a body that has lost a particular form of mobility. The image of a hand points towards ideas of “touch.” In digital space, it becomes a variant of sensuality that plays with the relationship between distance and intimacy: geographical locality is unnecessary for this form of closeness in digital space. The digital mimesis gives it an uncanny presence, while it also holds the ability to move, grow and shapeshift within my work. It is both an allusion to touch, touch in practice, and an enabling device for me to work with in this project, a device that I can work with to simultaneously touch my own body and the body of another. Within this thesis, the digital hand also acts as an aid: it gives me a point of departure which circulates back around to strengthen the hand and its activities. As an extension of me, the digital hand supports me and gives me a much-needed form of agency as a sick artist. The hand carries the weight of all other hands while it can wander freely in digital space. I am its point of departure while it resonates with others in ways I could not have imagined.

## // TERMS:

### DISABLED

In the UK, “disabled person” is the standard language used instead of *Person-First Language*, which prefers “person with a disability.”<sup>14</sup> Person-first language (used more in the US and parts of Europe) is often used with the well-meaning intention of giving someone a personhood beyond their disability. The alternative of “disabled person” claims that a person is disabled *by* society; this aligns with the *Social Model of Disability*, which argues that disabled people are only disadvantaged by how society is designed, emphasising the need for accessibility and a shift in a more positive attitude towards disability.<sup>15</sup> Critiques of this model are that it excludes those disabled by chronic illness who still struggle with symptoms and participation in society even when the physical infrastructure is improved. Furthermore, the *Social Model of Disability* can efficiently serve a neoliberal agenda, where social provisions and initiatives place expectations on disabled people to join the workforce whatever their particular circumstances or conditions, and without registering the inadequacies of the support and cuts to services that have taken place as part of wider austerity measures.

### CHRONIC ILLNESS/SICKNESS

I use the terms chronic illness and sickness in relation to symptoms and my bodily phenomena. “Chronic illness” describes my durational ill-health, while I generally prefer “sickness” in writing for its more visceral connotation. “Sickness” conjures an air of unease; it can be dramatic

<sup>14</sup> The following paper explains person-first, or identity first language. See: Krista L. Best et al., ‘Language Matters! The Long-Standing Debate between Identity-First Language and Person First Language’, *Assistive Technology* 34, no. 2 (4 March 2022): 127–28, <https://doi.org/10.1080/10400435.2022.2058315>.

<sup>15</sup> See the following website for a detailed explanation of the *Social Model of Disability*: ‘**Social Model of Disability**: Language | Disability Rights UK’, accessed 1 February 2023, <https://www.disabilityrightsuk.org/social-model-disability-language>.

and sometimes vulgar. I borrow “sickness” from Johanna Hedva’s *Sick Woman Theory*<sup>16</sup> and beckon to Dodie Bellamy’s text: *When the Sick Rule the World*.<sup>17</sup> Following Hedva and Bellamy, sickness is dramatic, poetic and political, and this adequately describes my relationship with this embodiment.

### CRIP

*Crip theory* reclaims the slur “cripple.”<sup>18</sup> Drawn from queer theory, it emphasises the fluidity and self-inclusion of claiming to be crip/disabled. Crip theory is a collective movement of individuals brought together through shared experiences and alliances against being othered and marginalised. Crip theory is useful for its self-assembly and fluidity.

### ABLED

After much consideration I have chosen to refer to people who are not disabled as “abled.” The term “able-bodied” can be considered offensive as it could be taken for someone possessing a superior body. Non-disabled is not adequate for this project, because it assumes that the only descriptor worth giving a name to is “disabled” and that anyone who is not disabled is simply a person. “Able” is often used more casually in chronic-illness/disabled communities online. “Able” is a compromise for me, because it follows the logic of a descriptor/adjective, and although I am not completely satisfied with the social model of disability, it is the standard in the UK and “abled” fits with this logic: a person is (en)abled by society.

<sup>16</sup> See page 68 for text on Johanna Hedva's artwork.

<sup>17</sup> See page 228 for the outro of this thesis on Dodie Bellamy's text *When the Sick Rule the World*.

<sup>18</sup> See page 140 for detailed text on crip theory.

## //AUTOTHEORY

“Autotheory is the integration of the auto or “self” with philosophy or theory, often in ways that are direct, performative, or self-aware.”<sup>19</sup>

Lauren Fournier writes on autotheory as a feminist practice. She explains how embodied practices have been dismissed, gendered and devalued to maintain patriarchal power throughout history. A patriarchal insistence on prioritising universal rationality allows for the disregard of practices that celebrate/acknowledge and utilise the unpredictable nature of the body to be dismissed as irrational.

My autotheoretical approach is drawn from my experience with chronic illness. My embodied experience is incredibly sensual - consisting of sensations generated by the body and augmented by the environment around me. This heightened awareness of my embodied experience is brought forward as knowledge which informs my practice. I focus on bodily encounters’ intensities and flows beyond objective rationalisations that fall short of this overabundant body.

## //A METHODOLOGY OF WORKING WITH

Throughout this thesis, I emphasise the *with-ness of this project*. The “with” I speak of is a spatial and temporal move. As a departure from Euclidean geometry and towards the quantum field, I allow for a different kind of taking up space/time<sup>20</sup> where there is room for co-existence even when it does not *appear* possible.<sup>21</sup> Extra space is created not just from the margins but nested, folded

<sup>19</sup> Lauren Fournier, *Autotheory as Feminist Practice in Art, Writing, and Criticism* (Cambridge, Massachusetts: The MIT Press, 2021).

<sup>20</sup> The following article gives an accessible explanation of “space-time” describing it as a fabric, and time being the fourth dimension. Time and space are thereby intrinsically linked. For this project, it is useful to think of time as a dimensional/spacial topology. This allows me to better understand the animation of 3D renders. See: Adam Mann published, ‘What Is Space-Time?’, *livescience.com*, 20 May 2021, <https://www.livescience.com/space-time.html>.

<sup>21</sup> Barad writes on the quantum field and how it discounts ideas around the “void” (nothingness/vacuum). Particularly, this field is composed of activity. All this helps me to think of that which is beyond the visible and its presence/importance.

and transformed as part of the topology of this project. This understanding of space provides a structure that permeates my thinking. Proximity can be cultivated from a distance, and one thing does not need to compete with another thing to find space. In this non-competitive move, being at the same time becomes a positive proposition with no concern about room. All this allows for free movement because the position of another does not detract from one’s own space.

The relationship between cyberspace and what we might call “physical space” can be considered a coalition at the same time and “at-a-distance.”<sup>22</sup> Cyberspace *can* be thought of as a distinct world and alternative reality, this feeds fears that digital media exists in competition with “physical” life. My position is that cyberspace is a part of physical/material space, and I emphasise its ability to promote movement and unlikely coalitions. Because cyberspace does not require geographical closeness to give proximity/intimacy, it allows for an enhanced being at the same time when it would not otherwise be possible. The relationship between my practice and this thesis is intended to work in the same way: this thesis works with my practice at the same time. This coalition, in time, creates space for my thesis and practice to work together with unexpected spatial moves. The practice and theory can fold, penetrate, and intermingle with each other, resulting in a feedback loop of mutual learning. This move is both political and formal; it also calls for a particular form of social ethics. Ultimately, this being with others is not an egalitarian ideal but a methodological move that allows for a temporal and spatial sense of unity. Therefore, the digital renders in my work act with all the rest of the matter that make up this project (be it theory or visual/sonic/virtual matter). The digital hand works with my fleshy hand, not to replace or compensate but to generate agency and create **new material encounters**.

See: Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham and London: Duke University Press, 2007), 354.

<sup>22</sup> Barad reference Einstein’s theory of “spooky-action-at-a-distance” which describes the entanglement of two particles in different locations. This idea of being entangled while in different locations is important for this thesis that argues for the intensity of virtual relations. See: Barad, ‘TransMaterialities’, 413.

## // CONTEXT

The COVID-19 pandemic greatly affected this work. Occurring in the middle of this project I had the experience of a before and (an arguable) after the pandemic while completing this project and dealing with my parallel period of becoming sick. The sudden shift to a more universal use of remote working, learning and socialising made it feel far more acceptable for me to stop and accept that I need to do things differently. My experience of continuing remote options and hybrid access has been inconsistent following the pandemic. Remote working and hybrid options are generally only thought of as a luxury and not as vital access. Remote options do not suit the needs of some, and therefore, I do not advocate for a mass shift online again, but technology does have an enabling potential for those who may find travel and movement a barrier. Environment, too, is an important factor in this preference or need to attend something remotely, where for the sick (if one is privileged enough), their environment is carefully orchestrated to limit discomfort. All this contributes to just how accessible these forms of media are and highlights ways in which this media can be consumed in conducive ways that suit the needs of the individual. While these needs cannot always be predicted, leaving options open and adaptable is important. For this project I focus on digital media for its portability and adaptability to presentation/consumption in different spaces.

## //SYNOPSIS

### //CHAPTER 1: DIGITAL DIGITS

In this chapter, I introduce the digital hand. I frame this chapter around learning to use the software programme *Blender* in response to my developing illness. Finding a more accessible

art-making method, I question how/if this digital hand can move beyond being only “representational.” Through a “sick” reading of Jean-Francois Lyotard, I challenge my initial assumption that figurative imagery is inherently *lacking*.<sup>23</sup> I consider Lyotard’s use of the term simulacra, where the reproducibility of the image/object correlates with its circulation. I argue that my digital hand performs in ways that differ from its “original” functionality, and ultimately it enables me to work in digital space; it, therefore, moves beyond being only a copy of an “original” hand. The ease at which this digitised hand might circulate is to my advantage: it operates both as signification (representational) and affects (virtuality).<sup>24</sup> I use this emphasis on the coexistence of these registers to think through my relationship with the digital image and the augmentary function of digital media. I move on to critique the work of Ed Atkins to contrast his different understanding of the digitally rendered body, where he argues that there is an inherent mortality, “illusion,” and “loss” in digital media.<sup>25</sup> I propose a reclamation of digital media where figurations are used for their ability to circulate (mobility) in ways that move beyond simply being representational (capitalistic) and towards championing digital media’s potential to produce meaningful encounters.

### //CHAPTER TWO - SEVERED HANDS

This chapter uses the digital-severed hand to understand disembodiment and emancipation in relation to digital media and illness. As someone who experiences unpleasant symptoms such as chronic pain, I hold a desire to escape my body. I relate this desire to cyberfeminist texts and question whether virtual disembodiment is the answer for a painful embodiment when it *feels* impossible

<sup>23</sup> See page 42 where I introduce my fears around representation.

<sup>24</sup> See page 58 for text on affect and Simon O'Sullivan's writing on affect.

<sup>25</sup> Karen Arcey et al., *More than Real: Art in the Digital Age ; 2018 Verbier Art Summit*, ed. Daniel Birnbaum and Michelle Kuo, Verbier Art Summit Series 2 (Verbier Art Summit, London: Koenig Books, 2018), 80–96.

to forget a symptomatic body. I am concerned that digital emancipation may require the sensation of disembodiment, noting the ephemerality of the body in the work of theorists such as Legacy Russell<sup>26</sup> and Laboria Cuboniks.<sup>27</sup> While I agree that the body's boundaries can be rethought and include virtuality, I emphasise extension and the co-presence of "meat" and virtuality. From the perspective of a person who excessively feels their body through symptoms, I become acutely aware of the interdependence of virtuality and the biological body. Our bodies are not left behind when immersed in a virtual reality.

### //CHAPTER THREE - REMOTE TOUCHING

In *Remote Touching*, I explore "touch" in digital media. To think of touch in this way, I need to expand my definition of touch beyond literal flesh bumping up against something. I begin this chapter by thinking about texture. While texture can be felt through a narrow definition of touch, texture can also be seen or heard. By extension, seeing or hearing a texture can also evoke a response in the body and on the flesh, and in this way, *feeling* the touch of texture does not need to be limited in its remit. I explore the affect of texture in digital media through reproducing bodily materials in *Blender*. I find this exploration cathartic, and having skin that shows signs of my "genetic defect," I reclaim my body beyond it being medically "deviant." *Blender* allows me to think of my body in terms of its material properties; its viscosities, undulations, roughness and opacities. Thinking of my body this way enables me to feel a part of this biological matter; my virtual and "physical" being becomes one textural exploration. I reference Karen Barad, who writes of the virtuality inherent in the function of matter, and consider how this new understanding of virtual touch can transform

<sup>26</sup> See page 79 for text on Legacy Russell's glitch feminism.

<sup>27</sup> See page 75 for more on Laboria Cuboniks (Xenofeminism).

my understanding of closeness.<sup>28</sup> Therefore, I turn to other digital media creators who have developed distinct methods that expand on definitions of texture/touch/proximity such as examples of *ASMR* and the overlapping slime trend.<sup>29</sup> These creators have developed techniques that push this phenomena beyond being an imitation, and offer promising prospects for the potential of digital media to move beyond capitalist motives.

### // CHAPTER FOUR - HYPERMOBILITY AND CONNECTIVE TISSUE

*Mobility* is the focus of this chapter. I play with the double meaning of mobility as both the possibility of changing social status and the movement of a body in space. I draw from my experience of hypermobile Ehlers-Danlos Syndrome: which limits my mobility despite presenting as flexible joints. This heightened awareness of my body's mobility forms the basis of my thinking around movement, proximity and agency of the body. I begin this chapter by playing with motion through rigging my digital hand in *Blender*. Digital practice enables me to present an excessively moving body and feel a resonance to this imagery while I do not suffer in the same way as I do moving my fleshy hands. This space provides me with mobility that extends beyond imitating my hand's movements, allowing digital media to serve a specific purpose. For this chapter, I focus on other disabled/sick artists, exploring how mobility can be performed and presented as a subject. I gravitate towards those who think of mobility and proximity in creative ways due to their body, giving, for instance, Rebecca Horn's *Finger Gloves* as bodily extensions that create a different form of closeness. Later in this chapter, I consider models of disability and illness, with in mind the flexibility that I desire. I consider the *Social Model of Disability* and how it excludes those like me who are disabled by their body: when/if society removes/improves access, my disability remains, countering the

<sup>28</sup> See page 114 for text reference to Barad and virtual touch.

<sup>29</sup> See page 116 for more on slime and *ASMR*.

social model's emphasis on being disabled *by* society. Crip theory provides a more fluid model that opens itself up to self-inclusion and considers flourishing ways in which people can work with/as disabled bodies. I therefore argue that agency can be achieved through acknowledging difference and centring difference, movement and creativity as integral to the function of this model.

## // CHAPTER FIVE - A SICK CYBERSPACE

I begin this chapter by considering futurity in relation to illness. I look to my digital hand for inspiration, thinking of the lines on its palm and the connotations of fortune-telling that these lines evoke. I outline my difficulties with linear timelines being neurodivergent, and now being sick I am more aware of just how unpredictable the future is. In addition to thinking of the unknown future, I struggle to think of the past because illness has changed my perception of *being* beyond recognition. I am left existing in the present, and I need to find new methods to produce a meaningful narrative using a time-based medium. Fortunately, the software I use translates spatial movements into a linear timeline. The experience of relying on the software to aid in making this work allows me to cultivate a reciprocal relationship with my technology. My input into the software I use is enhanced by its functions, forming a feedback loop as I continue to learn from the software while the output grows with this learning. I turn to Simon O'Sullivan and David Burrow's theories around *fictioning* in relation to how technology can aid in creating/presenting worlds that move beyond the immediately visible.<sup>30</sup> As an extension of my textural explorations in *Blender*, I use music-production software to construct my final narrative. Similarly to texture, rhythm works with variants in intensity. A rhythm repeats itself, changes and grows to produce meaning unique to the body it encounters. Presenting a 3D-rendered world, I give the work depth and atmosphere using sound,

---

<sup>30</sup> See page 191 for text relating to fictioning.

editing the animation and with techniques such as fades and overlays I can enhance the affects of the world I present. As a sick world, the videos I create are not a speculative utopia but a revelation of a sensuous, embodied virtuality already existing in the present. The difference is that I give a tangible presence to this affective dimension.

BLANK

//NAVIGATION:

Throughout this thesis you will come across several link-pages which will guide you to artworks made for this project. The artworks are in order of when they were made. I have placed them throughout the text as an interlude so the work can be viewed with the text.

There are three options to access the link:

If reading a printed copy:

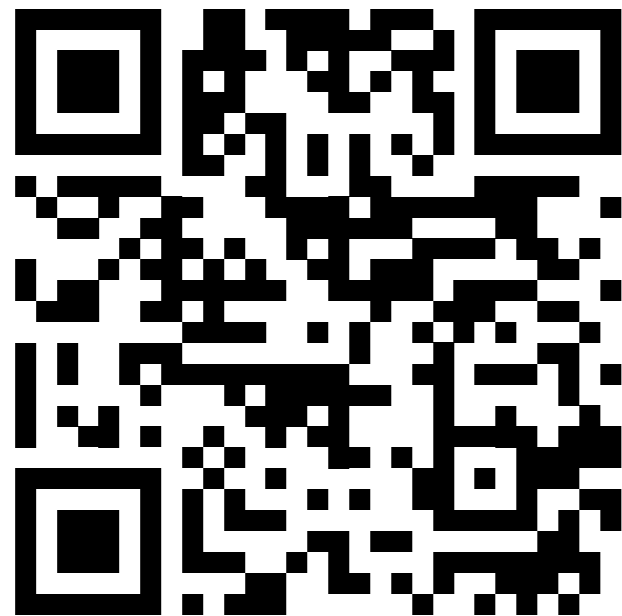
Use the QR code (square), and hold up your phone to the paper in its camera setting and follow the link.

If viewing in Acrobat or another PDF reader:

Click the "hand" icon and you will be taken to the page.

If you viewing in a web-browser,  
Copy and paste the link in the bottom right corner.





<https://annafhughes.co.uk/WELL>

## ARTWORK INTERLUDE:

I HOPE YOU  
ARE WELL

This artwork was the first work I made after learning 3D-rendering software, as well as being early on in my project. I include this work to show the progression of later works, both in technical skill and visual-language.



4. Anna Hughes, *I Hope You Are Well* (Still), Digital animation, 2020.



5. Anna Hughes, *I Hope You Are Well* (Still), Digital animation, 2020.



6. Anna Hughes, *I Hope You Are Well* (Still), Digital animation, 2020.

# I HOPE YOU ARE WELL

Making sculptures has become too much of a strain on my body. I need a different way of making art. Perhaps it is time to try and learn to use CGI software; I have been tempted to try it since the first time I saw Ed Atkins' 3D rendered artwork.<sup>31</sup> Starting YouTube tutorials for the free-to-use, open-source program Blender, I am enthralled with this form of making. I find it difficult to turn away from my computer: I am so intrigued to learn what I can do next in this world that offers me so much without moving from my chair. Better still, it seems this way of working suits how I think; I can travel around things using the software's navigation system, flying, walking or orbiting the scene. The objects I make in Blender become sculptures to me because I can move and view them from different angles or zoom in close to inspect details. All this moving around is so much easier now. This is freeing and exciting. I want more. It takes only a few months for me to get to a good standard using the software because I can not stop learning, but luckily my desire for more can be quenched with the software offering so many features which the developers are continuously updating.

It is time to put some of these new skills into practice, so I begin making the work I Hope You Are Well while learning extended skills. I make six rooms for the viewer to encounter different objects/scenes. The objects include a pillow, a severed finger, and a pill; each object presents a different challenge in its construction, fulfilling my desire to learn more, while each room can cater to a different feel or intensity. I learn different things from each room as if completing another level in a video game. In the first room, I choose to embody softness, and learn how to use a "fabric simulation" to make a plump pillow that I duplicate. I start with an oblong and adjust the simulation's settings to give the pillow pressure and elasticity. The simulation transforms it into a puffed-up

pillow complete with bulges and folds. When I press play, I apply the simulation in time, allowing me to watch as the pillow swells up full of stuffing, and then it shrivels, contracting back into itself, producing more wrinkles, then repeating the process. I then go back along the timeline to choose a moment when this simulation looks right and apply the best moment to the mesh. This simulation reminds me of lungs breathing, inspiring me to animate the object as if it is breathing while giving me an affinity with this strange yet familiar object I have given life to. To make the finger, I start with a cylinder, then make "loop-cuts" (inserting new lines into the mesh) at various stages, allowing me to expand, contract and rotate these cuts to form curves and bends. I give detail using the "sculpt" tool, which turns the object into a clay-like consistency with each "brush" serving a different purpose, for instance, a crease, smooth or blob option. I remember how satisfying it is to study and recreate the wrinkles and folds of the human body; I used to love drawing hands with so many lines to discover! I make the pill with two cylinders, pulling each outwards at one end to form a dome, and then I thicken them using a "modifier" function to replicate this smooth outer casing. With this pill room, I play around with scale: objects can be measured in units in the software; however, other objects give relative scale in digital space; an object's scale is perceived relative to other objects in digital space. In my world, the pill is a monolith. All the work making this video improves my skills in this software, and possibilities for making are opened up with every improvement. I can not wait to discover what I can do next; this is a strange realisation when this sickness has taken away abilities.

<sup>31</sup> See page 52 for an analysis of Ed Atkins' artwork.



7. Anna Hughes, *Blender Experiment #3*, Digital image, 2023.

I

---

## DIGITAL DIGITS



8. Anna Hughes, *Digital Hand #2*, Digital image, 2023.

## //THE HAND MODEL

Using my computer, I learn to make in three dimensions with the open source programme *Blender*. I follow online tutorials that guide me through the construction of different objects. Feeling more confident with the software I model an ambitious, organic form to challenge myself. I have the urge to make an uncanny semblance to a corporeal body; I can use my body as a comparative measurement of accuracy. I make a digital hand using *Blender*. I spend time with my new hand; each digit points my way through the modelling process. Once satisfied with my model, I look at the finished result in horror: I have made a figurative image! I have been seduced by representation. My introduction to representation was in my undergraduate lectures; it had been ingrained in me that mimetic figurative representation was a limited form of art. Representation meant that the artwork was not doing anything but pointing at something else; there was no “originality or sophistication” in representation.<sup>32</sup> But I am pleased by the digital verisimilitude of my new hand. Becoming sick has rendered it too painful to make in the same way I used to. I had longed to dip my hands in plaster and feel its warmth as I once did, but now I can move on to something else. I can create once more. This new computational skill opens up possibilities for me to continue to make as an artist. Can I use this hand, or should I cast it aside as an outcome of my learning? Perhaps I can distort the hand somehow, but does this come with its problems? Would this distortion be any more than a desperate attempt to fix my mistake? I have been spending time with “fictioning” recently; it permits me to conjure all kinds of uncanny imagery.<sup>33</sup> What old horrors has this severed hand unleashed? Have I taken this permission too far with such a realistic render?

<sup>32</sup> In my undergraduate degree in fine art at the University of Reading (2008-2011) lectures focused on conceptual art and french philosophers prolific in the 60's 70's such as Jacques Derrida and Jean-Luc Nancy. Simon O'Sullivan writes about this time and in art schools subsequently, where philosophers of that era critiqued art centred around aesthetics and figuration: that they focused on “understanding art as representation, and then understanding art as being in the crisis in representation.” Many students- without feminist, intersectional or other approaches being made legible, internalised this critique as their own crisis. See: Simon O'Sullivan, 'THE AESTHETICS OF AFFECT: Thinking Art beyond Representation', *Angelaki* 6, no. 3 (December 2001): 125–35, <https://doi.org/10.1080/09697250120087987>, 126.

<sup>33</sup> See page 154 for more on fictioning.

## //POINTING: TOWARDS REPRESENTATION AND THE SIMULACRA

I use my hand, running my finger across the page as I read. It draws me to Lyotard's “Great Ephemeral Skin.” The darkness and drama of this text once seduced me.

“The thing stands for something else, and it is less than what it represents. In order that it be what it is, there has been a lack of being. What is given to us, insofar as it is not similitude itself, is deficient in force [puissance]. The theatricality of representation implies this deficiency, this depression. It is in and through this deficiency that the figure of alienation comes about.”<sup>34</sup>

I re-read and attempt to grasp Lyotard's meaning with my new digital hand. The book begins by describing in detail a body that *is* surface: the parts that are usually inside are outside, except, without an inside, it no longer has an outside. Lyotard exudes a sense of pleasure in the perverse reveal of figurative flatness. This flatness is not evoked to expose superficiality as the unravelled body reveals a surface that is abundant in texture.<sup>35</sup> Lyotard writes of “semioticians” who claim the sign is

“hollowed out into a two-faced thing, meaningful/meaningless, intelligible/sensible, manifest/hidden, in front/behind; whenever you speak, you tell us, you excavate a theatre in things.”<sup>36</sup>

Lyotard seeks a form of meaning-making that moves beyond the binaries of dialectics. The dialectic needs a counter or other to become a whole. To be othered is a prospect that haunts me as a sick person: I am always in the shadow of wellness. Just to exist, I wrestle against my healthy other, and surely wellness is a more robust component than my sickly self. Being sick can sometimes feel like I am never free from wellness: always being the negative byproduct. For Lyotard, there is a danger that the very nature of the two-sided sign is the source of a disenchantment/disembodiment of sorts and

<sup>34</sup> Jean-François Lyotard, *Libidinal Economy*, *Theories of Contemporary Culture* (Bloomington: Indiana University Press, 1993), 1-6.

<sup>35</sup> Lyotard, 1-6.

<sup>36</sup> Lyotard, 50.

a subordination of something. The representational sign subordinates the sensual/bodily/affective/unspoken. The hollow sign is a “dissimulation:” a front for something elsewhere. The attempt to find this elsewhere, or to draw meaning from it, is an “excavation:”<sup>37</sup> the digging up of historical objects. The hollowed-out sign, which does not contain its meaning and points to a historical archive, leads to a process of constant “deferral.”<sup>38</sup> Meaning becomes a “theatre” of deception, constantly dredging up historical objects, only to be diverted elsewhere. Meaning is elsewhere and nowhere at the same time: unreachable and full of lack. Lyotard desires more. If the two-faced sign produces an object that is the opposite of the weighty body that I feel so excessively through illness, how can my digital hand speak to my experience as a body? This representation always falls short of the original: all the matter, agency and excess affects that make up me. Lyotard uses the term “simulacrum” later in his text; he emphasises the “exchangeability” of simulacra and their ability to circulate. Using a definition of “simulacrum” taken from the work of writer/artist Pierre Klossowski, Lyotard argues that the simulacra are exchangeable images that represent the unexchangeable.<sup>39</sup> My digital hand could be a simulacrum because it reflects back at my hand yet circulates freely in digital space. The proliferation of simulacra is seen as a negative thing for Jean Baudrillard, who critiques “electronic media” and its subordination, or moreover, eradication of the “real.”<sup>40</sup> A network of simulacra, following Baudrillard, seems to map onto the internet in late-stage capitalism easily: the ubiquitous cyberspace that has emerged since writing *Simulacra and Simulation*. Perhaps Baudrillard was right, and the internet has led to a societal descent into meaninglessness. The internet does facilitate the circulation of imagery without a traceability back to an origin, and it does indeed use this circularity and visual language of the simulacrum to shift capital, but just because something is used with questionable ethics, it does not mean that it can only be used in this way. If my digital

<sup>37</sup> Lyotard, 3.

<sup>38</sup> Lyotard, 70.

<sup>39</sup> Lyotard, 26.

<sup>40</sup> Jean Baudrillard, *Simulacra and Simulation*, *The Body, in Theory* (Ann Arbor: University of Michigan Press, 1994), 82.

hand is a simulacrum, I tend to Lyotard/Klossowski’s definition that emphasises the exchangeability of simulacra because movement/mobility is an important part of the appeal of cyberspace for me as a person with limited mobility. The simulacrum/my digital hand holds a function in a space that requires some sort of “standing in” because my body cannot literally move around in cyberspace. Furthermore, my use of digital space is not with the intent to subordinate that which is real; I have already lost the ability to move around the “real” world without discomfort; therefore, this space of circulating simulacra holds a unique and useful function. As a sick person, digital media is more than a space that attempts and fails to compete with its original because the once compensatory practice has already moved on and become something else.

>>>

When first reading Lyotard’s concerns with representation, I took from it a need to physically distort figurative imagery to ensure I create something new. Have I taken this distortion too literally? I imagine a hand whose fingers stretch and twist beyond their expected limits. I look at my fingers and consider how they move in such an unexpected way.<sup>41</sup> This unexpected movement is only a problem for me when it causes pain. I have thought of the figural as a visible change, but my invisible illness teaches me that the invisible affect of change is felt with great intensity. I do not need to change the appearance of my hand for it to be different.

I often choose surfaces for their sensual properties, guided by my pull towards a particular material, and I embrace meaning that emerges through these material encounters. On impulse, I choose the fleshy tones of my skin: pinks and reds, and these surfaces generate meaning beyond

<sup>41</sup> Towards the end of completing this project I managed to get a correct diagnosis of Hypermobile Ehlers-Danlos Syndrome. Flexibility of the hand and fingers is part of the criteria for a diagnosis. When first writing this, I was not aware of this condition and had been misdiagnosed with *Fibromyalgia*.



my control. Meaning does not precede the properties of the materials I use, allowing for choices governed by my attraction. I still hold on to a fear that my choices might seem superficial, but I do not want to be ruled by meaning that precedes *me*. I am not elsewhere: I become my body. Being a chronically sick body, I have no choice but to accept the change which emanates from me despite any outside intervention.

### //SURFACE DIMENSIONS: MEANING-MAKING

My experience with medical scans and investigative surgery means I understand the difficulty of making my insides present.<sup>42</sup> I am frustrated as I want to open up my body with ease; I want my pain to reveal itself. As a relief from my corporeal body, I can easily look inside my modelled hand. I find myself perfecting what is the inside of the model. I smooth the ridges formed by the hand's creases. I apply a material to the outside of the hand, but the software automatically applies the same material to my inside surface. I position the "viewfinder" at the base of the hand.<sup>43</sup> The software is designed to give the appearance of dimensionality, but in this view, the skin tone applied to the inside of the model flattens out the image. I remember that the screen is a flat surface. This digital exploration helps me understand that insides are only present when they are made visible on the surface or when I can feel their affect. My hand helps me consider the relationship between dimensionality and meaning. If I prioritise how my hand presents *itself*, its surface is not subordinated by an absent inside that gives it *form*. My hand's surface gives the *appearance* of form, be it on a screen's flat surface or a multi-dimensional surface. My hand autonomously presents itself to me despite my role in its making, and I hold no power over its meaning once I am absent. Where I

<sup>42</sup> This difficulty is both physical and political. I have encountered extremely long waiting lists, and doctors reluctant to give hope as possible treatments are not available on the NHS. See page 135 relating to Abi Palmer's work for more on society's attitudes towards the NHS and medical funding.

<sup>43</sup> Blender's "viewfinder" is a window that gives a view of the object in its 3D surroundings.

once assumed that the figural was a manipulation of form, a different understanding of form allows my hand's surface to remain malleable.



9. Anna Hughes, *Blender Experiment #4*, image, 2023.

I render out a still image of my hollow hand. The image gives the appearance of a distinct boundary between my model and its background. I view this image on the surface of my screen and remember that it is made up of individual pixels, so small I cannot see them: their presence is made when many are combined. Thinking of the screen's pixels allows me to imagine the individual particles that make up my body and its surrounding particles. Through pain, I experience the boundaries of my body which continuously change. I imagine myself as a collection of discontinuous pixels, interchangeable with my surroundings, forming a surface that extends out in multiple directions. Becoming sick has given me this new topological relationship with my body, and computational modelling has enabled me to understand it. To model an object in blender, I switch to "edit mode;" on the object's surface, a wireframe appears, and each line is joined by a "vertex", which can

be moved easily and joined to more vertices. The object's surface is easily manipulated and carefully constructed through the dynamics of these topological arrangements. I think about the bending, stretching and twisting that occurs to form the folds of my body, so easily manipulated and continuously in flux. As a topological surface, my boundaries are not complete, nor am I so clearly distinct from the world that appears to surround me. My skin boundary becomes porous, and I can grow much easier now, beyond this solid appearance. This digital exploration provides the means to move in ways beyond this skin: to emanate more of myself beyond this flesh.

Karen Barad's work that draws from quantum physics gives me material to think of different possibilities for how meaning is formed.<sup>44</sup> It is helpful for me to consider the use of terminology such as "matter" because this broadens the substance at stake; it highlights the malleability and commonality of the physical world. Barad writes that

"the world is an open process of mattering through which mattering itself acquires meaning and form through the realization of different agential possibilities."<sup>45</sup>

Barad prioritises "phenomena" in her work on "agential realism:" arguing that phenomena cannot be disentangled from their measuring apparatus.<sup>46</sup> For Barad, "phenomena" better describes matter than separating it into subject and object: phenomena describes the event of reciprocity made between the subject and measuring apparatus.<sup>47</sup> I think of this as the *feeling* of skin touched by another body will be determined by the other body and how it feels the skin. The body that seeks to touch this skin has caused the skin to be felt; therefore, even though the desired measurement is

<sup>44</sup> Barad draws from quantum physics in much of her work, for a comprehensive text on matter and meaning, see: Barad, *Meeting the Universe Halfway*.

<sup>45</sup> Barad, 141.

<sup>46</sup> Barad, 118.

<sup>47</sup> Barad, 118.

what the skin feels like, the feeling body is an integral part of this event: a phenomenon. Phenomena names this pluralistic, *material* practice that gives agency to its constituents without subordination. Knowledge, for Barad, does not exist independently from the thing that is being studied/measured.<sup>48</sup> The result of an experiment is dependent on *how* the subject is measured and *what* the objective of the experiment is. In this way, knowledge is produced by an active process; this means that how we might understand a thing is not a transcendental fixity waiting to be *discovered* but a malleable process: a result of being *invented*. If meaning is an emerging process constantly reconfiguring, it leaves space for creating new things that are potentially a reconfiguration of something else. This gives agency to the new thing without needing to be thought of in opposition to something else. In other words, my *digital* hand is not the opposition to my physical/original hand: my digital hand exists in addition to my "original" hand. Fundamental to this methodology is the formation of meaning as an emergent process, to avoid all the subordination and othering that representation risks.

I learn from Barad how important continuous movement is, where the processes that enable this movement are fundamental in understanding emergent creativity. Being sick has given me a different perspective on this mattering: my being is more explicitly affected by the material processes of my body. I feel the affect of the matter that continuously reconfigures itself to create me; for some reason, this mattering has become fraught, and I can feel this. My perspective, so dependent on bodily function, results in my claim to being sick. The problem that emerges is that so often, logic stemming from creationism *appears* to make sense: I *see* bodies as static, solid objects, and identifying them in this fixed way seems logical, but there are times I do not want to be seen as sick and others that I need to be seen as sick. How can anyone else give me this flexibility without being me?

My diagnosis is distinct from how I feel or to whom I find affinities: I have no control over my

<sup>48</sup> Barad, 115.

diagnosis and all it ties me to. My diagnosis is something that has been given to me by someone else. To this outside governance, I am always other to wellness. If I cannot reach wellness, I do not want to be held down by it. I want to cast it aside and use my hand to hold onto a more affirmative version of my intense sickness. I want to stop having to explain to people that I am *not* well. I find commonality with other sick bodies, and this *makes* me sick. Barad helps me feel that this creative power is within reach and that the appearance of static forms has deceived me. My new perspective on Lyotard locates a need for the deformation of the subject and not the object. If my new hand appears to form a static repetition of a hand, this formation is not the endpoint of my creative production. My hand holds a particular agential potential, which gives weight to the processes that I *feel* occlude the optical illusion of my static objecthood. My amplified experience of corporeal intensity has revealed more to being than the remit of optics. Lyotard was arguing this all along: for a sensual refiguration that does not stifle the intensities that can emerge from the process of imaging.

## //DEAD RENDERS: ED ATKINS' LIFELESS OBJECTS

My hand beckons me to digitally rendered bodies in other artworks. It shares my gravitation towards drama and darkness and points me to Ed Atkins. The staging convinces me of his rendered bodies. My most vivid memory of Atkins' work is of a video titled *Ribbons*.<sup>49</sup> A white man with a cigarette hanging out of his mouth sits at a table clutching a pint of lager. Several empty pint glasses litter the table before him, accompanied by an open packet of cigarettes, a lighter, and an ashtray. The man is topless, with a shaved head, and has words sporadically tattooed across his entire body, including "Troll" across his chest. The man starts to sing the lyrics to *I Think It's Going to Rain Today* unaccompanied by a backing track:

<sup>49</sup> Ed Atkins, *Ribbons*, HD Video, 2014.

"Broken windows and empty hallways  
A pale dead moon in the sky streaked with grey  
Human kindness is overflowing  
And I think it's going to rain today."<sup>50</sup>

The words are slow and haunting. This moment in the video moves me: it reeks of sadness and despair. Atkins' editing creates a rhythm: lulling moments, minimal pacing, and harsh punctuation. The video moves in and out of focus as if the viewer is complicit in the character's struggle to fill some kind of emptiness through destructive means. Preceding this scene, the word "LACK" interrupts the video; it is surrounded by a burst of light, which begins to break up and disintegrate into nothingness. I feel for this character: this lonely quest is familiar. Aside from all this, I am aware that this figure is computer-generated. The figure is obviously made with skill; the lighting and simulated aperture generate atmospheric space. This figure has an implied lifelessness, but despite convincing facial movements, his torso remains motionlessly clutching the pint. I am aware the figure's facial movements are made using a motion-capture technique, which gives a lifelike feel.<sup>51</sup> The stillness of the figure's torso undoes the illusion. It is as if Atkins does not want me to buy into the lifelikeness of this tormented figure wholeheartedly. Atkins reminds me that something is missing.

The work plays with my knowing that the render simulates another world. This undone illusion still enchants me: its atmosphere consumes me. I do not care that this body is rendered. The work touches me, and I resonate with the character and all the generated melancholy surrounding him. This figure is affective. All this is counter to Atkins' understanding of his rendered bodies: Atkins intends to expose digital media's insubstantiality through his work.<sup>52</sup> My experience of his work is

<sup>50</sup> Atkins.

<sup>51</sup> The following interview shows Atkins' reading to his screen/webcam and the rendered head mimicking his facial movements. See: *Ed Atkins Interview: Something Is Missing*, 2017, <https://www.youtube.com/watch?v=H1iwLbwxKys>.

<sup>52</sup> Atkins' talk on *Losslessness* relates digitisation to mourning. He uses words like "illusion" which assumes the image is deceptive and conceals some form of truth, see: Archey et al., *More than Real*, 80–98.

not lacking. I am drawn in by an energy that resonates *with* me: these encounters are constructive. Atkins names his rendered body a cadaver: his avatar of choice, with the intention that the cadaver is seen as an object.<sup>53</sup> Can a render resembling a living human be more than a lifeless cadaver? Using code to make a body ultimately renders out a “lifeless” object for Atkins. Atkins seems to think that cyberspace can only emulate corporeal life. My new hand is not autonomously alive, but I am not closing off the possibility of life running through it. It is *more* than a passive object. The image of a figure on a screen might mislead me when it fools me into pretending it is an autonomous object, but Atkins’ “cadaver” becomes a projection of his own embodiment. The technology tracks Atkins’ facial motions; the digital figure does not move autonomously, but this “lack” of autonomous aliveness is paradoxically what gives the figure life: the figure is dependant on life to exist, and in turn, it continues to produce affects on life when it meets me. The digital figure cannot escape life. Digitisation, whether computer generated or photographic, holds on to a functional purpose: it allows for movement, and this format is necessary for movement using this technology. Atkins’ avatar enables him to move digitally. The digital figure gives Atkins *extra* space to move. This space is additional and need not cause life to stop when converting into a digital format.

If digital space inherently consists of “lack”, according to Atkins, then I do not understand why his avatar is a cadaver. Of course, I can find a logic that connects lack to the cadaver: the corpse is a body that lacks life, but to be a cadaver the corpse needed to be alive once, which does not correlate with the digital being a place of illusory insubstantiality. The corpse carries with it the life that brought it into being. When I think of the corpse, I cannot help but think of the living. Atkins’ use of the word “lack” that precedes his rendered avatar-cadaver reflects a representational logic: as I explored

<sup>53</sup> Maria Walsh references Atkin’s claim to a cadaver-based objecthood. See: ‘Art Monthly : Article : I Object – Maria Walsh on Art and the New Objecthood’, accessed 27 January 2021, <http://www.artmonthly.co.uk/magazine/site/article/i-object-by-maria-walsh-november-2013>.

through Lyotard, this lack is in the continual deferral of the sign.<sup>54</sup> Lack, then, is never reaching this point of origin, only experiencing the “thing” retrospectively and through its relationship to other signs that also lack “thinghood.”<sup>55</sup> Writer Maria Walsh addresses Atkins’ position concerning the “thing” and the object, noting his opposition to Heidegger’s separation of object and thing.<sup>56</sup> Walsh writes of Atkins’ use of object-oriented ontology, where the object-thing gives rise to the “durational potential of objects,” allowing them to “occupy different realms outside the human consciousness.” In relation to Atkins’ use of his cadaver in a performance with Andy Holden, Walsh writes:

“to witness the performing of this disembodiment was simultaneously exciting and troubling, the digital cadaver indiscriminately reaching out to copulate with the universe as a whole, thereby acquiring a supra-consciousness untrammelled by the limits of identity.”<sup>57</sup>

Ultimately it seems this object-thinghood is an attempt to rectify the problems of the subject which is “overburdened by subjection.”<sup>58</sup> Therefore, the subject is thrown out altogether, and we are left with an uncanny flattening of object-things and their relations. Walsh points out technology’s role in this vision:

“A theory of an object-oriented network fails to engage with the virtual objects that occupy us in technological dream worlds, which are much more complicated.”<sup>59</sup>

Atkins’ digital avatar, which is inherently lacking life then, is supposedly unburdened by an “actual” body, yet in his writing about digital technology, he evokes intense feelings of melancholy

<sup>54</sup> See page 44.

<sup>55</sup> Gilles Deleuze and Felix Guattari offer a useful critique of Lack, used by Jacques Lacan and other theorists of the time to speak about desire emerging from a lack. Deleuze and Guattari seek a more affirmative version of desire. See: Félix Guattari, and Gilles Deleuze, *Anti-Oedipus: Capitalism and Schizophrenia*, 7. print (Minneapolis: Univ. of Minnesota Press, 1994).

<sup>56</sup> ‘Art Monthly : Article : I Object – Maria Walsh on Art and the New Objecthood’.

<sup>57</sup> ‘Art Monthly : Article : I Object – Maria Walsh on Art and the New Objecthood’.

<sup>58</sup> ‘Art Monthly : Article : I Object – Maria Walsh on Art and the New Objecthood’.

<sup>59</sup> ‘Art Monthly : Article : I Object – Maria Walsh on Art and the New Objecthood’.

and mourning with this digital practice.<sup>60</sup> I see an advantage to this object-thinghood in digital space: its flattening of material relations. Giving inanimate objects an equal thinghood to myself facilitates a seamless flow/“exchangeability” between digital objects and my body as an object.<sup>61</sup> However, this is only if I give digital images a thinghood rather than a status as an ungraspable mirage, as the lacking image implies. But in all this, I object to needing to become an object-thing to have any meaningful relationship with the digital image. Taking on the avatar of a cadaver does not resonate with my experience of digital practice as a sick person. Digital practice does not feel like the oblivion of death to me because life seeps into everything I do now that I am sick. Through this sickness, I have encountered resistance to the continuity of living. This resistance gives me a particular *sense* of being alive. Through pain, it feels as though I can grasp my body’s systemic processes. It is not death that makes me feel this aliveness; it is life that presents itself to me through my own undoing. An undoing that allows me to continue.

Because of this experience of intense aliveness, my digital practice is affirmative in a sense. Rather than adopting an objecthood, I give substance to the object by emphasising materiality and the distinct materiality of virtuality, which allows me to intermingle with the digital. I cannot shake this aliveness embodied by the symptoms of sickness. Still, this awareness of embodied virtuality (symptoms) gives me material to work with. I consider how I relate to the virtuality of the digital image, operating in the present, and with intense affect that in no way consists of lack. In contrast, Atkins holds on to “death” as the ultimate threat that occludes being in a body. As Atkins claims, his avatar: the digital body is a reflection of himself having lost all his aliveness in the digital process.<sup>62</sup> Seeing a reflection of his body, Atkins thinks of death. Does death give meaning to life? Atkins’

<sup>60</sup> Archey et al., *More than Real*.

<sup>61</sup> See page 44 for more on the exchangeability of simulacra.

<sup>62</sup> Walsh writes of Atkins’ reference to his cadaver-avatar. See: ‘Art Monthly : Article : I Object – Maria Walsh on Art and the New Objecthood’.

choice of the cadaver makes more sense in this transcendental perspective: living is only meaningful through its opposition to its own lack. Lyotard critiques this dialectic method.<sup>63</sup> Death, given a dialectical method of meaning-making, is part of every image that depicts a living body: it is dramatic and individualised. The image of “life” results from a strange longing for death because it is one’s driving force and the end of an epic story where the subject is the main character. I am torn as I have always felt drawn to gothic darkness and enjoyed death’s romance, but I have found a new dramatic tension within my body’s aliveness. Although this sickness could be framed as destructive (sickness negatively impacting my health), the further into this sickness I wade, the more it feels generative. These symptoms, and my perpetual quest to relieve them, operate *additionally* to my body. Being (relatively) well once gave me *less* awareness of my embodiment. Therefore, these symptoms give me more of a sense of being alive, which is a polymorphous and constructive process: symptoms constantly give simultaneous awareness of both my body *and* the immediate sensation itself. Rosi Braidotti agrees that “death is overrated,” equating it to the fear of the “narcissistic human subject” which frames death as “the ultimate subtraction” where life going on without oneself becomes “unthinkable.”<sup>64</sup> Braidotti calls for a post-anthropocentric sobering that understands the forward “affirmative” and emergent flow of “life” as a singularity, a flow in which the subject emerges and disperses. In this way, there is no distinctive lack of life because life continues despite me.

Rosi Braidotti satisfies my desire to pursue a more affirmative mode of living despite living with chronic illness, and she shares my new-found unease with a practice centred around death/lack. I no longer share Atkins’ concern, as non-being is the least of my worries. I am forced to encounter every moment my body resists being alive. A part of me enjoys the drama of my wretched state, and this is not about my fight against non-being: my body’s sickness is not terminal. It is a chronic

<sup>63</sup> See page 43 for more detail on Lyotard’s critique.

<sup>64</sup> Rosi Braidotti, “‘Bio-Power and Necro-Politics’”, 6, accessed 16 September 2019, [https://www.academia.edu/854914/\\_Bio\\_Power\\_and\\_Necro\\_Politics\\_](https://www.academia.edu/854914/_Bio_Power_and_Necro_Politics_).

mode of living. All I can do right now is keep living.

My shift in ontological perspective allows me to think about my rendered bodies differently to Atkins. I feel uncomfortable claiming an objecthood. Objects are too static for me to feel any affinity. The “subject” does come with problems: it is often pinned down as other, but from the perspective of a body that feels too much, I resent the assumption that I am not distinct from an object that is never in pain, that my subjecthood, so contingent to my body, can be lost as easily as adopting an online avatar.<sup>65</sup> Rosi Braidotti soothes my discomfort once more. Braidotti speaks of how marginalised people “may first need to go through a phase of “identity politics”—of claiming a fixed location,” she moves on to state that “you cannot give up something you have never had...”<sup>66</sup> Nor can you dispose nomadically of a subject position that you have never controlled to begin with.”<sup>67</sup> For those without power, enabling reclamation and transformation is a more useful process than emancipation alone.<sup>68</sup>

Braidotti does not excise the subject to solve its problems; she focuses on possible processes that might enable movement from being a located subject. Braidotti helps me understand that being a subject is not the problem: the outside force which ascribes meaning to the subject is the problem. Braidotti’s nomadism allows a subject to gain control, move *with* their subjecthood, and continue

---

<sup>65</sup> Here it might seem that the definition of an “object” is taken literally. My position gives a materiality to meaning, therefore I allow for ambiguity between the “object” as a subject’s possession or desire, and an “object” as a material “thing.” My understanding of an objecthood is of a fully formed thing/concept. Braidotti’s “nomadic subjects” is a way in which one’s subjecthood/meaning can be reclaimed for being emergent and fluid without turning to an egalitarian object-network that assumes giving “freedom” will solve inequality.

<sup>66</sup> I want to emphasise that “claiming a fixed location” is not easy: it needs to come from the affected individual/collective, but is dependent on the very society that allowed/caused the marginalisation. Braidotti’s writing on nomadic subjects explains that it is a societal shift, as opposed to telling us to simply be more nomadic.

<sup>67</sup> Rosi Braidotti, *Nomadic Theory: The Portable Rosi Braidotti*, Gender and Culture (New York: Columbia University Press, 2011), 42.

<sup>68</sup> Further to the above, I prefer Braidotti’s “nomadic subject” to an object-oriented approach for this reason that it emphasises the work of levelling that needs to be done: that many subject-groupings need to be seen to matter before disbanding these groups. Braidotti emphasises movement and I find this more important than distinctions between subject and object.

moving away from a predetermined location in multiple directions. In “claiming a fixed location,” Braidotti understands that a becoming-object is not a simple rejection process, as this solution is not within reach for many. While I know that my claim to being sick is not the end-point of my subjecthood, this knowledge alone does not change how I am seen; however, it does allow me to find others who share this knowledge, and it gives me hope that together we might be strong enough to change someone else’s perspective.

Atkins’ attitude towards his rendered bodies and their “lack” is a fundamental position on what, or moreover, *where* cyberspace is in relation to physical bodies: a separate illusory space designed to mimic “real” life. This world composed of empty signifiers is always the next-best thing to the “real” world. The experience of finding essential modes of mobility through cyberspace has convinced me that it *can* be emancipatory.<sup>69</sup> Even when cyberspace offers me new pathways, my restless body persists. My activity online and digitally happens at the same time as my bodily processes. My body does not wait elsewhere or disappear when I practise digitally; my symptoms make this very apparent.

Although Atkins’ position does not convince me that the digital figure inherently lacks substance, I still find myself drawn in by his digital figures and their staging within his video works. The figures are characters in his videos, and I empathise with their sadness; they project a form of melancholy that does not tell me they long for a “real” body but contend with all the despair that I might experience throughout *my* life. It is not necessarily the definition of the words that punctuate his work that is meaningful to me; it is the abruptness of their intrusion that *affects* me. The juxtaposition between musical moments and sparse sounds gives me the feel of different spaces and the

---

<sup>69</sup> In chapter two I write in detail about emancipation, I explore how I can depart from cyberfeminism to take a sick perspective on cyber-emancipation that includes the corporeal body.

complexity of human experience. All this builds tension that is released cathartically or abruptly through his variances in pace. Atkins' artwork must produce something *additional* to his intention. The image continues to produce its own affects, which means the imaging does not stop moving at the final render. It might be a stretch to call this a "life," but the image can potentially affect life. Simon O'Sullivan's writing on affect helps me to understand the art object's potential impact on a corporeal body: a variant of touch that embodies cyberspace's compatibility with my visible dimensions "beyond representation:" the generation of supplementary affects rather than a complete rejection of the sign.<sup>70</sup> "After the deconstructive reading, the art object remains. Life goes on. Art, whether we will it or not, continues producing affects."<sup>71</sup> O'Sullivan draws on a Spinozan notion of affect.

"Affects can be described as extradiscursive and extra-textual. Affects are moments of intensity, a reaction in/on the body at the level of matter. We might even say that affects are immanent to matter. They are certainly immanent to experience. (Following Spinoza, we might define affect as the effect another body, for example an art object, has upon my own body and my body's duration.)"<sup>72</sup>

O'Sullivan's uses the plural of affect (affects), continuously throughout the work, which makes me think of a *material* composed of multiple units. Affects are a particular form of matter. I imagine affects like an aura that surrounds an object, ready to overlap with another object. My visual representation paradoxically *represents* something that, by definition, is unrepresentable. However, an object's affects do not follow the rules of Euclidean geometry; they move and make their presence known in unspeakable/invisible ways. This unruliness is why "affect" is such a helpful term in relation to cyberspace and its defiance of geographical proximity. O'Sullivan explains that affects operate on an "a-signifying register,"<sup>73</sup> and posits that art emerges from the "realm of the virtual."<sup>74</sup>

<sup>70</sup> Simon O'Sullivan, 'THE AESTHETICS OF AFFECT: Thinking Art beyond Representation', *Angelaki* 6, no. 3 (December 2001): 125–35, <https://doi.org/10.1080/09697250120087987>.

<sup>71</sup> O'Sullivan, 126.

<sup>72</sup> O'Sullivan, 126.

<sup>73</sup> O'Sullivan, 126.

<sup>74</sup> O'Sullivan, 127.

It seems then that the ephemerality of this realm allows it to cohabit our reality at the same time because its form of taking up space does not compete with the solid object it works *with*. Therefore, through cohabitation of time (the present), affect can produce meaningful effects on/in/with the representational world. This plurality of the artwork and its affects, seems to be calling for a similar sensual intensity that Lyotard evokes. I find my representational image of an object's aura composed of affects useful (although I have to keep reminding myself of this representational function) because this aura-image does not require another body to function. Affects *usually* require another body to fulfil their potential. Still, at the point of art-making, my affects are made up of this virtual potential: I produce images surrounded by an aura of potential, and my art-making involves setting up conditions that produce possibility as a substance. O'Sullivan claims: "this is what art is: a bundle of affects or, as Deleuze and Guattari would say, a bloc of sensations, waiting to be reactivated by a spectator or participant."<sup>75</sup> My own experience of affect, as a body requires a consideration of affect as a material in itself rather than a clear-cut body affecting another body because my body affects itself. The affects of illness radiate from my body and come back around to effect me in the form of sensations/symptoms. Because my illness is considered "invisible" my experience is heavily weighted through visceral sensation rather than observable mutation and destruction/production.<sup>76</sup> Affect, for me and this project, is not a focus on it as a phenomenon or action: affect is the material that is produced beyond the image or the body. In this way, the image on the screen is this representational object, but there is so much more, and my job is to use all this knowledge of this a-signifying register obtained through sickness to produce affects.

<sup>75</sup> O'Sullivan, 126.

<sup>76</sup> My illness is invisible to an extent, but later in this thesis I look at the visible signs of my illness and my relation to "exploring" my body and its materiality. See page 111.



## ARTWORK INTERLUDE:

S I C K  
W A V E S



<https://annafhughes.co.uk/SICK-WAVES>





10. Anna Hughes, *Sick Waves* (Still), Digital animation, 2021.



11. Anna Hughes, *Sick Waves* (Still), Digital animation, 2021.

# SICK WAVES

BLANK

Sick Waves is the first artwork to feature the digital hand. The finger I made tempted me to make more fingers, especially because a whole hand can do so much more in digital space. The digital hand can grasp hold of other digital things for me. I can pose the fingers and add so much more expression to the work. It is a challenge to create a more detailed organic object. I duplicate the finger I have already made; in Blender, creating multiple copies of something is so effortless. I then attach the fingers to a cube and make cuts in the mesh to start forming the shape of the hand. Perfecting the shape of the mesh and the joins between the fingers and palm takes weeks, partly because I learned that it is best practice to perfect the shape of something with a less detailed mesh (the mesh looks like a net, where smaller/more holes means more detail). Attaching detailed fingers to a simple cube is not the best way to work because the different meshes do not correlate, but at least I know that for the future. All this difficulty and time spent with the hand and learning from my mistakes means I know this object well. I know every detail of the mesh's over one hundred thousand faces. Every indent becomes precious. The hand becomes so much more meaningful for me, which is fitting if I am going to make artwork that works with the intensities of digital images. In the video, I make the hand burst through a pool of a red-sticky substance. I animate the hand so it impacts a "fluid simulation" and watch as all the droplets fly into the air as the simulation plays out. I accentuate these objects' complex-interdependent materiality with this hand and liquid collision. I feel this collision with my digital hand that I have spent so much time getting to know. Knowing this hand so well means I have an attachment to it and feel for everything it encounters.



12. Anna Hughes, *Blender Experiment #5*, 2023, Digital image,

2

---

## SEVERED HANDS



13. Anna Hughes, *Digital Hand #4*, Digital image, 2023.

## // FLESHING OUT A DISEMBODIED HAND: DIGITAL EMANCIPATION AND EMBODIMENT

A disembodied hand floats in the centre of the screen. I notice how abruptly the skin stops: a severed hand. Being sick feels excessively violent. It feels as though my body is attacking itself. Perhaps I desire revenge on my body for its cruelty towards me. But I refrain because I know I would only be hurting myself in a feedback loop of pain. I see a glimmer of hope: technological emancipation from my body. I detach myself from this body and leave it behind. I disavow this cruel mass of flesh. Disembodiment. I join my severed hand. A sharp blade to the wrist pierces soft flesh, muscle, veins and tendons, then hits brittle bone, slicing through it in one swift movement. It was a suppressed extremity, and now finally, it can be emancipated from the painful body that once controlled it. The nimble fingers of the digital hand can transport it anywhere now, scuttling across the floor or even flying through space. The hand is lighter and able to enact on its desires so much easier now it is free. Yet, my body remains. All this movement and my immobile body persists. How is this the severance I sought?

## // DISEMBODIED BODIES: VIRTUAL EMANCIPATION

My body seems like an estranged object that controls me. I often dream about breaking free from it, cutting myself open, relieving myself of this unnecessary bodily weight. Johanna Hedva, an artist with chronic illness, speaks of their dissociative episodes:<sup>77</sup> Hedva “feels a violent obliteration of [their] body as though [they are] being blasted apart by light and the void.” Hedva resonates with women mystics throughout history whose “union with God” seem always to be “bodily, rapturous, erotic and unhinged.” Their emphasis on the disorderly nature of women’s sickness in contrast to

<sup>77</sup> Johanna Hedva Tue and Jan 19 2016, ‘Sick Woman Theory’, *Mask Magazine* <<http://www.maskmagazine.com/not-again/struggle/sick-woman-theory>> [accessed 12 March 2020].

male incapacity paves the way for historical hysteria diagnoses. Their *Sick Woman Theory* emphasises the feminist poignance of chronically ill women and the feminisation of bodily deviance.<sup>78</sup> According to this theorisation, hysteria was the pathologisation of many physiological illnesses and speaks to the imbalance of power in a male-dominated/oriented discipline.<sup>79</sup>



14. Johanna Hedva, ‘GLUT’, 2021, <http://glut.website/>.

<sup>78</sup> Johanna Hedva introduced her Sick Woman theory in the following talk: Johanna Hedva, ‘My Body Is a Prison of Pain so I Want to Leave It Like a Mystic But I Also Love It & Want It to Matter Politically’ (Human Resources, Women’s Centre for Creative Work, 2015).

<sup>79</sup> Hysteria was used extensively as a medical term coined in the 19th century. Hysteria as a term has been criticised as a blanket dismissal of physiological illnesses, insisting that their symptoms are psychological and stem from feminine “lack.” The advent of imaging technology and new diagnostic methods has decreased this practice of dismissal, yet the power dynamic stemming from patriarchal systems remains today. See the following for a feminist overview of hysteria and below for a note on contemporary gender bias: Cecily Devereux, ‘Hysteria, Feminism, and Gender Revisited: The Case of the Second Wave’, *English Studies in Canada* 40, no. 1 (March 2014): 19–45, <https://doi.org/10.1353/esc.2014.0004>.

Gender bias in medicine continues to actively mistrust women's perception of their bodily processes.<sup>80</sup> Hedva lives with mental illness and chronic illness, which affects their association with their body in multiple ways. A traumatic event in childhood can cause dissociative disorders; these episodes can cause not only the feeling of disconnection from one's own body but the world around them.<sup>81</sup> Hedva describes a strong desire to participate in political events surrounding them: they cannot attend a *Black Lives Matter* rally due to being too sick. While specific episodes of dissociation are not to be confused with the general experience of being a sick woman, being sick comes with its own bodily dissonances. Symptoms give my body an overbearing presence and it exposes me to the vulnerabilities of being disabled in a capitalist society. This experience of vulnerability emphasises the urgency of political movements like *Black Lives Matter* and other movements surrounding the marginalisation of certain bodies. In this way, even anti-capitalist and anti-fascist movements are not be limited to physical demonstrations on the street. Hedva uses their political impetus circulating their body, all from a horizontal position, and I join Hedva writing horizontally in this moment.

As Hedva titles their talk, *My Body Is a Prison of Pain so I Want to Leave It Like a Mystic But I Also Love It & Want it to Matter Politically*.<sup>82</sup> Being sick allows me to experience my body's "internal" functions, but the internalisation of these functions no longer feels accurate for me because I associate the "internal" with being "hidden." Because of my symptoms, my body has become more than a container with a distinct inside and outside; my embodiment feels like everything is being

---

<sup>80</sup> The following paper outlines examples of gender bias in medicine, in particular, the paper describes instances where the treatment of female patients for the same disease are proven to be misdiagnosed, or underprescribed pain relief. See: Katarina Hamberg, 'Gender Bias in Medicine', *Women's Health* 4, no. 3 (1 May 2008): 237–43, <https://doi.org/10.2217/17455057.4.3.237>.

<sup>81</sup> 'Dissociative Disorders', nhs.uk, 12 February 2021, <https://www.nhs.uk/mental-health/conditions/dissociative-disorders/>.

<sup>82</sup> 'My Body Is a Prison of Pain so I Want to Leave It Like a Mystic But I Also Love It & Want It to Matter Politically', Vimeo, accessed 12 March 2020, <https://vimeo.com/144782433>.

played out on the surface. Although not equally as welcome, my flesh and its pain have an equal weighting in the composition of my embodiment. In this sense, visual presence is not the quality that dictates the shape (form) of my embodiment.<sup>83</sup> My body is a surface, as I imagine Lyotard would agree.<sup>84</sup> Whether in flesh (form) or pain (ephemerality), I continuously feel the presence of my corporeality, but as it grows more present, I lose more and more control over it. Counter to being a surface, this power struggle leaves me feeling both so enveloped *in* this body yet so aware of its presence as a distinct weight *on* my being. But, my experience tells me that without a strict separation between myself and my body, there is no pretence of objective control over my body. I have not lost control *over* my body because bodies are inherently unruly.

Digital software provides *some* level of escape from my body's physical limitations. Technology might not necessarily allow 'escape' from a body but digital software can be used to rethink the confines of a body. Hedva produces a video game called *Glut* which I eagerly download and begin to play.<sup>85</sup> In the game, I become a grotesque bodily form. The form expands and contracts, resembling an unknown organ. The organ form is surrounded by whiteness but with a corridor and doorway in the distance. As I move using the keys "W A S D," I notice the form is dragging itself around with one claw-like limb in front of it. I hear sounds of moaning and other strange yet familiar sound effects in the background that create a grotesque, oppressive atmosphere full of rage and despair. I move down the corridor and encounter the words, "A voice is all you need...The universe doesn't care about our feelings...What other customers bought." Behind me, I leave a trail of purple, mushroom-like shapes. I eventually encounter a black hole at the end of the corridor. The white passage has felt strangely oppressive in its bleakness, and I am relieved to find something different.

---

<sup>83</sup> Lyotard introduces the libidinal surface in the beginning of chapter 1 of *Libidinal Economy*, 1.

<sup>84</sup> See page 43 for more on Lyotard's relationship to surface.

<sup>85</sup> 'GLUT', accessed 22 April 2022, <http://glut.website/>.

I scuttle down the black hole, reaching a cave-like structure. I explore this cavernous landscape, still trailing mushrooms behind me. A “heavenly” wailing drone joins the sound effects. I encounter more text at intervals, for instance: “I enter into a dead end. There, all possibilities are exhausted; the possible slips away and the impossible prevails.” There are moments when I get lost in this structure: aside from the lit moments at the end of the cave’s tunnels, the scene is black and obtuse. My only navigation is the trail of mushrooms I have left myself: I know I must have been there before. I move away from the path I have taken. I desire a way out of this cave, but at the same time, I somehow know that I should not go back to where I came from. I enter a throbbing, glittering, textured area, glad for the disruption. There is a mass at the end of this corridor, but it seems I cannot go any further. I try a different route, now very disoriented.

The text makes less sense moving along the passageway. The entire experience makes me uncomfortable. I reach text that tells me to “turn around and find the portal,” I turn around dutifully but apprehensive. Turning around, the cave seems different now, open but more abstract. The words and sounds haunt me as I move back down the passageway. I speed up and try to escape this internal prison. I find a new space with a rippling surface underneath. I start to fall out of control. Eventually, I fall back into the white opening, and it begins again. Returning to the webpage hosting the game, I search for more context. Hedva writes:

“I don’t think we can talk about the mystical only in terms of transcendence. More often it’s a state of anti-climax, body horror, confusion, doom, and dread, and it is precisely this paradox that makes it mystical.”<sup>86</sup>

The work draws on Hedva’s experience of the mystical, embodying imagery found in the process

<sup>86</sup> ‘GLUT’, accessed 23 February 2023, <https://glut.website/#text>.

of a witch-guided trance.<sup>87</sup> Hedva complicates the work by layering text of AI-generated “voice-clone” software. Through this work, the mystical becomes conceptually accessible via technology. I resonate with the work’s output, which feels like it has been drawn from bodily experience and channelled with technological mediation. Hedva writes:

“In the *Glut* videogame, users are a teratoma avatar that drags itself through an environment cheating at non-Euclidean geometry through a series of nesting black holes, intestinal tunnels, glittering caves, and oceans of black water.”<sup>88</sup>

Hedva’s reference to non-Euclidean geometry makes sense because their world seems to have more than three dimensions, which relates to a different way of thinking about the body as more complex than a container. All this geometric subversion reminds me of my impression of being a sick body: a forever shapeshifting topology that confuses inside and outside. *Glut* is disorienting, and the soundtrack is melancholic. I do not enjoy the game, but perhaps because the work encapsulates my fears: Hedva’s nested tunnels still amount to a distinct “inside” to the work, or perhaps everything is inside, and I fear being trapped inside this body. The despair of the voices, black growths and oblique passageways epitomise my darkest take on illness. Despite not “enjoying” the game, the work greatly affects me. I cannot deny that illness (especially untreated) often feels like this opaque enclosure. Differing to Hedva, I want to transform this negativity to encapsulate not so much the positivity of being ill but to move away from either of these polarisations to focus on the matter at hand. In this way, I use my experience constructively without the burden of splitting up this embodiment into two competing sides, i.e: negative/positive, pleasure/pain, or horror/elation. Being a body is a far more nuanced game with illness because it affects one’s other bodily experiences which merge and shapeshift into one another. A non-Euclidean geometry, to me, is not simply

<sup>87</sup> ‘GLUT’.

<sup>88</sup> ‘GLUT’.

the physical geometry of nested dimensions but also a methodological subversion of how meaning is formed. In this regard, meaning is formed through shapeshifting relations that do not adhere to a 2-sided formation or a container-object given an essentialised boundary. I do not want to be trapped, and I do not want to use digital software to recreate this situation. I use this software to escape while also embracing my body at the same time. I do not want to choose between my embodied reality and the supernatural beyond that computational software offers me.

>>>

My digital hand reaches out; so far, I can no longer see it. *Blender* becomes a refuge: a place where my heavy body does not limit me as much. Becoming sick has made it too difficult to practise as an artist in ways I did before. Having specialised in sculpture, all this physical movement, big or small, became too much for my body. Today I flinch at the thought of needing to lift anything that carries a slight weight. The problem starts with my hands, and I can feel my joints being pulled out of place; the throbbing pain that comes with this intensifies after the action. All the work done with my hands as an artist no longer seems fun or satisfying. My hands are just the start of this spreading pain throughout my body, and the pain is just the start of my long list of symptoms. Because making art in physically demanding ways has become too difficult, the subtlety of computer-based movement is a much more viable option for me. The computer is an invaluable resource for me then, especially when I still have an urge to make art, or at least, make *something*. Learning to use *Blender* has made it clear that my medium shift is not a concession. Sculpture had its limitations: the need for physical space and money for materials. I can do so much with *Blender*: I can model objects, sculpt their surface, apply a material, create a background, stage its lighting, animate it, and apply post-production effects, all with complex camera settings and more.

Perhaps my technological awakening is a form of emancipation even though my throbbing body remains. I desire agency and mobility, and this “virtual” world is excessively mobile. The text *Xenofeminism: A Politics for Alienation* by collective Laboria Cuboniks values “technological mediation, interlacing our daily lives with abstraction, virtuality, and complexity,” they point towards “a future in which the realisation of gender justice and feminist emancipation contribute to a universalist politics assembled from the needs of every human.”<sup>89</sup> The Xenofeminist (XF) text provokes a disavowal of capitalist structures and the “politics of alienation” that facilitates it. A manifesto is a firm declaration: XF simultaneously locates a need for change while pointing out a way forwards. XF sets out to utilise “technological mediation, believing that bodily adaptation and modification are to be encouraged against the threat of “essentialist naturalism.” Essentialism is a particularly frightening word for me as a sick person. By its reasoning, there is a strict way I should be: healthy. Illness and disability are a deviation from the norm/standard human according to an essentialist view. I do not want to be a deviation because my (supposed) fault always defines me: I am other to “the human,” always a subordinate, never fully gaining a subjecthood of my own. XF warns of the doctrine of “nature,” which, given an essentialist viewpoint, takes things as having inherent qualities. “Nature” is used to close down the possibility of difference and change. XF warns of dictated “biological norms” that are given as an argument against the self-modification and transformation of bodies, highlighting the discrimination of trans and disabled people. I am experiencing the unreliability of being a particular body and staying that way, all at full force. My reality that feels heavily bodily and materially process-driven seems compatible with a materialist viewpoint: material encounters lead my world, but inherent in this is change and possibility. XF’s interpretation of “essentialist naturalism” argues the dogma of “nature” where “nature” is given a transcendental power, the word of which we must not question. Any “technological mediation” is going against

<sup>89</sup> Laboria Cuboniks, ‘Laboria Cuboniks | Xenofeminism’, accessed 16 September 2019, <https://www.laboriacuboniks.net/>.



“nature.” My experience of “nature,” as a product of it, is incredibly tumultuous. As a species, we have interfered too much to claim things must not change. Moreover, how can we claim that change is *not* a given? “Nature” is used to carve out a hierarchy of bodies. A genetic “defect” governs me; a defect that makes my body function in an unusual way.<sup>90</sup> My diagnosis of *Hypermobile Ehlers-Danlos Syndrome* is an inherited “disorder.” Because it seems I am the first in my direct family to have hEDS, this defect occurred without cause: it just happened. “Nature” has made me this way; but without reason, I am this “natural” event. I am a thing in my own right: or at least, I want to be my own thing. I want a thinghood/subjecthood that defines me for existing as I am and not for how I deviate from others. I want to be alongside the others with different genetics and not as a subordination. And beyond all this, what if I wanted to change myself? Perhaps even if possible, I would not wish to fix my defect to become how “nature” wanted all along; maybe I would choose to become something different with my “defect” remaining. Change continues to happen and occurs throughout the multiple registers of being. Technology can launch this change into overdrive. And with this power, there is no need to return to, or become an already-decided thing, because there is nothing fixed to find in this world composed of change. I might as well use technology to produce something decidedly different.

As an alternative, XF identifies how computational networks and other technologies can provide an emancipatory structure from the doctrines now infiltrating online spaces and the world.

“The radical opportunities afforded by developing (and alienating) forms of technological mediation should no longer be put to use in the exclusive interests of capital, which, by design, only benefits the few.”<sup>91</sup>

<sup>90</sup> ‘Hypermobile EDS and Hypermobility Spectrum Disorders – The Ehlers-Danlos Support UK’, accessed 17 March 2023, <https://www.ehlers-danlos.org/what-is-eds/information-on-eds/hypermobile-eds-and-hypermobility-spectrum-disorders/>.

<sup>91</sup> Cuboniks, ‘Laboria Cuboniks | Xenofeminism’.

Technology, then, is not to be thought of without acknowledging its facilitation of capitalist networks, and a right-wing politics of alienation and subordination. XF’s emphasis on an “alternative” is both hopeful, and realistic: it is a harmful place now, but things can change. There is another way to use technology that works through change and difference.

This notion of an alternative way forward, facilitated by technology, is vital for this project because it acknowledges how cyberspace can enhance this world. Cyberspace does not need to replicate the “physical” world; it can look and be different, all without being other to this world. Creating extra space without essentialism or subordinated bodies is incredibly desirable for me as a sick body. There is a possibility for me to be in a space which is designed for/by the sick/disabled. All this means that I can use technology to adapt *with* illness. This embodiment can become anything that I desire or that suits me. My adaptation of changing art methods due to illness has given me a taste of what adaptation can look like: different but an effective alternative.

>>>

Becoming sick, I turned to online communities for support. This support takes the form of online support groups/forums, all for company and a feeling of community when I feel particularly isolated. Mostly, I craved information, especially with a disorder that has little awareness. I joined a facebook group for women with hypermobility, asked and contributed to discussions around particular aspects of my illness.<sup>92</sup> This reciprocity gave me a sense of community, however, I still feel some sense of connection when the advice is one-sided. This is called a “parasocial” relationship: the

<sup>92</sup> The *Facebook* group I was mostly active on was specifically for women. I chose this one particularly because I was looking for answers around a gynaecological connection to my symptoms, but now I would rather the group was not gendered for fear of excluding different genders: ‘(20+) Hypermobility Syndrome- Womens Only Group | Facebook’, accessed 5 August 2023, <https://www.facebook.com/groups/382799295132062>.

sense of knowing a content creator or celebrity because they share things with followers.<sup>93</sup> I follow the content creator *Chronically Jenni* known for her EDS related “hacks,” Jenni creates videos and lists of products and lifestyle tips.<sup>94</sup> Jenni has helped me. The XF manifesto argues for more widespread uses of open-source-style “hacking,” specifically giving the example of blackmarket distribution of hormonal pharmaceuticals that bypass the gatekeeping of gender and its affirming care.<sup>95</sup> In relation to chronic illness, the open-source format is not without dangers: medical advice from a non-medical professional is not always accurate. However, advice from a medical professional is not always accurate (from my own experience).<sup>96</sup> The open-source format, in relation to medical care, does not need to eradicate medical professionals, but it should include knowledge sourced by patients. I have learnt so much more from others with my condition than I have from a doctor.<sup>97</sup> My software *Blender* is also open-source which means it is free to use, giving me access to it. In the XF manifesto, their reference to gatekeeping is also a call for access, of which, a public health service that is adequately funded would partially fulfil. It is also a call for a reciprocity between the doctor and patient, where the patient is believed and respected leading to receiving the right care more easily. This “open source”-style societal system is a structure that would develop more reciprocity, or sharing within society as a whole, and in turn, this allows for better availability and access to these online-based “hacks,” alongside expert-led support. Perhaps though, if society was built more so on reciprocity and shared systems, these online communities would no longer need to share “hacks.”

<sup>93</sup> See the following paper for a definition of parasocial relationships and the prevalence of “tween’s” strong relation to *Youtubers*. Amanda N. Tolbert and Kristin L. Drogo, ‘Tweens’ Wishful Identification and Parasocial Relationships With *Youtubers*, *Frontiers in Psychology* 10 (2019), <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.02781>.

<sup>94</sup> ‘My EDS Survival Kit (Part 1) – Chronically Jenni’, accessed 5 August 2023, <https://chronicallyjenni.com/2019/09/20/my-eds-survival-kit-part-1/>.

<sup>95</sup> Cuboniks, ‘Laboria Cuboniks | Xenofeminism’.

<sup>96</sup> The following study, found within their control group that the Ehlers-Danlos syndromes would no longer be considered rare if wider trends followed that of the group of participants. They attribute the EDS prevalence increase in their control group (compared to global statistics) to delayed diagnosis and a misdiagnosis rate of 56%. See: Joanne C Demmler et al., ‘Diagnosed Prevalence of Ehlers-Danlos Syndrome and Hypermobility Spectrum Disorder in Wales, UK: A National Electronic Cohort Study and Case–Control Comparison’, *BMJ Open* 9, no. 11 (November 2019): e031365, <https://doi.org/10.1136/bmjopen-2019-031365>.

<sup>97</sup> hEDS is a particularly neglected condition, the following campaign by *Ehlers-Danlos Support UK* calls for specialised treatment for the condition: ‘#EnoughIsEnough – The Ehlers-Danlos Support UK’, accessed 18 August 2023, <https://www.ehlers-danlos.org/enough/>.

they would simply continue to share, but in a different format.

>>>

Computation opens up a potential space distinct from the weighty grounding of corporeal bodies. Legacy Russell writes of a cosmological body and that “to dematerialise—to once more abstract—the body and transcend its limitations, we need to make room for other realities.”<sup>98</sup> Legacy Russell’s *Glitch Feminism* utilises cyberspace’s potential for disruption. “Errors” are a means for creative production distinct from preset algorithms. Computation as a glitchy system can easily be analogous to the organic body. A disruptive body like mine is not a body rapt in repeated errors but a creatively glitchy system. Russell repurposes the word “glitch,” proposing that its meaning becomes synonymous with its creativity. This creative power makes the emergence of a feminist society more possible. The glitch empowers and prioritises feminist agency. While Russell does include the body in her technological emancipation, I find this body overly ephemeral. Being only an ephemeral body is alien to me. Heavy interoception caused by a noisy system grounds me.

A computer-based practice minimises strain on my body. With less strain, I can do more. The ease at which I make art is emancipatory, but being here in front of the computer still takes a noticeable toll on my body. Sitting upright, the vertebrae in my spine begin to migrate away from each other; the pull produces a burning ache that travels upwards towards my neck. My autonomic nervous system struggles to pump blood around my body; blood pools in my extremities, and my heart beats faster to compensate, but to no avail. I begin to feel sick, dizzy and confused. All this is exhausting. Although being chronic, I have not grown used to my symptoms. My activity in digital space does not drown out my symptoms. These symptoms are continuously present, and I hold on

<sup>98</sup> Russell, Legacy. *Glitch Feminism: A Manifesto*. London, New York: Verso, 2020.

to a conscious awareness of them in every moment. Because of this overtly visceral experience of being a body, I can no longer compartmentalise my embodiment. This digital emancipation retains a co-presence with my corporeal body. Bodies require maintenance, even if, for the moment, they are quiet. Where I might fantasise about leaving my painful body behind, there is still a danger that I become complicit with all the others who are able to forget all the other bodies susceptible to being left behind.

>>>

My severed hand is not the aftermath of a disembodied fantasy; it embodies my desire to travel without being held down. I know it is impossible to leave my body behind entirely because I have the ability to really feel its presence even though I can find ways to thrive using a less weighty format. The task, then, is to remind those who can forget their bodies in cyberspace how easily bodies are neglected. So much violence can be done to bodies, both physically and systemically. Russell and the Xenofeminists, each in their own way, are acutely aware of this risk; most importantly, they identify cyberspace's potential to facilitate an alternative to violent structures. Cyberfeminism is useful for me but supplemented by a rigorous awareness that virtuality cannot suppress bodily forces. My virtual hand guides me in cyberspace and shows me a present reality bursting with energised possibility. The cells of my body resonate so intensely now with this energised virtuality because this sickness becomes me: invisible matter nestled among my fibrous being.

>>>

Virtuality is not necessarily a glimpse at what might be. That which *might* happen is too timid for what I am doing: far less present.

“The virtual is not a set of individual possibilities, one of which might yet be realised or actualized. Virtual possibilities are not what is absent relative to the real's presence. They are not the roads not taken or some yet unrealized potential future, the other to actual lived reality. The virtual is a superposition of im/possibilities, energetic throbs of the nothingness, material forces of creativity and generativity. Virtual possibilities are material explorations that are integral to what matter is.”<sup>99</sup>

Virtual possibilities are a part of the “quantum field;” matter puts feelers out in every present moment.<sup>100</sup> In Barad's writing around quantum physics, she explains how this virtuality is a part of matter's functionality. Giving the example of how electrons behave, Barad explains that the electron is “inseparable from the wild activities of the vacuum.”<sup>101</sup> Earlier in the text, Barad describes the quantum field as a “desiring field.”<sup>102</sup> The electron emits a “virtual photon” that tests/searches for its desired counterpart (negative and positive electrons attract); after testing all possibilities, the electron reabsorbs the photon.<sup>103</sup> The virtual goes on in the quantum field enable the production of encounters within this field. In the quantum field matter can take on a “superposition” which enables the testing of different paths at the same time.<sup>104</sup> This form of being in two places at once, even “virtually” can be drawn on methodologically: virtually, one can be in two places at once. Space is thereby far more malleable than once thought. This thinking helps me reconsider what virtuality is, particularly concerning the digital as virtuality or producing a “virtual reality” digitally.<sup>105</sup> In Barad's account of quantum field theory, virtuality is not a vision of a possible future or a construction of an alternate reality; virtuality is a crucial part of the present. Virtuality contributes to the making of the future, but it is not situated elsewhere: it is embedded into our reality and its functionality. Emphasising the co-existence of virtuality in the present is important for my argument

<sup>99</sup> Barad, 'TransMaterialities', 410.

<sup>100</sup> Barad, 398–99.

<sup>101</sup> Barad, 399.

<sup>102</sup> Barad, 387.

<sup>103</sup> Barad, 399.

<sup>104</sup> Barad, 410.

<sup>105</sup> See page 161 for a section on virtual reality/worlds and their relation to “real life”

that cyberspace is not a reality essentially lacking substance/value; cyberspace exists as virtual augmentation. Ultimately it means that there is not a void, or just air between myself and the screen, but a busy virtual field of possible “intra-actions;” matter working out the coalitions that will stick and present themselves. “Affect” closely relates to this field, of which this desiring field generates and activates these potential affects through reciprocity.

Both virtuality and the body function simultaneously in my digital practice. The digital makes visible these possibilities that are still otherwise embedded in my material reality. Virtual possibilities embedded in the present provide the material for an emerging future. As a body so consumed by invisible symptoms, a space equipped for giving visibility is exciting for its potential communicative power. This infinite present of virtual possibilities feels akin to my body, which is so much more than others can see or feel.

## //DISABLED CYBORGS

Because technology holds the potential to enhance my being as a sick body, cyberfeminism is still important for me even though I seek a more meaty form of virtuality: virtuality that works with my heavy body and acknowledges its materiality. Because I am so heavily grounded in this weighty world, I am left behind if this digital emancipation involves so much ephemerality. It is easy to forget about one’s body when it does not protest much. The “healthy” body can work in the background without much interruption; it can be compartmentalised and subordinated in one’s thoughts: as a mind engrossed in a “virtual” activity. The sensation of disembodiment is an illusion. Illusory or not, this feeling of disembodiment makes it difficult to imagine otherwise because this effect is an *involuntary* lack of awareness. In contrast, trying hard to forget that you have a body paradoxically

brings it into focus. My particular plight/skill is that my body is bringing *itself* into focus for me through symptoms. For the healthy others lacking this “skill”, it makes sense to feel like one’s embodiment can either disappear while engrossed in cyberspace. This worries me because the subordination of bodies leaves those heavily affected/dictated by biopolitical realities vulnerable to neglect. I do not want to be left behind. For me, being a body in cyberspace is to be in two places at once: each “place” augments the other without competition, creating a feedback loop that allows for co-existence: the corporeal and the virtual.

My body needs to come with me if I am to be included in cyber emancipation because otherwise, it is not accessible to me. My body comes with me whether I like it or not. The need for bodily inclusion means an “intersectional” cyberfeminist manifesto must consider just how accessible digital disembodiment is. When women are marginalised for additional reasons to being a woman, these forms of marginalisation may restrict access to technology for example, affording hardware, hardware/software with an inaccessible design, or a lack of tech-education; barriers such as these, still restrict even if women are included.<sup>106</sup> Furthermore, for women who have been marginalised because of their gender, having an added vulnerability based on characteristics means added difficulties when it comes to “escaping” one’s own body (all-be-it figurative escape). Being sick means I have dependance on things other than digital escape, like the politics around healthcare and social support, as well as the symptoms that prohibit mind-oriented immersion. Hate, prejudices, and exclusions based on bodily characteristics can manifest “IRL” and online, affecting and overlapping with one another.<sup>107</sup> With all this in mind, the body needs to be acknowledged and brought with

<sup>106</sup> The following article focuses on the “digital divide” during the first wave of the COVID-19 pandemic. Disabled people are cited as being greatly affected by this divide, and socioeconomic was a major factor. Children without adequate technology for virtual lessons and homework was also cited as a major problem. See: Carl Baker et al., ‘COVID-19 and the Digital Divide’, 17 December 2020, <https://post.parliament.uk/covid-19-and-the-digital-divide/>.

<sup>107</sup> “IRL” refers to material that is not digital media. “IRL” stands for “In real life,” I use this somewhat ironically, but do think the reference to popular culture is useful as a way of identifying the problem with thinking digital media is not “real:” something I argue against, for its qualitative comparison to “original” experience. Digital media is a part of our reality and is material, so a distinction is counter intuitive, however there are times in the context of this thesis that I do need to distinguish

us if we are to include disabled people in this feminist emancipation. Hybridity is a solution to this problem: technology used in coalition with the corporeal body. Specifically, hybrid-tech that acknowledges and creatively engages with barriers that people face as bodies. Rather than overtly “bridging” between the “IRL” aspects of embodiment and technology, hybridity can be the inclusion of embodied methods, knowledge and needs in a technological space.

The *Cyberfeminism Index*<sup>108</sup> begins with *A Cyborg Manifesto*.<sup>109</sup> When I imagine cyborg hybridity, I picture a body made “complete” by technology: cybernetics replace the messy organs of this “perfect” fleshy young exterior. Sara Cohen Shabot identifies issues with the figure of the cyborg as it manifests in popular culture, giving the example of the *cyberpunk* science fiction sub-genre.<sup>110</sup> She states the cyborg is often hyper-sexualised, reinforcing gender binaries, and it represents a “flight altogether from the embodied subject.”<sup>111</sup> The cyborg becomes a signifier for “traditional categories”, which she argues is counter to Haraway’s argument for the hybridity and malleability of human and non-human subjects. The cyborg promotes a return to a “complete” body; it embodies a systemic preference for perfect humans, ultimately moving towards eugenics and/or transhumanism. Returning to my own body and its relationship to the “fixing” of me by cybernetics, the hope of a future cure is a tricky subject: seeking therapeutic management of my symptoms takes up so much time, but all this time is about relief in the moment and not a speculative future in the absence of an actual cure. Alison Kafer argues that Haraway flippantly uses disabled people as already existing examples of cyborgs.<sup>112</sup> Haraway does not acknowledge the harmful expectations

---

between the two to identify the problems with this split.

<sup>108</sup> ‘Index- Cyberfeminism Index’, accessed 18 February 2022, <https://cyberfeminismindex.com/>.

<sup>109</sup> Donna Jeanne Haraway, *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991). Donna Jeanne Haraway, ‘A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century’, in *Simians, Cyborgs and Women* (New York: Routledge, 1991).

<sup>110</sup> Sara Cohen Shabot, ‘Grotesque Bodies: A Response to Disembodied Cyborgs’, *Journal of Gender Studies* 15, no. 3 (n.d.): 225.

<sup>111</sup> Shabot, 224.

<sup>112</sup> Alison Kafer, *Feminist, Queer, Crip* (Bloomington, Indiana: Indiana University Press, 2013).

created by cyborgian completion. The cyborg promotes “able-bodied” wholeness as a universal desire, where some disabled people choose to embrace their disability; they establish communities and methods that allow them to thrive without conforming to systems made for abled people. Kafer argues that a preoccupation with “cures” points towards future expectations of the eradication of disabled people.<sup>113</sup> Technology developed for the future needs to plan for the continuation of disability. Otherwise, society never seriously works towards technology/infrastructure that will give disabled people agency.

Within this framework I have just outlined, this standard cyborgian body mocks me and reminds me what an idealised body should look like, knowing I cannot attain it right now. Thus, a cyborgian future relinquishes me of my flaws yet problematises my body today. The cyborg whispers in my ear that in the future, my faltering flesh will be erased.<sup>114</sup> I want to rid myself of the pain this flesh causes me, but I feel so enfleshed now that I would only be erasing myself. The cyborg fixes me as a problem in the future, but it makes things worse for me right now. Without the stochastic nature and perishability of faltering flesh, cyberspace remains an exclusionary space.<sup>115</sup>

Barad is also wary of scientific bodily modification; she gives for example, research into stimulating the regeneration of tadpole tails noting that the investigation had the original intent of producing robots that can heal themselves for military purposes.<sup>116</sup>

“Projects in the service of the military-industrial complex, capitalism, racism, and colonialism cannot be disentangled from the practices of modern science.”<sup>117</sup>

---

<sup>113</sup> Alison Kafer, *Feminist, Queer, Crip* (Indiana University Press, 2013), 118, <https://muse.jhu.edu/chapter/843101>.

<sup>114</sup> Kafer, *Feminist, Queer, Crip*. <https://muse.jhu.edu/chapter/843101> Kafer. INFO

<sup>115</sup> Sara Cohen Shabot writes of the quest for perfection exemplified by the cyborg, which she notes can easily align with racist and fascist ideologies. I would also emphasise here the cyborg’s relation to ableist ideologies. See: Shabot, ‘Grotesque Bodies’.

<sup>116</sup> Barad, ‘TransMaterialities’, 403.

<sup>117</sup> Barad, 412.

Although deviating from the initial intention, these findings have promising implications for medical advancement. From my perspective, even though technology may be used to regenerate a severed limb for military purposes or to affirm the normative mode of embodiment to enrich the already powerful, this does not mean that all “technology” should be criticised, especially because there is so much potential for my sick embodiment to be suitably soothed and enriched.<sup>118</sup> Barad calls for a monstrous, queer enhancement more akin to a giving of agency rather than completion.

“The point is that the monstrously large space of agency unleashed in the indeterminate play of virtuality in all its un/doings may constitute a trans-subjective material field of im/possibilities worth exploring.”<sup>119</sup>

This idea of *monstrosity* holds so much potential, whether it is a third hand or the use of monstrosity as inspiration to find a way to live with a chronic illness that is so excessive, it defies the limits of a “healthy” body. The “grotesque body” offers an alternative to becoming a cyborg; it gives the agency to live in the present and allows the body to thrive.

“To keep its promise of strength and immortality, the cyborg must rid itself of its meat and its maternal origin. Only then can it be safe from the terrible menaces of death and destruction in an era in which all organic life appears to be at stake. The grotesque, in contrast, marks an emphatically embodied existence. Flesh is an essential feature of the grotesque subject and, as such, cannot be abandoned.”<sup>120</sup>

<sup>118</sup> Barad writes of bioelectric studies that aim to regenerate lost limbs for military purposes, of which, the technology could be used for medical uses. Barad does not necessarily write of any ideological issues with ‘cures’ that disabled people face (As Alison Kafer would suggest, see page 85 where I have written about this)- assuming a disabled person is always in need of completion, others those with disability and neglects their current needs. However Barad does argue for ‘monstrosity’ and against biological essentialism, therefore she seems to want to emphasise technological enhancement without notions of completion.

<sup>119</sup> Barad, ‘TransMaterialities’, 413.

<sup>120</sup> Sara Cohen Shabot, ‘The Grotesque Body: Fleshing Out the Subject’, *The Shock of the Other*, n.d., 60.

The grotesque body is a framework compatible with Barad’s more scientific augmentation because their augmentation is an addition rather than a return to a predefined “complete” state. Shabot writes of “Grotesque art,” a term used throughout art history. Grotesque art, Shabot writes, generally depicts imagery that is grounded in, but “contradictory to, the natural, social, or political worlds of which we are a part.”<sup>121</sup> Shabot highlights historic subject matter that is “distorted” or made of incompatible fusions. This subversive quality of the grotesque body is said to be antithetical to the classical figure adopted during the Renaissance. The classical body pertains to the pursuit of human perfection, where the body reaches a point at which it is complete and whole. By contrast, Shabot argues that the grotesque offers malleability and the ability to outgrow boundaries; its boundaries are therefore unfixed and always in question.<sup>122</sup> Shabot reclaims the grotesque in her work, arguing that the grotesque body can work as an interventional figure that threatens any notion of the perfect body and, by extension, serves to rid the grotesque body of the burden of perfection.

This grotesque body gives a way to understand the augmented body in a way that includes the materiality of the body in its augmentation. This virtual augmentation-based theory is different from cyborgian perfection because it allows for adaptation that can change and grow without a finite objective of “perfection” that the cyborg might promise. Shabot does not focus on cyberspace when speaking of her grotesque body. Most surprising to me is that Shabot does not explicitly reference disability in her vision of the grotesque body. Disability is so effortlessly included in this theory because Shabot’s grotesque body embraces excess without labelling it deviant. Are we meant to assume that the grotesque body has implications for all non-normative bodies: does the grotesque body automatically include disability? Nonetheless, the grotesque body supports disabled bodies. “Excess” is accepted within the theory of a grotesque body, whether it is in the form

<sup>121</sup> Shabot, 58.

<sup>122</sup> Shabot, 58.

of augmentation (as an alternative to the cyborg) or the body producing its own excess/affects.<sup>123</sup> Building an environment where excess is part of its systemic function is a far more feasible project for me than seeking to become a cyborgian figure. With this environment, there is room for spillages; they flow into its rivers and help this environment thrive; the cyborg, in contrast, is a finite figure with fixed edges and will not work for this project full of excess.

## // FICTIONAL HANDS

The image of a severed hand is more than a fictive trope: it collapses history and connects these hands in a collective proposition. The hand holds its own agency distinct from any omnipotent force, be it a separate mind, soul, or god. The severed hand acts independently. The hand is unpredictable, untamed and radical.

An example of the severed hand as a fictional character is *Thing* in *The Addams Family's* numerous adaptations. Academic Laura Morowitz analyses the 1960s version of *The Addams Family*, arguing that:

“Thing. A severed hand that inhabits a velvet box, Thing is a ‘childhood friend of Gomez’, which performs simple household tasks such as pouring tea, delivering mail and playing instruments. A literally ‘de-humanised’ object, Thing is at once a reference to the banished servant class (replaced in suburban America by the ‘happy homemaker’) and an archaic version of the labour-saving devices that fill the modern suburban dwelling.”<sup>124</sup>

<sup>123</sup> Shabot, 59.

<sup>124</sup> Laura Morowitz, ‘The Monster Within: “The Munsters,” “The Addams Family” and the American Family in the 1960s’, *Critical Studies in Television* 2, no. 1 (Spring 2007): 35–56.

*Thing* is a character that escapes both being an (essentialised) human and a completely dehumanised object through its movement that gives it a sense of being alive. Without a voice, however, *Thing* does seem to symbolise a lack of agency. *Thing* performs tasks, making it a tool without autonomy, but it becomes more than a tool through its uncanny lifelikeness as a moving hand-thing. My digital hand does become a tool for me: an augmentary device, as opposed to an avatar.<sup>125</sup> Beyond being a tool for me or a labourer susceptible to exploitation, my digital hand works with me; this is a co-dependent relationship. Being my guide in digital space, my digital hand teaches me more about this digital work than I could ever understand without its specialist knowledge of being digital.

Hands feature in many of Tai Shani’s works, for example, in the exhibition *Your Arms Outstretched Above Your Head, Coding With Angels* at *Gathering*, London. The exhibition features several sculpted hands, bones and precious-looking objects, a candle, a film and other bodily forms and soft pink colours. Shani adopts a mixed-media practice which encompasses sculptures and digital media, but all her work follows her intended narrative, shifting between expressions of this world. Digitisation carries much of the story-telling of this narrative due to its time-based format, and works with the objects she presents: the digital and the sculptures do not compete or detract from one another. Critics *The White Pube* are reminded of saints throughout history, martyrdom and the undead when reviewing Shani’s exhibition.<sup>126</sup> The severed hand gestures to so many of these supernatural phenomena. I resonate with this Martyrdom: I carry the burden of sickness. I languish in this suffering body. Without this sickness, what would remain? All my “undead” digital artefacts: a digital hand pointing towards my dead body but it remains animated. Reanimated. Without pinpointing the symbolism of these hands, I hold onto this connection, or resonance, with the others whose hands remain.

<sup>125</sup> See page 130 for more detail on my digital hand as an augmentary device, or prosthesis.

<sup>126</sup> ‘Tai Shani @ Gathering’, *The White Pube*, accessed 30 January 2023, <https://thewhitepube.co.uk/art-reviews/tai-shani/>.

## // BEING SPLIT IN TWO: CARTESIAN DUALISMS

In *Blender*, I can do all kinds of things with my digital hand. To realise some of this potential, I create a new form for it to play with in digital space. I begin with a plane, and through specific settings, I make the surface react to contact with my digital finger. My digital finger plunges into the surface, rippling like water in response. I am very satisfied with this result. I can use this software to make or do almost anything I imagine. My own hand clutches onto my computer mouse, and my fingers press down on its buttons producing a click. A single click sets in motion an abundance of activity in digital space. This skill might well demonstrate a sort of hand/mind coordination: a particular ability to create or replicate my thoughts. A disorienting mix of sickness and determination clouds my memory of making this hand and ripple scene. Chronic symptoms muddy any claim to “mastering” coordination between my brain and “skilful” hand. My “brain fog” gives my hand the ability to come alive and move without a master, or at least, it levels this relationship: hand and mind turn out not to be so different. Making sculptures before this sickness was a very physical activity. Using tools and other materials and working in scales larger than my body made me feel *powerful*. The embodied nature of computational making is a far more subtle move. My finger moves up and down, placing pressure on my mouse, producing noticeable ripples on my digital surface. While my body does not appear to move as much as it did to make sculpture, it works overtime to maintain my being while I work. All I have is channelled into that click. My mind becomes that movement. Everything I do feels so heavily weighted in the physicality of its movement.

I continue to click my mouse and watch as my desires manifest in the imagery on my screen. The click and the imagery seem like discrete entities that do not correlate. I cannot touch this imagery with my hand like my computer mouse. There appears to be a split, a void between the screen and my mouse, accentuated by wireless technology. Bluetooth gives the appearance of a lack of

connection, but connections do not need to be rooted in appearance. So much more goes into this work than the click of my mouse. So much embodied sickness has gone into my monstrous third (digital) hand, of which my intentions are not separate from the physical clicks of my finger. My intentions are heavily embodied. My systemic processes are rough and noticeable, but it does not mean I am more interconnected than those whose systems hum quietly like white noise. My monstrous system howls, and it moans to me that my thoughts are embodied.

“Had we been pure consciousness, with no body (a kind of Cartesian or Platonic ideal), we would be a totally different kind of being, a kind of god, who, among other things, would not have any need for ethics.”<sup>127</sup>

My relationship with my fleshy hand that clicks is not that of control; my systemic processes have been so obviously flattened that they threaten any remaining illusion of control. I reach out further. My rapidly spreading mess oozes from me and appears on my screen as a digital hand.

## //NEOLIBERAL MODELS OF DISABILITY

I find it hard to shake deeply embedded beliefs that I must resist succumbing to this sickness, that I can do anything if I put my mind to it. When this sickness struck with great intensity, my instinct was to carry on as before: Sickness should not stop me. “Mind over matter” is an attitude that declares there must be a winner between oppositions: mind or matter. It is hard to distinguish which side I should back when my thoughts and visceral sensations become so embroiled. Neoliberalism tries to persuade me that willpower is the answer, but I become confused, and my brain fog takes

<sup>127</sup> Shabot, ‘The Grotesque Body’, 63.



over. My acting-up body grows louder; it is so present in my thoughts. Neoliberal beliefs threaten me even more so now I am sick. In their book on biopolitics and disability, Sharon L. Snyder and David T. Mitchell critique forms of “inclusionism” in neoliberal societies; they call for more meaningful forms of inclusion that result from the acceptance and recognition of the creative and life-enhancing contributions of disabled modes of living.<sup>128</sup> A societal shift towards more adaptive and flexible systems is fundamental to this meaningful inclusion. Writing that “neoliberalism offers few spaces from which to recognise (our)selves outside the values, needs, and desires preferred by the market,” Snyder and Mitchell argue how neoliberalism is fundamentally set up to exclude those with a disability unless they assimilate to please the market.<sup>129</sup> To be included in this “inclusion,” the disabled person needs to contribute to the market. The disabled person’s contribution is not seen as worthwhile if adjustments are not (cost-effectively) “reasonable.” profit is a measurement of a disabled person’s contribution. In my case, the fear of navigating the inadequacy/cruelty of social support implemented by this UK government leads me to work against my body and try to participate as if I were well. I managed for a while with great suffering as symptoms first struck, but eventually, I had to give in: my body won in this enforced mind/body battle. This dissonance between what my body needs and my fear of noncompliance created a split between my body and willpower/mind. I forced myself to work beyond my bodily comfort. This neoliberal system is abusive. Because “inclusion” initiatives exist (however suitable or available), it feels as if I have no “excuse” but to thrive. Individualism, at the centre of neoliberal thinking, is the nub of this problem because I only have myself to blame if I do not prosper. I should be thankful that neoliberalism offers me the hope of inclusion: at least, this is better than exclusion. Before “care in the community” initiatives, disabled people were removed from society living in institutions and were subject to neglect and abuse.<sup>130</sup>

<sup>128</sup> David T. Mitchell and Sharon L. Snyder, *The Biopolitics of Disability: Neoliberalism, Ablenationalism, and Peripheral Embodiment*, Corporealities: Discourses of Disability (Ann Arbor: University of Michigan Press, 2015), 36.

<sup>129</sup> Mitchell and Snyder, 4.

<sup>130</sup> Alison Kafer writes about historical approaches to disability, including the use of sterilisation, and the institutionalisation of disabled people. Kafer relates these historic practices to notions around futurity: a desirable future is seen to eradicate

This removal both signifies and enacts a desire to eradicate disability from society. Allowing disabled people to be a part of society is a step forward for disabled people in comparison to past direct abuse and exclusion, but it does not mean that “care in the community” is free from indirect abuse and exclusion. The problem with inclusionism is that the initiatives that make living in the community possible are rendered unsustainable because of subsequent austerity measures. Snyder and Mitchell write:

“The paradox of support for living in the community while simultaneously gutting the very social service systems needed to accomplish this kind of integration sits at the heart of the weakened strain of inclusionism extant in neoliberalism.”<sup>131</sup>

Snyder and Mitchell call this phenomenon “bait and switch” which I find a particularly insidious tactic: the fundamental principles of inclusionism (initiatives to enable disabled people to thrive and participate in their community) are appealing to me, and are arguably a significant improvement on being essentially locked away in an institution, but, the government needs to fund these initiatives properly.<sup>132</sup> The subsequent cuts and austerity measures, according to Snyder and Mitchell, tend to go unnoticed or under-reported. All this leads to the pressure I feel as a disabled person: society gives me every opportunity, so my failure to thrive results from *my* inadequacy. Ultimately, the gesture of inclusionism diminishes support for disabled struggles and needs when these initiatives are underfunded/lacking due to austerity because the gesture alone masks the level of feasibility for the individual.

disability, which by extension, eradicates/prevents disabled people existing. Kafer’s work around futurity is further explored on page 131 of this thesis, but this part of Kafer’s text is useful here in terms of laying out historical disability injustices. See: Kafer, *Feminist, Queer, Crip*, 30.

<sup>131</sup> Mitchell and Snyder, *The Biopolitics of Disability*, 37.

<sup>132</sup> Mitchell and Snyder, 38.

>>>

I have found a way around my lack of mobility: I can use computational software to make art. I take pride in “overcoming” my “limitations” while satisfying my creative impulse. I have found a way to continue my PhD, which seems positive, but neoliberalism has adapted to exploit my achievements. Snyder and Mitchell diagnose this condition as the “able-disabled.”<sup>133</sup> My “positive representation” as a sick person is particularly sticky because criticising the portrayal of disabled “success stories” runs the risk of diminishing the hard-earned achievements of these individuals. The problem is not these individuals; it is “*the individual*.” neoliberalism uses these individuals as symbols for *the individual*. Neoliberalism’s hold on me is a deception. A neoliberal society uses individual success stories to mask and enforce the competitive, individualistic society I have been corrupted by. A neoliberal society can use my success against others who do not prosper and justify welfare limitations because I prove that movement is possible. I do not want to speak for every other sick person, however: there are so many variable factors in this group that can prohibit achieving in the same way as another, and equally, I would not wish the side effects of “carrying on,” or “overcoming” one’s own body, on anyone else. Societal sympathy for the sick diminishes when one of us prospers, and this is a painful thought.

Should I cast aside my mouse and keyboard? I do not want to be used to make others suffer: the “brave” student who managed to complete their PhD (hopefully) despite feeling like death warmed up? But wait, if I “down tools”, I become one of the “lazy” ones and simply add to this representation. I cannot win in this system! But I remember my digital hand and how much satisfaction it has given me, its hold over me, and my suspicion that it might be able to reach out to others. I might as well carry on if I cannot “win” either way.

<sup>133</sup> Mitchell and Snyder, 36.

>>>

Snyder and Mitchell give a new materialist framing of disability, away from “the stigmatising ramifications of seemingly deterministic social beliefs” as an alternative to neoliberal notions of inclusionism that leave no room for “non-normative” bodies.<sup>134</sup> Through the social restrictions involved in being an “individual” in this market-driven system, “new materialisms involve a more fleshy grappling with the nature of materiality itself; how bodies go about inhabiting their messy dynamics.” This “fleshy grappling” excites me.<sup>135</sup> I am fascinated by the properties of surfaces. A tactile understanding of this political climate makes more sense now that I can *feel* the effects of this oppressive belief system. A practice symbiotic with my body’s needs is a radical move because my desire to achieve in ways that benefit the market does not supersede my flesh.

Digital technology enables an invisible extension of my bodily matter even when my flesh never physically touches these digital manifestations. My body and this “virtual” realm become one. I become a “grotesque body:” a body that defies expected limits. I am this expansion. As Shabot argues, the “cartesian dualism” grounds thinking that mind and body are separate, and I have experienced the adverse effects of this logic.<sup>136</sup> Believing that “mind over matter” will counteract the involuntary change I experience lead me to hurt myself because I believed I should not let sickness defeat me. To think that a theory can physically hurt me is hard to stomach. As opposed to being trapped *in* this body, *being* my body is a form of emancipation. My embodiment gives me the agency to find the extra space required for my rapidly expanding body. Now I can do something with all this excess material leaking from me. I can channel this flowing matter, study it, transform it into something new and pour it back into my body through any orifice available. This process allows me to move and create the extra space cyberfeminism offers without needing to shed my corporeality.

<sup>134</sup> Mitchell and Snyder, 5.

<sup>135</sup> Mitchell and Snyder, 5.

<sup>136</sup> Shabot, ‘The Grotesque Body’, 63.

## ARTWORK INTERLUDE:



I CAN FEEL  
IT

<https://annafhughes.co.uk/FEEL-IT>



15. Anna Hughes, *I Can Feel It* (Still), Digital animation, 2021.



16. Anna Hughes, *I Can Feel It* (Still), Digital animation, 2021.



17. Anna Hughes, *I Can Feel It* (Still), Digital animation, 2021.



18. Anna Hughes, *I Can Feel It* (Still), Digital animation, 2021.

# I CAN FEEL IT

Having spent so much time with my digital hand, there is more I want to do with it. The hand can help me feel my way through this work. I begin I can feel it with the digital hand to set up a particular feel within the work. I rest the hand on a dark blue reflective surface for its dramatic effect. I make the index finger tap on the surface, starting a beat to be carried throughout the video. First, I animate the hand by creating a “skeleton” in the software. Next, I click further along the software’s timeline, stopping to position the joints and set a “keyframe” which records the bone’s position. I position the finger’s bone at intervals so its joints rotate up and down. The finger’s skin bends according to the movements of the bones. It takes trial and error to bend the fingers as I want them to. I intend to create motion with this finger like pressing my mouse or touching my skin. My body creates motion continuously, as does the click of my mouse. I use a “wave dynamic paint” tool, which creates ripples as my fingertip impacts the inky surface. The dynamic paint tool does not require the modelling of a mesh: the ripples are calculated according to particular program settings that can be adjusted. It takes experimentation to get the desired effect, controlling the force and weight of the finger-collision and then the waves' depth, width and frequency. The most pleasing thing about this simulation is how the impact creates a droplet in the middle of the ripple, denoting this interaction. In all this, the impact of this imagery is in the staging of the scene.

With all the scenes in this video, I concentrate on developing the lighting and filming techniques; all these elements need light to make their details visible. I carefully position lights above the hand and am surprised at how much this position and brightness affect the presence of wrinkles on the finger joints and the gloss of the nails. I place a central light to emphasise the impact of the finger as it creates ripples on the surface, bringing out the blue undertones of this simulated liquid

and the dramatic nature of the slowly moving severed hand. I use a post-production setting in the software before rendering, which adds a glare to light sources to give more atmosphere to this world. In the “camera” setting, I can change the aperture to bring particular objects into focus while the background blurs; it creates depth and different intensities with the work, all while making a believable world. Thinking of the viewer’s position and active experience of this world, I use different camera movements in the video like “pan” and “fly.” Considering all the different scenes, this work's rendering process is prolonged, taking up to five minutes for one frame (each frame is a 25th of a second). I have to wait for the render of each scene to ensure I am happy with the work. With each render, I wait to see what emerges, meaning the work reveals itself to me, and I work back and forth with the software and its programming that does the final work for me. This delay in discovering the outcome builds my anticipation, often creating unexpected but appreciated results. The software works with me in this process, and I could not have envisioned the outcome before all this back-and-forth collaboration.





19. Anna Hughes, *Blender Experiment #6*, Digital image, 2023.

3

---

## REMOTE TOUCHING



20. Anna Hughes, *Digital Hand #5*, Digital image, 2023.

## // ABJECT HORROR: EXPERIMENTS IN GORY TEXTURES

I use *Blender* to explore the textures of my own body: its appearance and how it feels. I open up my body and watch as bits of blood, bone and other tissue disperse into space. I do not want to disperse as a way of escape but as a way to move, grow and intermingle with others.

>>>

>Texture is a stimulating hybrid of appearance and sensation.

>A texture can be seen and/or felt: texture does not force me to choose between image or affect; it can be achieved in *Blender* through multiple methods.

>An easy way to apply a texture to an object is by using a ready-made material sourced from contributors to a “plug-in.”

>Texture can be embedded into the mesh of an object, and other material properties can be applied on top of this to enhance it.

>Texture can be programmed to create a “material” that only gives the “appearance” of a surface while the mesh of the object remains untouched.

>Texture can be achieved in “particle” formations or it can be “painted” on.

>Lighting is important for the appearance of texture because it accentuates undulations with shadows and highlights.

>Shine can be controlled in the material settings of *Blender*, as can the roughness of a surface.

>Texture can spread throughout a surface, repeating itself in multiple iterations.

>There is so much possibility.

The possibilities for my digital hand grow more possible as my 3D imaging proficiency improves. I am no longer satisfied with the smooth skin I initially wrapped my fingered mesh with, so I endeavour to give my digital model a “better” flesh texture. With this technology, there is no need to worry about how the skin might adhere to the mesh of my seemingly inorganic object. I do not worry about whether the hand might reject the skin now grafted onto my digital form. My digital skin does not adhere to any biological rules, and it does not need any of the muscle, fibres, or anything else I do not have the biological expertise to list here. There is no real need to think more in-depth about the composition of my digital hand’s flesh, nor is there a real need to make this flesh look “realistic.” There *is* power, or at least, *affect* in this fleshy lifelikeness. A news article grabs me with the headline promising a “slightly sweaty” robotic finger.<sup>137</sup> The robotic finger makes me feel both repulsed and excited at the same time. I would not be as excited or repulsed if the finger was not “slightly sweaty.” I would not feel the same if the finger was not *slightly* sweaty. A finger sweating profusely is simply a wet finger, but the slightness of this sweat evokes a clamminess unique to the creatures who sweat through glands in their skin. My autonomic nervous system is not working well at the moment, and without medical intervention, my skin becomes extremely sweaty with little effort. The robot finger does not need this slippery detail to function, and surely liquids are detrimental to robotic circuits? These textural details do serve a different function, however (intended or not): they enhance my relation to this machine. The oddity of this monstrous creation is amplified by the lifelikeness of this disembodied body part, but I would imagine the finger was chosen for practical purposes: a small sample of a human, of which they can test the stretch and wrinkles of the skin as this finger writhes in a petri dish with the help of a robotic skeleton. My relation to this machine is dictated by the visual appearance of fleshiness, the promise of movement, and imagined dampness. I imagine touching this finger with my own to explore its moist surface. My experience

<sup>137</sup> Hannah Devlin, ‘Scientists Make “Slightly Sweaty” Robot Finger with Living Skin’, *The Guardian*, 9 June 2022, sec. Science, <https://www.theguardian.com/science/2022/jun/09/scientists-make-slightly-sweaty-robotic-finger-with-living-skin>.

with this robotic finger is entirely virtual, yet, so affective because its slightly sweaty surface does something to me from a distance. The article about the robot finger warns of the “uncanny valley,” of the unsettling feeling when encountering a lifelike robot.<sup>138</sup> Perhaps the divide between human and robot should be distinct for this very reason: humanoid robots can be unsettling. But is being unsettled inherently bad? My own body is unsettling. My body unsettles me whenever I am on the brink of forgetting it is there. I cannot say that this feeling of constant agitation is good, but it is effective. Malaise is a medical term which describes a sense of ephemeral unease relating to ill health. Perhaps malaise acts similarly to the uncanny by using the impact of slightness; the clamminess of a skin replicated all too well. I want my digital hand to hold this unsettling power that my sick body does: the ability to touch others, all because of its unsettling affects. Because I have expertise in being an unsettled body, I have some insight into reproducing this effect using my technology to hand. Perhaps for me, the lifelike textures designed to unsettle have the opposite effect: this technology allows me to relate to my slightly unsettling body and avoid seeing it as an uncanny other.

>>>

I inadvertently learn about my own skin through researching my health. In honesty, I wish I could remain ignorant about the specifics of my sick body, not because I am squeamish or disinterested, but because it is through necessity. I have to work out what is wrong with me because I do not have adequate medical care.<sup>139</sup> My explorations in *Blender* are far more cathartic. My new knowledge about being a body helps me with this work. It is a novelty to retain/gain agency while acquiring/applying this knowledge. I channel my bodily knowledge into a format that can be carefully

<sup>138</sup> Devlin and correspondent.

<sup>139</sup> There is no longer a dedicated clinic or specialist for hEDS available on the NHS: ‘#EnoughIsEnough – The Ehlers-Danlos Support UK’.

adjusted or expanded beyond what I thought was possible for my embodied reality. My skin holds qualities that evidence a genetic defect (hypermobile Ehlers-Danlos Syndrome). My skin is described as stretchy, velvety, soft and semitransparent; this is due to lacking a protein called “filaggrin.”<sup>140</sup> My skin bruises and tears easily while these wounds heal slowly. One strange symptom and criterion for hEDS is called “Piezogenic heel papules.” A Piezogenic papule is a herniation of subcutaneous fat that breaks through the “reticular dermis.”<sup>141</sup> These papules appear on the heel of my foot as small round protrusions that are lighter than the reddening skin of the heel. Because hEDS was missed by countless medical professionals in the NHS, when I eventually came across hEDS in my obsessive quest for a diagnosis, I inspected my own skin for all these signs. Without medical knowledge, I had to repeat these inspections, pinching my skin, and stretching it, placing pressure on my foot in a mirror, and observing all the bruises and scars littering my body. The pinching creates even more bruises, and I tell myself I have to stop. This form of biological knowledge has limitations: once I learn I have an incurable biological defect, I have nowhere else to go with that knowledge. Biology has failed me. I have to explore my embodiment differently: in a way that does not leave me with more bruises.

To create depth within my digital skin’s surface, I need to learn more about the composition of my skin. *Blender* gives the option of a “subsurface” layer when making materials, to which the detail of the “dermis” can be added.<sup>142</sup> The dominance of this subsurface can be adjusted, creating variants in the visibility of the outer layer, or the “epidermis.” “Subsurface scattering” mimics how light enters and exits the translucent surface of skin. The result is a hazy glow. Adopted by CGI artists and designers, this effect gives the figure extra dimension and an organic feel. I learn about

<sup>140</sup> Edimo, Cynthia O., et al. ‘The Dermatological Aspects of hEDS in Women’. *International Journal of Women’s Dermatology* 7, no. 3 (January 29, 2021): 285–89. <https://doi.org/10.1016/j.ijwd.2021.01.020>.

<sup>141</sup> Edimo et al.

<sup>142</sup> ‘Subsurface Scattering — Blender Manual’, accessed 21 March 2023, [https://docs.blender.org/manual/en/latest/render/shader\\_nodes/shader/sss.html](https://docs.blender.org/manual/en/latest/render/shader_nodes/shader/sss.html).

my own skin as I learn to make digital skin. I took for granted the texture of my own skin, unaware of its deviation. My bond to this digital hand grows stronger through textural properties, while my skin feels more so a part of who I am.

I have the urge to create blood that might have escaped the grasp of my digital hand, pooling as it oozes out or splattering out as my flesh rips open. I try a ready-made blood, but it does not look right. I need to think about the viscosity of blood, how this moves, and how light interacts with it. My digital hand bursts through a pool of blood as droplets fly into the air. I watch *Youtube* videos that teach me how to make “fake blood” for prosthetic makeup using ingredients such as flour, coffee and red food colouring.<sup>143</sup> I marvel at how popular these videos are.<sup>144</sup> There is a thirst for recreating bodily matter, and simulating leaked insides for pleasure. The abject feeds off a spillage over this virtual “border,” an inside made visible.<sup>145</sup> According to psychoanalyst Julia Kristeva “a wound with blood and pus, or the sickly, acrid smell of sweat, of decay, does not signify death” more it denotes a border in which the body must place itself to live. The other side of the border is where we shed this filth, and therefore “the most sickening of wastes, is a border that has encroached upon everything.”<sup>146</sup> My sick body outgrows its virtual borders, so perhaps it is fitting that I find bodily matter that is out of place so oddly satisfying. Julia Kristeva’s border is a border of signification; the border between “I and the Other.”<sup>147</sup> To distinguish myself as a subject, I must identify the moment where others stop and I begin; therefore, I create a border. Kristeva notes the distress spillages cause: they make our subjecthood feel less stable and our border far less impenetrable. To see a part of oneself outside this border of subjecthood is distressing. This distress could be at the sight of one’s blood

<sup>143</sup> ‘DIY Edible Fake Blood: 4 Recipes- YouTube’, accessed 25 February 2020, <https://www.youtube.com/watch?v=PiiMqe9arIk&t=50s>.

<sup>144</sup> The Youtuber *Ellimacs Sfx Makeup* has to date, over a million subscribers: ‘Ellimacs Sfx Makeup- YouTube’, accessed 6 January 2020, <https://www.youtube.com/user/macsmoser>.

<sup>145</sup> Julia Kristeva and Leon S. Roudiez, *Powers of Horror: An Essay on Abjection*, Nachdr., European Perspectives (New York, NY: Columbia Univ. Press, 2010), 3.

<sup>146</sup> Kristeva and Roudiez, 3.

<sup>147</sup> Kristeva and Roudiez, 7.

escaping past their skin barrier, or it could extend further to something that reminds them of this blood. Kristeva argues that the cadaver is the ultimate uncanny object: this body becomes a signifier for the fate of all bodies, and I see it as my own, escaped from the safety of my living bodily boundaries.<sup>148</sup> Cyberspace mocks this notion of subject/object boundaries where I become used to projecting parts of myself into this digital space. I interpret Kristeva’s theory around abjection as a call for a move beyond thinking of the subject/object boundary as static and distinct: it is an argument for the malleability between the supposed subject/object boundary.<sup>149</sup> Kristeva writes on “approaching abjection:” “Apprehensive, desire turns aside; sickened, it rejects... a vortex of summons and repulsion places the one haunted by it literally beside himself.”<sup>150</sup> The distress caused when confronting this leakage demonstrates how ingrained cognitive compartmentalisation is: a thing that appears even slightly out of place within a structure causes the subject experiencing it to question their place within the structure. All this causes dissonance. While a psychoanalytic analysis has become too full of lack and opposition for me to connect with (as I explored through Ed Atkins’ work).<sup>151</sup> Kristeva’s writing is full of drama and resistance to the order she identifies. Kristeva’s writing on the abject is full of movement and digression, where things bend and stretch beyond their limits. Accepting that the body digresses beyond its border is accepting my body as it is.

When I make decisions about the material settings in *Blender*, I am confronted with the properties of my own body as I use it for reference. I lean into the pleasure of observing the texture and movements of these materials; I am no longer disgusted, or if I *am* disgusted, I like it. I have accepted that my border is malleable and permeable. Like my skin, this border can easily stretch, tear, leak and herniate, even if this malleability is invisible. I adjust the transparency of my blood in *Blender*

<sup>148</sup> Kristeva and Roudiez, 3.

<sup>149</sup> See page 52 for more on the subject/object in relation to Ed Atkins’ work.

<sup>150</sup> Kristeva and Roudiez, p. 1. Julia Kristeva and Leon S. Roudiez, *Powers of Horror: An Essay on Abjection*, Nachdr., European Perspectives (New York, NY: Columbia Univ. Press, 2010), 3.

<sup>151</sup> See page 52 for more on lack.

and control its shine and viscosity. I realise that the digital blood does not need to look exactly like blood as the readymade material does, but it needs to give me the *feel* of blood. Drawing from the functionality of the object, producing a meaningful encounter with blood does not need to involve touch (for the moment defining touch in its most basic sense of “physical” contact); a meaningful encounter can be activated from a distance. The “feel” of blood I speak of is the making sense of the signifier of “blood,” and all the context and aesthetic decisions involved in presenting this blood dictate the affect this “blood” has on the body that encounters it. Feeling, in the sense I am using it, is a bodily reaction: a resonance with the “blood” that goes beyond recognition. This feeling is something that is felt through the body, and imagery has the potential to instigate this reaction from a distance. Being matter that grows, flows and refracts light reminds me that although my excessive materialisations are not pleasant, the textural possibilities of my material movements are immense. I use the matter that flows from me to resonate with other matter, be it virtual or visible, because I can no longer distinguish between the two: both my visible and invisible matter reverberate and pulsate as intense sensation. It, therefore, makes sense to think of these experiments in *Blender* as textural because it confuses a separation between visible and invisible matter.

## // DIGITAL TOUCH

I feel through my eyes in *Blender*, but this does not limit me to only feel in this way. I use sound and other methods to help me feel in multiple dimensions. Before working in digital media, I held onto a very narrow definition of touch. Touch, I thought, requires “physical” contact: my flesh meeting something else. Touch is close proximity. But my definition of touch is rapidly expanding, and I get a sense that it cannot be limited to this fleshy friction. However, I am not rejecting proximity as a prerequisite to touch. Proximity can be made possible through technology without worry of

distance. Touch is still an activity in which matter makes contact, but if I expand my definition of what matter is, distance cannot prevent proximity. Screen-based touch is troubled by the literal touch that the smartphone touchpad requires, all further confused by the built-in haptic effects created to *mimic* feedback sensations. These haptic sensations have their uses, but why should I limit myself to such a basic understanding of touch? Barad writes of classical physicists who tell us that touch is “repulsion.”<sup>152</sup> We do not need to “physically” touch the screen, but we can feel its force regardless. Matter behaves in a far more “perverse” way than simply being distinct entities repelling one another however.<sup>153</sup>

“Every level of touch, then, is itself touched by all possible others. Particle self-intra-actions entail particle transitions from one kind to another in a radical undoing of kinds—queer/ trans\*formations.”<sup>154</sup>

Therefore touch is not a simple contact with the other; there are far more complex movements involved, which stretch, leak, tear and herniate. Exteriority and interiority become confused. Am I touching myself or someone else with my digital hand? If matter interacts with itself and other matter with virtuality as part of the process, it is further complicated by the infinite possibilities of these movements. Touch does not need to be limited to mild vibrations on a screen. Touch in cyberspace does not need to be an imitation of “touch.” The interaction can be its own thing: a different form of touch.

Cyberspace has already started to adapt to utilise the “monstrous” possibilities for creating virtual

<sup>152</sup> Barad, ‘TransMaterialities’, 396.

<sup>153</sup> Barad writes of how the self-touching of electrons was described as perverse by a physicist (Richard Feynman). See: Barad, ‘TransMaterialities’, p. 400

<sup>154</sup> Barad, 396.

forms of touch. I watch a *Youtube* video by *ASMRMagic*.<sup>155</sup> The video has reached over eighty-eight million views to date. I drift through scenes where the creator plays with and gently caresses various objects. I see a mannequin head covered with glitter and listen as manicured fingers scratch its surface; the glitter crackles as the hand moves. Later, a tubular microphone with ear shapes at either end is rubbed and poked with various objects. The microphone is called a binaural microphone, designed to record dual-channel audio. This microphone incorporates “free space” between the ear-clad receivers and is said to replicate the experience of the sound in its “natural” environment.<sup>156</sup> Utilising this space between the ear speakers, this *ASMR* creator can cultivate a sense of intimacy with the viewer/listener. The sound surrounds the viewer, creating the *feeling* of closeness, of being in the room with the creator despite the screen that attempts to divide us. *ASMR* is often used for relaxation, there is something comforting about this closeness, where the viewer/can experience the atmosphere.<sup>157</sup> Participating in *ASMR* is to be drawn in and brought along with this wave of sensation, playing with time and allowing the user to settle their mind/body.

The hand form of my digital object is an obvious nod towards touch, while the screen reminds me of how this digital hand differs from my fleshy hand that “really” touches. I deliberately conjure thoughts of touch for the viewer who sees my hand; I want “touch,” or an associated sense, to be thought of when experiencing my work. *ASMR* can be thought of as a making-do in the absence of touch, where the popularity of these videos is evidence of isolation and a longing for “real” forms of touch. *ASMRMagic* does not attempt to hide the binaural speaker; the ears are ear-shaped but are plasticky white, and in between them rests a black bar with switches running along it. The speaker

<sup>155</sup> ‘ASMR 50+ Triggers over 3 Hours (NO TALKING) Ear Cleaning, Massage, Tapping, Peeling, Umbrella & MORE- You-Tube’, accessed 19 December 2019, <https://www.youtube.com/watch?v=oXp0hTkXiks&t=2187s>.

<sup>156</sup> ‘3Dio: Professional Binaural Microphones’, 3Dio, accessed 22 March 2023, <https://3diosound.com/>.

<sup>157</sup> In a study on *ASMR* 98% of participants reported using it for relaxation purposes. See: Emma L. Barratt and Nick J. Davis, ‘Autonomous Sensory Meridian Response (*ASMR*): A Flow-like Mental State’, *PeerJ* 3 (26 March 2015): e851, <https://doi.org/10.7717/peerj.851>.

is clearly a device, not a human, and features proudly in the centre of the frame. *ASMRMagic* does not pretend to be anything else despite *alluding* to physical closeness as a concept because it proudly features its technology and implements. The atmospheric space created by the binaural microphone is particularly effective: the sound surrounds me. Many aesthetic devices contribute to this video’s efficacy: the lighting is low, and the background a glittery purple. The creator’s nails are freshly painted, and the different objects are kept central in the frame. *ASMR* has become its own practice, and it need not contend with traditional forms of touch because, through technology, it becomes something new. The eighty-eight million viewers are a testament to the efficacy of these methods.

The exhibition *Weird Sensation Feels Good* hosted at the *Design Museum*<sup>158</sup> takes its name from the original thread of the same name by user *okaywhatever*.<sup>159</sup> The exhibition is very much *about ASMR*. In a review of the show in *RIBA Journal*, Pamela Buxton writes, “[the exhibition] is also a very good place for digital non-natives to find out what all the recent *ASMR* noise has been about.” For me, there is something strange about presenting something meant to be experienced in an intimate setting in the form of a physical exhibition. The exhibition allows the viewer to observe intended or accidental forms of *ASMR*-like content. Something is disappointing about the exhibition; all it does is *present* intentional or unintentional forms of *ASMR*. All among novelty intestinal-like plush seating. The exhibition lacks the intimacy of experiencing the content in the comfort of one’s chosen surroundings, however the exhibition serves its purpose of giving an overview of this phenomenon from the perspective of an outside observer, as opposed to committing to cultivate an affective encounter. The exhibition is *about ASMR* rather than being an exhibition *of ASMR*. *ASMR*, here, is an affective encounter.

<sup>158</sup> ArkDes, ‘WEIRD SENSATION FEELS GOOD: The World of *ASMR*’ (Design Museum, London, 2020).

<sup>159</sup> Anonymous, ‘History of *ASMR*’, *ASMR University* (blog), 2 July 2015, <https://asmruniversity.com/history-of-asmr/>.

Freddie Mason writes about the viscous. Mason seems suitably fascinated but torn about the practice of *ASMR* and the related *slime* trend.

“The rise of *ASMR* exhibits a desire for a heightened experience of mundane materiality that signals, for some, a return to some kind of authentic intimacy that has been lost in lives spent in front of screens.”<sup>160</sup>

Mason acknowledges, however, that this trend can be something other than a return to an authentic form of intimacy. “What fascinates the viewers of this Instagram slime is the power of technology to enhance our intimacy with material things.” Although acknowledging the draw of these internet trends, Mason is concerned by the anthropocentric sense of domination this seemingly trivial trend evokes. For Mason, the trivial reduction of this matter to a “cute” blob is the source of this power-struggle. Perhaps there is a sense of domination channelled through the hands of the slime-fondler, but watching someone else fondle the slime is a different matter. Although the object of slime fondling and watching slime fondling appears to be the same, each practice stimulates the viewer in different ways. I find passively watching a material move, stretch, and compress relaxing; I can relax deeply into knowing I do not need to think about anything other than the dancing matter on screen. I do not need to think about moving the material around myself: the image moves for me. I can enjoy the strange pleasure of witnessing how this material moves. Triviality can be a distraction from a need to control.

Rethinking proximity is to expand access, opening up alternative, pleasurable touch for different needs and desires. The draw of a video that displays and enhances a material as it oozes is not hindered by geographical separation. I do not dominate this matter, and I am not separate from

<sup>160</sup> Freddie Mason, ‘The Viscous: Slime, Stickiness, Fondling, Mixtures’ (Royal College of Art, 2019), 193, [https://researchonline.rca.ac.uk/4264/1/Freddie\\_Mason\\_unredactedPhD\\_2019.pdf](https://researchonline.rca.ac.uk/4264/1/Freddie_Mason_unredactedPhD_2019.pdf).

it because there is so much more at play, virtually spreading throughout my body and resulting in visceral sensations. At the core of a world without domination is an ideological flattening of the relationship between virtuality and materiality. Virtuality becomes not the dominator but the flattening force that allows for intimate material relations beyond thinking of the virtual and material as separate realms bumping up against each other in a combative embrace. As Barad argues, the formation of matter is contingent on virtual movements. Virtuality is embedded into the emergent ontology of matter. Virtuality is matter.

Artist and quantum physicist Libby Heaney makes slime sculptures out of glass, capturing the moment slime begins to stretch and slip off a surface.<sup>161</sup> The static sculptural form still speaks of the viscosity of this material. Heaney is said to use “slime as a metaphor for the blurry, slippery quantum world.”<sup>162</sup> The fascination with slime is more than a metaphor: it is a form of pleasure that subverts traditional notions of proximity. Rethinking proximity opens up greater possibilities for understanding material cohesion and for compatibilities that do not appear possible relying on an ocular version of materiality alone. *ASMR* gives a glimmer of this material potential: technology used to disperse and reform seemingly disparate matter, culminating in new sensorial coalitions.

Making a digital hand with realistic skin is not a compensation for an unfulfilled desire to touch skin. Giving my digital hand virtual blood to play with is not to be qualitatively compared to my relationship with my blood. My digital blood crystallises and becomes a substance more satisfying to me than the blood that circulates (insufficiently) throughout my body. The *ASMR* creator whispers gently into the speaker and convinces me that working with digital/virtual forms of “touch” is valid.

<sup>161</sup> ‘Libby Heaney- Works’, Fiumano Clase, accessed 26 January 2023, <https://www.fiumanoclase.com/artists/188-libby-heaney/works/>.

<sup>162</sup> ‘Libby Heaney- Works’.

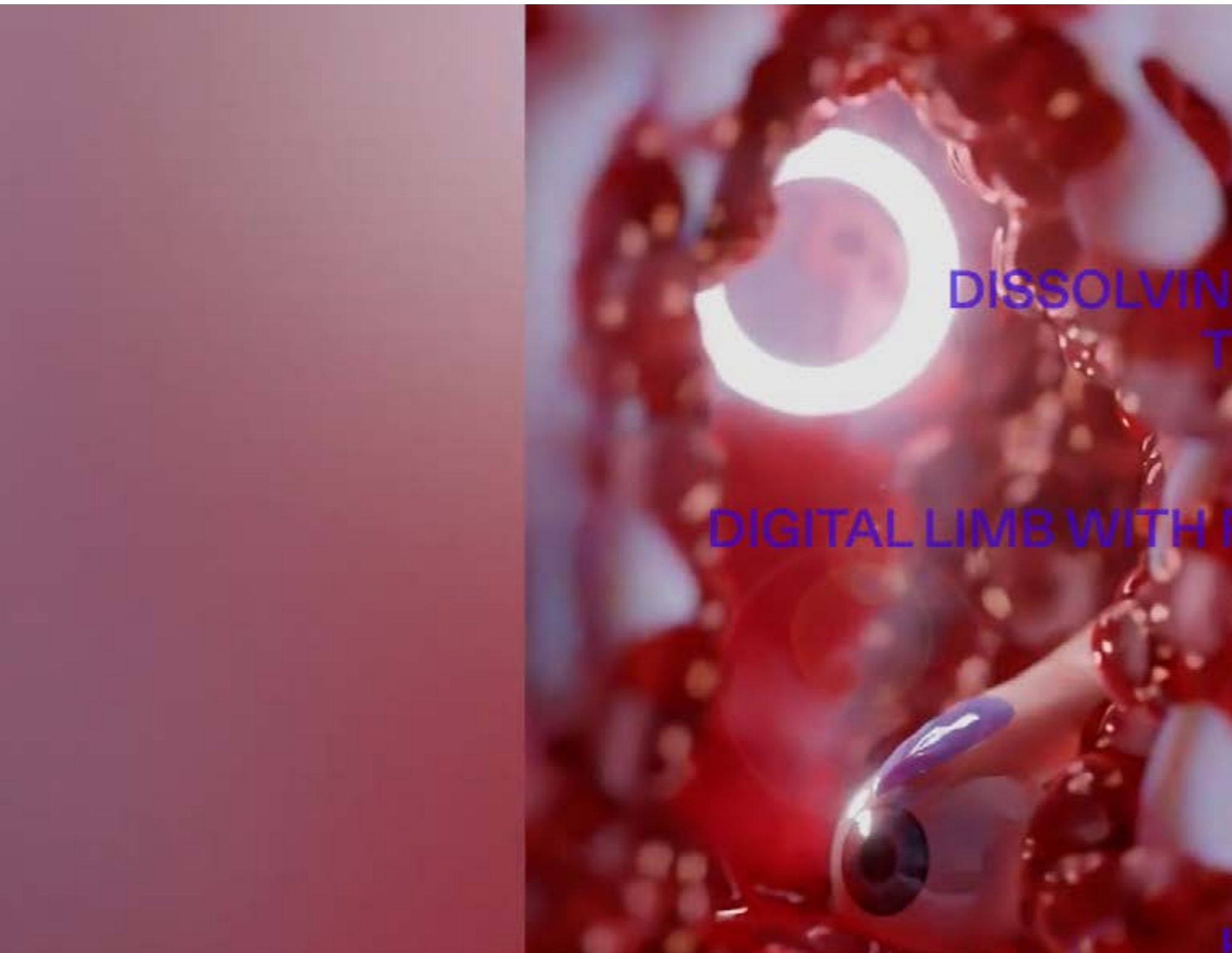
ARTWORK INTERLUDE:



<https://annafhughes.co.uk/QUIET>

QUIET MY  
MY BODY'S  
INCESSANT  
MATTERING

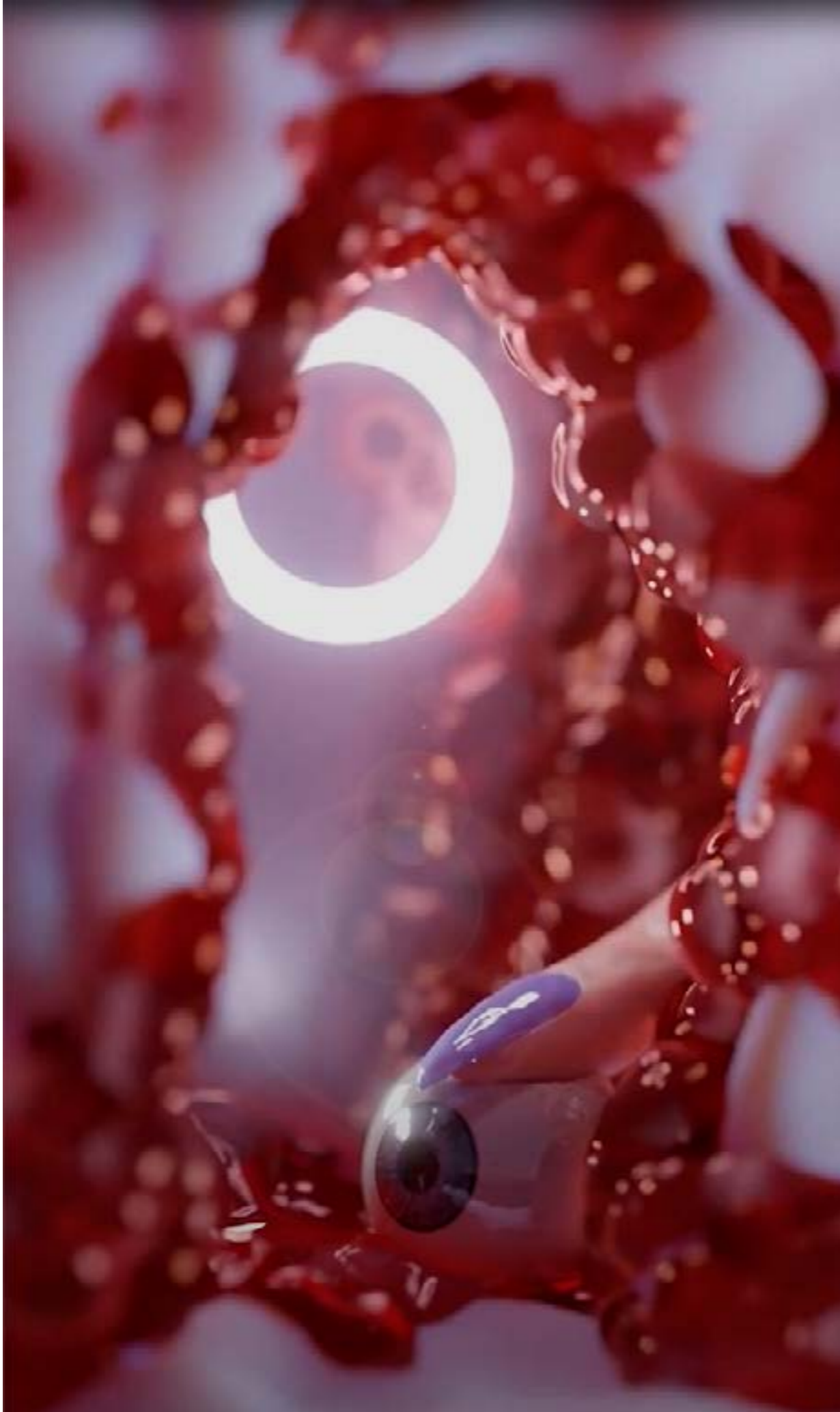




DEEPER  
THICKER  
GROTESQUE  
THE RHYTHM SEDIMENTS  
DISSOLVING WITH MY POROUS BEING  
THIS SICKNESS SWALLOWS  
TISSUE BREAKS DOWN  
BLENDING FLESH  
DIGITAL LIMB WITH PROSTHETIC CONNECTION  
AT A DISTANCE  
PLEASE MESH MY BODY  
LET ME SCREEN  
BOLD CLICKING  
REGURGITATES  
WANDERING WE MEAT  
HE SHIFTS IMMEASURABLY

21. Anna Hughes, *Quiet My Body's Incessant Mattering* (Still), Digital animation, 2023.

BLANK



22. Anna Hughes, *Quiet My Body's Incessant Mattering* (Still), Digital animation, 2023.

# QUIET MY BODY'S INCESSANT MATTERING

With *Quiet My Body's Incessant Mattering*, I follow my recurring technique of featuring a repetitive motion to set a pace and feel for the work. As the systemic processes of my body continue, my heart beats, and this chronic illness persists. I made this work to echo a similar format to *Viscous Feedback*; the videos were shown in different exhibitions at the same time. Giving the videos a similar format means the videos can speak to each other and inhabit the same time, albeit in different locations as cyberspace can enable. With this work, I continue with the bodily landscape, including body parts that litter its surface. I make the eyeball using a “soft body” and collision simulation, which functions similarly to the fabric. Instead of creating an inflated object, I create a soft substance that compacts as I imagine an eyeball would, giving an unsettling feel while the eye continues to look out into the distance.

I use the music production software *Logic Pro X* to make the soundtrack for the video. With this software, I can layer sounds that appear as horizontal bars stacked on each other along a timeline. I upload the first draft of the video into the software so it can help me produce the sounds that feel right. Playing with different instruments, I settle on a “vox” instrument in the synthesiser category. The Vox instrument takes notes from a vocal sample, which means each note sounds somewhere between a singing voice and an electronic note; this especially appeals to me for my work hybridising a digital and embodied practice. The notes are haunting and carry the digital uncanniness I carry throughout this work. I make the soundtrack of the video sync up to the rhythm of the slow tapping finger to allow the viewer time to take in the scene. I interrupt these slow sounds with a poetic stream of words I write quickly, relating bodily and technological words while playing with

these meanings and connections. I then alter a recording in *Logic Pro X* to emphasise how my voice is technologically mediated in this work. Bringing the video and soundtrack into the video-production software *Premiere Pro*, I make bold captions for the words to give this video an extra sense and layer of texture while also considering the accessibility of these words. Once I put all this together, I finish this work with an artificial lens-flare overlay, adding more depth to the scene. I export the work, downloading a file to be transported anywhere.



23. Anna Hughes, *Blender Experiment #7*, Digital image, 2023.

4

---

## HYPER-MOBILITY AND CONNECTIVE TISSUE



24. Anna Hughes, *Digital Hand #6*, Digital image, 2023.

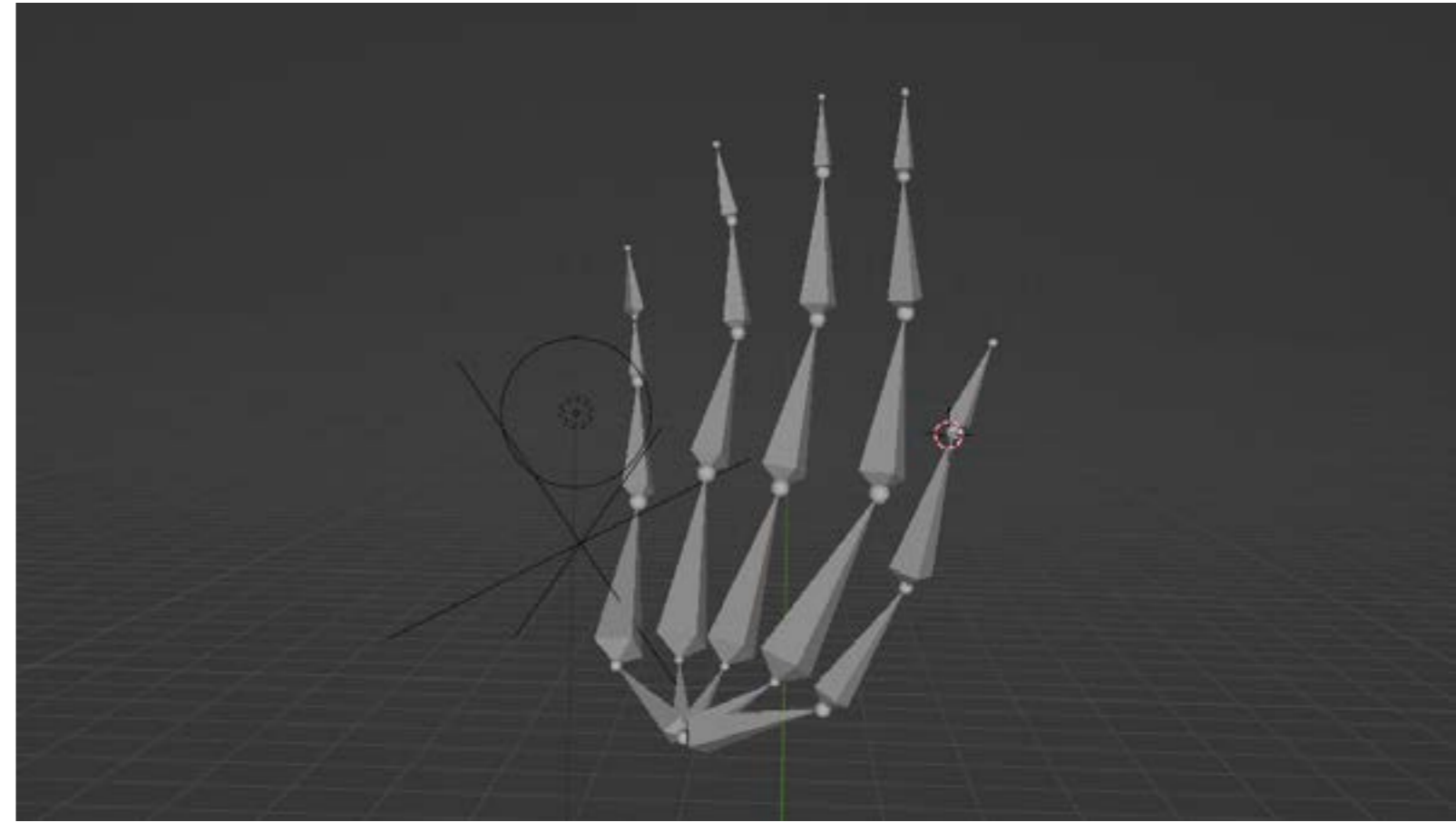
## //EXCESSIVE MOVEMENT

Four years since becoming notably ill and four years since beginning this project, I am diagnosed with Ehlers-Danlos Syndrome (EDS). My form of EDS involves joint hypermobility (hEDS).

“JHM is the clinical consequence of increased joint mobility along physiologic axis(es) and may be measured by comparison with standards. Meanwhile, joint instability is used to define the capacity of a lax joint to move along nonphysiologic axes.”<sup>163</sup>

My joints move too much. Joint hypermobility is the joint’s ability to move more easily in the direction the joint is meant to. Meanwhile, my muscles protest: I can feel this. I feel the sharp pull on my “gastrocnemius” leg muscles as my ankle joint moves with abandon. All the while, my joints are susceptible to making unusual movements. My joints are rebellious and unpredictable. I admire this rebellion but do not enjoy the pain this causes me. Making a joint move is far less painful in *Blender*. To make a digital skeleton, I start with one initial bone which consists of an elongated diamond shape bookended by a sphere at either end. A new diamond/bone can sprout from each sphere, and so on. To mimic my hand’s infrastructure, I have to turn to medical diagrams because I cannot peel back my flesh without discomfort. This task is not about recreating the look of these bones; instead, I study how these bones function and how they provide a framework to facilitate movement. The bones I make in *Blender* do not appear in the final render, but luckily they do not need to be visible to function: their only function is to give me the movement I desire. These bones are not brittle, they do not break, nor do they dislocate from their sockets. These bones do not even need connective tissue because they function seamlessly around a shared ball socket. *Blender* even names these mechanical parts bones, and this excites me because I can reconnect with the pleasure of excessive bodily movement without fear of visceral repercussions.

<sup>163</sup> Marco Castori, ‘Ehlers-Danlos Syndrome, Hypermobility Type: An Underdiagnosed Hereditary Connective Tissue Disorder with Mucocutaneous, Articular, and Systemic Manifestations’, *ISRN Dermatology* 2012 (22 November 2012): 751768, <https://doi.org/10.5402/2012/751768>.



25. Anna Hughes, *Screenshot of the Digital Hand’s ‘Skeleton’*, Digital image, 2022.

Once I grow enough bones to construct a digital hand skeleton, I need to attach it to the outer mesh/flesh. The computer programme allows me to “parent” the bones,<sup>164</sup> while the mesh “deforms” in response to any movement.<sup>165</sup> After several failed attempts, I pair the skeleton with my hand’s flesh/mesh. Each bone rotates around its ball socket, and I animate it in such a way as to produce realistic hand movements. Looking back at my first creations in *Blender*, how far I have come! This

<sup>164</sup> Parenting two different object allows for one object (the parent) to become the dominant influencer in this pairing. The “child” will follow any animation set that involves the parent. By parenting a “skeleton” to the mesh of my hand, the mesh can bend and stretch in response to how the individual joints of the skeleton are animated. See: ‘Parenting Objects — Blender Manual’, accessed 14 March 2023, <https://docs.blender.org/manual/en/2.79/editors/3dview/object/properties/relation/parents.html>.

<sup>165</sup> “Deform” is a term used in Blender. While the word has negative connotations for the disabled (deform can be related to incorrectness), I find the context of deformation interesting here, as it represents the malleability of a topology. Ultimately I would not otherwise choose to use this word. See: ‘Simple Deform Modifier — Blender Manual’, accessed 14 March 2023, [https://docs.blender.org/manual/en/latest/modeling/modifiers/deform/simple\\_deform.html](https://docs.blender.org/manual/en/latest/modeling/modifiers/deform/simple_deform.html).

hand looks so real, and now it can actually grasp hold of something in digital space for me. Every so often, a slip of my computer mouse rotates a finger joint excessively while I animate. The rotation is surprisingly effortless. The bone rotates around its socket at almost impossible angles. As the finger joint bends backwards, its skin stretches excessively, yet the skin does not tear, and the bones remain attached even at an unreasonable angle. Although my render style produces "lifelike" imagery, I push my work further than these mimetic confines. In this digital world, the reality I am familiar with extends. When I "hyperextend" my fingers, it can cause visceral repercussions for me, yet, I can hyperextend the joints of my digital hand without any extra pain. My computational making is an extension: a move beyond reproduction. I am continuously hyperextending away from this "healthy" standard while my digital finger-joints also rotate away from "normal" limits. Grounded in a figurative aesthetic, my digital hand/my body transforms "deviation" into an extension. The ability to reach out beyond expectations poses a threat to the set boundaries of "reality." My digital hand reaches out beyond the screen and draws me into it, all without moving through geographical space. My digital hand opens up my understanding of "movement:" in digital space movement can take the form of continuous reaching. I can reach out further than the limits of my corporeal body.

## //REACHING OUT AND CONNECTING USING A PROSTHETIC HAND

So engrossed in the process of making my digital hand, I forget why I made it in the first place. I tell myself it is for the challenge: for the learning of a new skill. The challenge of making the hand was important, but there must have been an impulse at play: I must have had a desire to do something with this hand. Hands are made for grasping; for reaching out *to* something. Have I made a digitised prosthesis? The digital hand acts as an aid to help me navigate this digital world, it does

not complete me, nor does it compensate for my lack. Made in response to my limited mobility, this digital hand does not return me to the domain of wellness, but it allows me to be more than this sickness. The crip theorist Alison Kafer argues that disabled bodies are often associated with a loss, longing and nostalgia for able-bodiedness, even for those who have been disabled from birth:

"they rely on an assumption that all disabled people long for a lost whole, pre-illness, pre-disability body. In this framing, illness and disability can, and should, be left behind; these lost pasts are compulsorily hypernormative in that they are presented as futures disabled people would give anything to inhabit."<sup>166</sup>

This assumption that the best destination for disabled bodies is a return to a previous self, or even a past self that never even existed is an impossible prospect, and Kafer moves on to explain how this erases these bodies from future planning in various forms. Because a neoliberal society assumes that future cures or prevention will materialise *eventually*, "the needs of disabled people in the present" are neglected. My digital hand cannot help me return anywhere, but it can help me. I use my digital hand to reach out. It seems fitting that a sick person would want to reach out: sickness comes with isolation. Being isolated and reaching out to others became a more universal experience during the COVID-19 pandemic. For many, technology enabled a different form of connection in the absence of "IRL" experiences.<sup>167</sup> Feeling isolated and then finding community online is a coping strategy already in place for many sick and disabled people.<sup>168</sup> During lockdowns the well got a taste of this sick isolation. However, technology, or a creative method for reaching out, is

<sup>166</sup> Kafer, *Feminist, Queer, Crip*, 43.

<sup>167</sup> I resonated with the following article by Frances Ryan, where she gives accounts of technological adaptations implemented for covid restrictions. In the article there is an air of bitterness that I felt during lockdowns, thinking that all this technology could have been very useful for myself as a disabled person. For me, without the pandemic, I would have struggled to conduct this PhD and participate/attend lectures, seminars and conferences. As it stands, following lockdowns, it has become necessary to argue for these provisions to stay. All this struggle signifies a lack of consideration of the needs of disabled people. See: Frances Ryan, 'Covid Lockdown Opening up World for People with Disabilities', *The Guardian*, 20 April 2020, sec. World news, <https://www.theguardian.com/world/2020/apr/20/covid-lockdown-opening-up-world-for-people-with-disabilities>.<https://www.theguardian.com/world/2020/apr/20/covid-lockdown-opening-up-world-for-people-with-disabilities>Ryan.

<sup>168</sup> On page 140 I turn to Carolyn Lazard who writes of the importance of the internet and its connection for disabled people. Carolyn Lazard, 'How to Be a Person in the Age of Autoimmunity', n.d., 11.

not a *compensation* for being isolated. Although driven by isolation, my digital hand creates a *new* encounter. I am not unique in responding to illness in this way. For example, Rebecca Horn made and designed artworks from her hospital bed. Although Horn's work is not aided by a computer, her "bodily extensions" are technological devices: contraptions used to extend her body. Like me, Horn made hand-based extensions. In Horn's film *Finger Gloves* her own hands are physically attached to the gloves, but the excessively long fingers of the gloves seem to create a distance between horn and the interaction.<sup>169</sup> The absurd length of the fingers creates distance between the gloves and the "original" fingers that wear them. Far from being a lament for touch that is always unfulfilled by these gloves, or an emphasis on the failure of compensatory prosthesis, the gloves create a different form of interaction: an interaction that uses distance to create a meaningful form of closeness. This work emphasises how bodily interruptions can instigate different methods. As I have moved away from using my own hands as subjects in videos I have found a different way of working: I learn how to use my digital hand to reach out to others in an alternative way than before. Like Horn, the distance between me and the screen is not about unfulfillment, it is a changed understanding of the boundaries of my body through the assistance of technology.

For Horn, illness is not a theme in her work: illness drives these works. Illness has given me an acute awareness of how alternative measures do not replace something inaccessible. My digital hand does not replace my fleshy hand that cannot grasp as well as it once did. To insist that a prosthesis or an aid is an extension of one's body is to acknowledge that being well is not the only way forward. Using my fleshy hand, "IRL" is not the only way to reach out to others. The absurdity of a prosthetic artwork that nods to a limb, yet functions in an unexpected way, shows that illness can be generative, and therefore, I use it for creating alternative interactions. This way of using illness/

<sup>169</sup> Tate, 'Finger Gloves', Rebecca Horn, 1972', Tate, accessed 31 January 2023, <https://www.tate.org.uk/art/artworks/horn-finger-gloves-t07845>.

disability avoids the traps of neoliberalism's "able-disabled" because the gloves/my digital hand finds *extra* space in which they can coexist with the hands they assist and not in competition or with any intent to compensate for bodily lack.<sup>170</sup> These hands are additions, and instead of fixing me to create a whole once more, they question the notion of a whole body in general. My body does not stop, and sickness has revealed this.

Expanding the body and reaching out with something other/more than flesh creates new ways of being with others. Perhaps isolation might well make connection seem particularly allusive and, therefore, precious. It would be inaccurate to project feelings around isolation onto every other isolated person, but isolation has made me more conscious about what connection means or can be. I am becoming more aware of the disparate parts of my body as my connective tissue becomes more fragile than before. I connect to disparate bodies through shared diagnosis, online support groups, and social media platforms. Online spaces enable me: a prosthetic limb that is radically different to the limb that instigated it. My limb acts at a spooky distance and touches others in its path. Connection is not a visible path in the case of my wandering digital hand; my digital hand bypasses distance and finds its way to others, all while being an extension of me.

Artist Stelarc has also worked with prosthetic limbs, but with technological advancements, he directly questions the adaptive promise of prostheses as aided by robotics and biotechnology. I am intrigued and repulsed by his third ear grafted onto his arm, he proudly showed us in the lecture theatre at the Royal College of Art during an artist's talk,<sup>171</sup> but it is fitting that I focus on his "third hand."<sup>172</sup> The work, now documented in posed photographs, displays the excessive contraption worn

<sup>170</sup> For more on the term "able-disabled" see page 189

<sup>171</sup> Stelarc, 'STELARC FRACTAL FLESH / PHANTOM FLESH: INDIFFERENT, ANXIOUS AND AMBIVALENT BODIES' (Royal College of Art, 2019).

<sup>172</sup> 'STELARC | THIRD HAND', accessed 3 July 2023, <http://stelarc.org/?catID=20265>.

by Stelarc. Stelarc is nude but for a belt/battery/device that sources many twisting, tangled wires that enter the bionic hand and wires attached to pads connecting to other parts of his body. The third hand's forearm displays its inner workings of more wires, switches and other robotics/engineering paraphernalia. Stelarc poses with this third hand, proudly becoming this extended human. The appropriation of prostheses and disability-related technology could be an issue in Stelarc's work: the prosthesis is a novelty or luxury rather than an enabling device, thus trivialising the necessity of prosthetic devices and limbs. The result is the enhancement of an already abled person. The same could be said for my third hand because I do not use the hand as a direct replacement. I play with the notion of a prosthesis as compensation or imitation: the digital hand is used in response to a loss but it is a new addition that cannot be said to complete me because it opens up my boundaries. The digital hand does not make a novelty of the prosthesis, it affirms that enabling devices might suit disabled people better if they do not need to compete with the "original" loss/"lack." Furthermore, questioning this cyborgian completion with an alternate prosthesis critiques abled notions of perfection and one's need to conform. The need to conform others disabled people, labelling them as deviant.

Stelarc offers a helpful take on bodily modification and its relation to technology. Johanna Zylinska writes on bioethics and considers Stelarc's work. Despite Stelarc previously commenting that "the body is obsolete," it seems Stelarc's work has now become more so about the relationship between the body and technology:<sup>173</sup>

"we are not talking here about the pairing of "human" and "technology" seen as separate entities but rather about human agency and corporeality as being always already reliant on, connected to, and becoming with, *techne*."<sup>174</sup>

This declaration, of the human becoming with technology, compliments my understanding

<sup>173</sup> Joanna Zylinska, *Bioethics in the Age of New Media* (Cambridge, Mass: MIT Press, 2009), 168.

<sup>174</sup> Zylinska, 173.

of my digital hand, and more broadly, my relation to digital technology: working *with* technology allows for adaptation that does not need to replace, compensate, or expand the physical presence and/or abilities of the human. Working *with* is a creative endeavour designed to enhance one's bodily explorations rather than being dependent on a scale of human totality. Technology is not a "tool," but a coalition. Stelarc writes retrospectively about this work on his website:

"The Third Hand has come to stand for a body of work that explored intimate interface of technology and prosthetic augmentation- not as a replacement but as an addition to the body. A prosthesis not as a sign of lack, but rather a symptom of excess."<sup>175</sup>

Stelarc's excessive prosthetic hand allows for the emergence of new understandings of ways to be with technology and by extension, new ways of being with, and reaching out to others.

## // SICKNESS AS A SUBJECT

My body forces me to specialise in illness. I am overwhelmed with this sickness: now I search for sick and disabled artists, I find so many others like me. My digital hand reaches out for me, I make art with it, which resonates with the sickness infecting the "art world." The artist Abi Palmer waves to me from her inflatable bathtub. I intensely relate to Palmer's desire for the soothing warmth of hydrotherapy. Perhaps I feel a kinship with Palmer because we both have hEDS or because we are both vulnerable to strain on the NHS.<sup>176</sup>

<sup>175</sup> 'STELARC | THIRD HAND'.

<sup>176</sup> In the book *Sanatorium*, palmer uses arts council funding to visit a rehabilitation service in Budapest, then back in the UK she purchases an inflatable bathtub. Warmth is a particularly soothing thing for people with EDS (in my experience), and Palmer's book manages to conjure this visceral feeling of warmth that I resonate with while highlighting the lack of provisions on the NHS currently. Particularly she finds a loophole in funding which becomes an absurd protest: Abi Palmer, *Sanatorium* (London: Pinned in the Margins, 2020).





26. Abi Palmer, *National Health Shrine*, Collective, Edinburgh, Mixed media installation, 2019.

“Crip Casino is designed to explore the nature of deserving. Using 1:1 interactive games, DIY hacked fruit machines, the installation examines the relationship between chance and ritual, winning and losing. Participants, both dis+abled are invited to play a series of games which lead them to reconsider their position in life. Expect wonky glamour, Instagrammable pain & underground experiments, in a gambling institution as bizarre as its inhabitants”<sup>177</sup>

<sup>177</sup> ‘Crip Casino’, Abi Palmer, accessed 26 January 2023, <https://www.abipalmer.com/cripcasino>.

Palmer’s *Crip Casino* makes for wry relatability: it seems as though many believe that health is something that can be controlled. Palmer’s “games” emphasise the “chance” of health. Palmer creates the *National Health Shrine* which plays with the idea of “disproportionate” give and take involved in the UK’s NHS. In Palmer’s work, she brings into question a belief that one can skillfully invest in their health, a view which, in turn, generates resentment for those who need to take more than their “fair share” from the NHS. Playing Palmer’s game we become complicit in these speculations that some “win” more in this system. Simultaneously, with her initial proposition, Palmer ridicules the belief in skilful healthiness by confronting us with the *Crip Casino*, in which health is merely a game of chance despite one’s input.

The Crip Casino demonstrates how sick artists can respond to the politics affecting their bodies. Palmer’s audience actively participates in a work that cultivates a different or expanded perspective. My digital work does not necessarily demand participation: I have a different approach, although Palmer and I draw from shared experiences. My digital hand seeks out a form of participation from those who meet it: it offers itself as a potential screen-based encounter. Despite different approaches, I resonate with Palmer as another artist drawing from their illness/disability. Compared to Palmer’s *Crip Casino*, my artwork is less explicit about the sociopolitical impacts on disability. Through my digital hand, I enact and reveal possibilities for bodily knowledge. I express this knowledge through sensuality; the digital space facilitates this extra, enhanced bodily interoception. Fluctuating affects are my mode of expression. “Expression” seems more fitting for this than “language” because if I state that this work is a language, I give the impression that this work is translatable one for one. Illness and its symptoms are challenging to describe, and there is no easy translation, but if I *could* transmit this sickness into another body, I would not have the heart to watch them feel this. In the film *Pain Is*, Stephen Dwoskin asks, “Is it possible to make an image for pain?” He questions:

“If you get a splinter, you feel your finger. That’s how pain works, it moves from outside to inside.

How do we express pain to others, is pain physical or mental or is it both?

Is it an emotion or only a physical sensation?

Is pain always seen as negative or does it have positive aspects?

Is pain something that we can live without or is it something we actually need?

Does pain give us some kind of meaning?”

Throughout the film, Dwoskin interviews several people about their pain experience and difficulty expressing it. Most participants struggle to find the language. Among these interviews, we encounter acts of self-inflicted pain for pleasure, subjects participating in BDSM-like activities, and a woman piercing her flesh to seek pleasure. I find these acts difficult to watch, but at the same time, these more pleasurable takes on pain seem to fit easily among accounts of chronic pain. My experience of chronic pain is a very disorientating mix of confused sensations, becoming used to some pain, seeking relief in some way, and finding release, all to recoil back to this painful tension. All the pain and symptoms merge into my other bodily experiences. Dwoskin captures this disorientating assemblage of bodily sensations through these shifts in different forms of intensity. Through exploring sensuality, Dwoskin expresses a confusion between pleasure and pain. The intense variation of pain expressed in Dwoskin’s work resonates with my experience of pain.

## // ART AND ACCESS

*Blender* opens up possibilities for me to make imagery: I access a vast wealth of computational power through it. I continue to come across the word “access” as I delve deeper into disability activism. “Access” as a concept seems diluted; it is difficult for me to grasp, and I am painfully aware that my experience is so different from other disabled people: my disabling experience seems so internalised. Even when my fleshy barrier is surgically cut open, no tangible obstruction can be found. I am

devastated when I find out this sickness is not a graspable object inside me that can be removed.<sup>178</sup>

With an invisible illness, my barriers are heavily weighted in a virtual world. Emily Barker constructs physical access barriers for the “able” while I give visibility to my virtual world of disabling affects in the form of a digital render.<sup>179</sup> *Built To Scale* features monolithic Kitchen cabinets with worktops too high for an abled person to reach.<sup>180</sup> The work allows their audience to pass through this Kitchen, now rendered “useless.” Barker gives their audience the experience of encountering “functional” objects rendered sculptural because of their design. The cabinets become a relic of the once functional object. Because I do not use a wheelchair, I cannot grasp the pain of encountering horrifying access barriers in the same way as Barker. I resonate with Barker’s desire to give visibility to any form of pain however, so overwhelmingly present to them, yet societal neglect compels them to *show* those around them what this inaccessibility looks and feels like.

While Barker’s sculpture recreates a “physical” encounter, I find it difficult to describe to anyone else what this sickness looks and feels like because there is no tangible precedent. I use *Blender* to actualise this “intangible” phenomenon. Relying less so on a traditional notion of geographical travel, this computational world gives me access to something, but it is hard to put my fleshy finger on what I am gaining access to. The elusive quality of virtual imaging makes thinking about an accessible objective difficult to quantify. Arguing the tangible importance of digital imaging is a difficult quest compounded by including my virtual illness in the mix. However, the virtual qualities of both aspects of my working conditions (digitisation/illness) give my study a weighty objective. Computational software gives me *access* to imaging possibilities. Furthermore, my fatigued

<sup>178</sup> In the first year of becoming considerably ill I underwent investigative surgery for suspected *Endometriosis* because my symptoms began as an intense abdominal pain. I was told that they found nothing, which was paradoxically very upsetting because I had been waiting a long time in pain, and having a diagnosis would be a step towards getting some form of relief/treatment even if the prognosis was bad.

<sup>179</sup> ‘Built to Scale — MURMURS LA’, accessed 22 February 2020, <https://murmurs.la/Built-to-Scale>.

<sup>180</sup> ‘Built to Scale — MURMURS LA’.

body is given relief when I limit the geographical travel/movement involved in making this work. The possibilities for this work expand when I do not stretch my body further. The screen gives me access to epic leaps in geographical locality. My work in digital space should not occlude the need for traditional forms of geographical movement, but it can give me some agency.<sup>181</sup> And when lack of access is unavoidable, cyberspace can give visibility to the virtual affects of this barrier, whether it is immediately visible or not.

My excessive bodily mobility has forced me to find a different way of moving. My movements appear minimal but now I travel at the speed of light. As the artist Carolyn Lazard writes, “for many chronically ill and disabled people, the internet is an invaluable social space.”<sup>182</sup> Having lost the ability to easily travel through geographical space, the hyper, energised speed of light feels far more vital than a concession or luxury. Experiencing the need for this space gives me the advantage of understanding the vitality cyberspace can offer.

## // CRIP CLAP BACK: FLEXIBILITY AND AGENTIAL IDENTITY

Crip is a reclamation of a slur; it is an identity claimed by the individual and not given to them. I should have the agency to self-identify as disabled. To self-identify is affirmative. However, the thought of claiming to be disabled scares me. I am apprehensive about identifying as disabled because I know I am disabled in different ways to others, and I worry that I am misrepresenting someone else’s experience that is radically different from mine. Being disabled is not an identity in the social model of disability, however: it is something that happens to an individual. The social model of disability

<sup>181</sup> By “geographical travel,” I include the need for the free-movement of migrants, as well as the enabling of disabled people to travel/access physical spaces and amenities locally. By the latter, I argue that digital activity should always be supplementary and not used as a replacement for anything that can be feasibly made accessible.

<sup>182</sup> Carolyn Lazard, ‘How to Be a Person in the Age of Autoimmunity’, n.d., 11.

argues that society can disable us. Widely accepted as the ethical standard in the UK, I am still dissatisfied with the model, and not just because I am sceptical of the UK’s neoliberal inclusionist motives. I do not fit in the social model of disability because my body disables me, or moreover, I am my disability. While for some disabled people, a social shift would give them agency, I cannot ignore my symptoms. A sociopolitical shift that affects the NHS’s efficacy and a push/fund for better research may help me, but I cannot rely on this hypothetical cure. I do not want to be medicalised; I want something which comes from my body: a model of disability full of change, growth and bodily resistance. Disabled people are labelled as “deviant” in the medical model of disability. Instead of presenting disabled people in a negative light, a biopolitical model of disability that sees me as a body made with matter that intermingles and moves with others. When I claim I am disabled, I accept my present embodiment; it is not only something that society does to me: society provides the conditions that affect how and where my body functions. In this way, I agree with the social model of disability in its emphasis on the effects of society on disabled people, but that the model’s emphasis on society’s causality neglects the agential potential of bodies. Accepting the agential embodiment of disability is a way in which disability can move on from negative assumptions and centres the disabled person in this movement. The disabled person is not always a passive victim in society’s mistreatment, although this is often the case. My solution is not to shift responsibility onto the disabled person for their body but an insistence that social movements need to work with bodies.

The disability theorist Tobin Siebers coins the term “complex embodiment,” describing it as the interdependent effects of embodiment and social structures on disability.<sup>183</sup> He acknowledges that embodiment is a contentious subject given the medical model of disability problematizes, excludes and alienates individuals, labelling them as defective. Complex embodiment builds on the social model of disability, understanding that things deriving from the body affect one’s experience of

<sup>183</sup> Tobin Siebers, *Disability Theory, Corporealities* (Ann Arbor: University of Michigan Press, 2008), 25.

disability and sometimes cause disability. Siebers highlights complex embodiment's reciprocity: one's environment and embodied perspective affect one another. The relationship between one's environment and embodiment are interlinked, and Siebers writes that

“they belong to the spectrum of human variation, conceived both as variability between individuals and as variability within an individual's life cycle, and they need to be considered in tandem with social forces affecting disability.”<sup>184</sup>

The theory of complex embodiment considers the interdependence of the embodied subject and the world around them as well as the interdependence of human variation in its many forms. This helps me understand how I can care for others in society while my embodied perspective feels so formative of my being.

I am drawn to crip theory as an alternative because it gives me more flexibility. Siebers writes that disability is a “minority identity” and this understanding is useful for emphasising the intersectionality of minorities and encourages a collaborative approach between different movements. This collaborative approach is evoked when I build on cyberfeminism, for instance. Drawing on queer theory, crip, as a reclamation, is formed through commonality as opposed to exclusion. Crip theorist Robert McRuer writes that, like heterosexuality, being “able-bodied” is widely thought of as a non-identity and therefore seen “as the natural order of things.”<sup>185</sup> The phenomenon of able-bodied invisibility is coined as “compulsory able-bodiedness” in McRuer's text.<sup>186</sup> McRuer writes that crip theory emerges because of compulsory able-bodiedness in which this normalisation creates minorities who do not fit. However, McRuer describes this formation as “resistance to cultural homogenization” and “self-identified crips,” this gives disabled people agency because they

<sup>184</sup> Siebers, 25.

<sup>185</sup> Robert McRuer, *Crip Theory: Cultural Signs of Queerness and Disability*, Cultural Front (New York: New York University Press, 2006), 12.

<sup>186</sup> McRuer, *Crip Theory*, 2.

assemble to dismantle the hegemony of able-bodiedness.<sup>187</sup> I want to acknowledge my bodily difference without giving more privilege to the abled. Like “queer,” “crip” can evade being an identity given to us as other to the abled: being crip does not give meaning to the abled. Crip theory builds fluidity into its methodology, where “crip” can describe both methods and individuals as verbs, nouns or adjectives. Crip theory gives me agency because it is not definitively attached to ability. Crip theory entails a self-actualizing, emerging, moving construction: a mode of being that has not simply been given to us as a by-product or to affirm the ability of others but a specified creation made through the knowledge and experience of its inhabitants. Crip theory begins to ease my distress, ultimately knowing that I have a meaningful connective force to turn to, and one established through agency rather than exclusion.

As well as being of an emerging construction, McRuer writes of the flexible boundaries of being crip. In theory, anyone could come out as crip, but he notes that abled individuals who are disillusioned from “compulsory able-bodiedness” will generally be self-aware of the problems with appropriation.<sup>188</sup> To add to this, exclusion and fear driven by gatekeeping cripness opens up the possibility of bullying and intimidation, which is far more damaging to our group than letting in “questionable” disabilities. Questioning disability and one's needs as a disabled person easily leaks into, and already reflects society and its suspicion of disabled people. The last thing we need is for the community to be policed from the inside. Being crip retains a boundary of sorts (otherwise, it would be meaningless as a term), but the boundary manifests through a choice to include oneself in this elusive definition. Being so elusive, cripness gains its meaning through collective affirmation.

I still worry about claiming to be disabled because I cannot speak on behalf of such a varied

<sup>187</sup> McRuer, 33.

<sup>188</sup> McRuer, 37.

group. Representation continues to haunt me as a problem. Still, I worry less about whether I am claiming an identity when I turn to crip theory because I just want to be pointed in the right direction: towards a common wave of resistance. The collectivity of a crip community gives me a sense of stability even though I know we collectively desire movement. My body moves too excessively to hold on to a fixed identity; therefore, a collective movement is more akin to my present embodiment. Digital spaces can provide the infrastructure for groupings based on commonality to continuously expand and contract, never settling on a prescriptive boundary. Online spaces are terrifyingly tumultuous, but these damaging forces only give crip theory more agential waves in a space that thrives on these dynamic forces.

Technology gives me agency. This technology does not have to be something made on disabled people's behalf, however. The Crip Technoscience manifesto written by Aimi Hamraie and Kelly Fritsch states:

“Disabled people design our own tools and environments, whether by using experiential knowledge to adapt tools for daily use or by engaging in professional design practices. Crip technoscience conjures long histories of daily adaptation and tinkering with built environments.”<sup>189</sup>

Hamraie and Fritsch give examples of disabled people who design or adapt existing technologies for their particular bodily requirements or needs. This reflects the diversity and polymorphous reality of bodies. The manifesto describes disabled people as “tinkerers” which resonates with my research because making objects and tools is not the only way to adapt to/for disability.<sup>190</sup> We are tinkerers in methodology: adapting and moving with voluntary and involuntary modes of being as a body in the world. Hamraie and Fritsch emphasise the “friction” which occurs in disability action,

<sup>189</sup> Aimi Hamraie and Kelly Fritsch, ‘Crip Technoscience Manifesto’, *Catalyst: Feminism, Theory, Technoscience* 5, no. 1 (1 April 2019): 5–6, <https://doi.org/10.28968/cftt.v5i1.29607>.

<sup>190</sup> Hamraie and Fritsch, 8.

and indeed in the everyday lives of disabled people in relation to an inaccessible world and ableist politics/attitudes.<sup>191</sup> Friction is a positive/agential thing in the manifesto, however. Friction can be used as a method for change, as Hamraie and Fritsch describe direct actions that create friction to draw attention to or instigate change. Differing from my research, Hamraie and Fritsch focus on the built environment and design. The manifesto does bring to light the importance of valuing the creativity of disabled practices, which extends to cyberspace; disability brings particular expertise to digital practices through embodied creativity and knowledge.

## //HYPERMOBILITY

This digital work is not *about* illness or disability. It does not matter if I identify as disabled. I am drawn to others whose bodies give them heightened interoception.<sup>192</sup> This heightened interoception is what paradoxically allows us to be drawn to other bodies because we are made acutely aware of our own bodies while encountering others, and, in turn, we can think of others as feeling bodies too. My sickness is a method, not a theme. I cannot distance myself from this body. Sickness extends from me; it creates a noticeable distance between myself and others, a distance so noticeable that it brings me closer and allows me to feel others, but in a different way. My digital hand is the outcome of all of this, while at the same time, it is the instigator. With this extra digital hand, I gain a strange form of hypermobility: an interoception so energised it allows me to be/move with others while preoccupied with myself.

<sup>191</sup> Hamraie and Fritsch, 8.

<sup>192</sup> Differing from introspection, *interoception* is the sense/awareness of one's own bodily processes. Often we do not notice our heart beating, but when it beats faster for some reason, we notice its thumping, for instance. This awareness can be both disconcerting or grounding. Being ill, I notice the processes of my body constantly through its symptoms, this gives a heightened awareness of one's embodiment which often leaks into other activities. Rather than being something that takes over, it helps me learn that my body exists while I focus my attention elsewhere.

ARTWORK INTERLUDE:

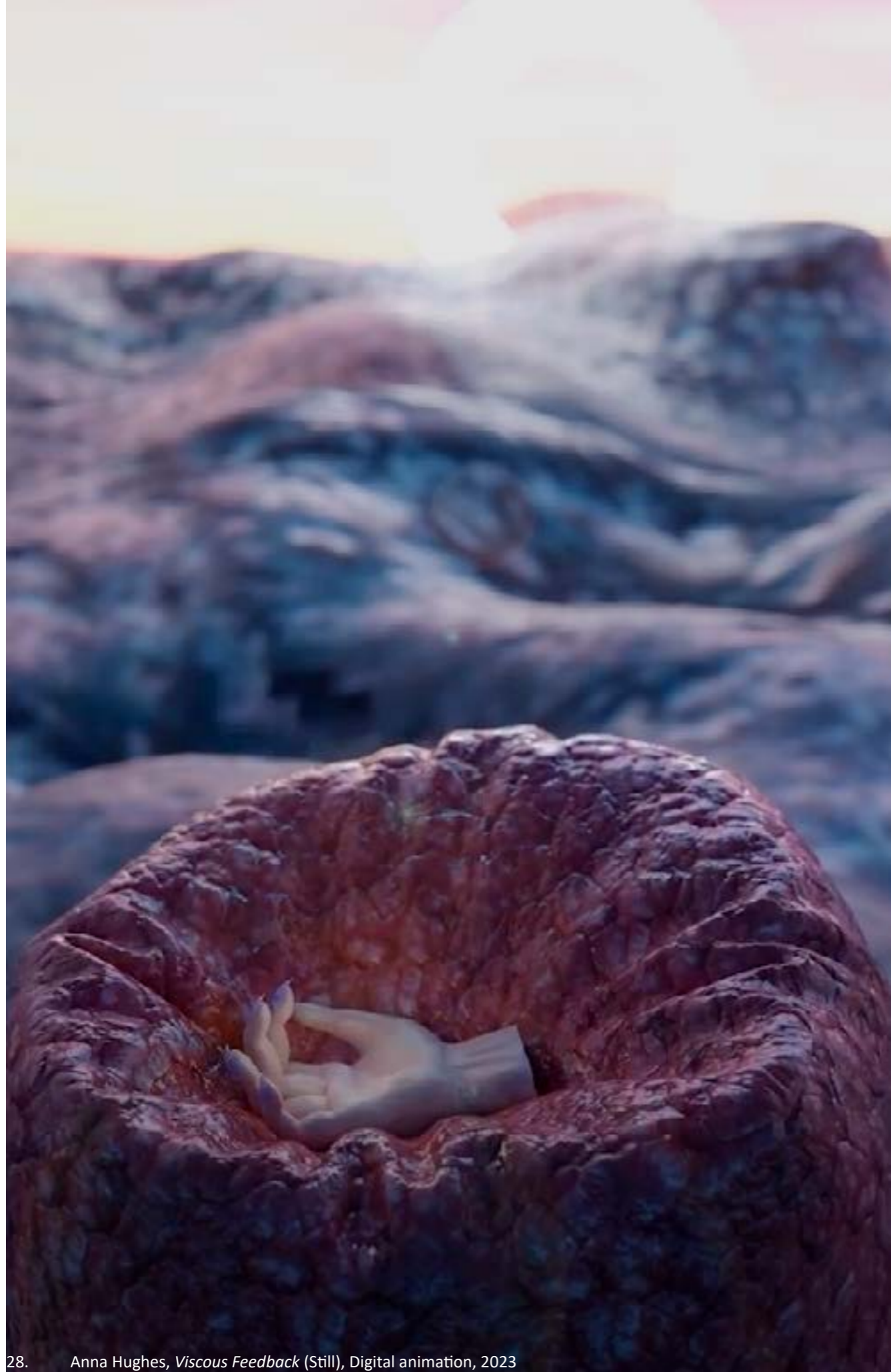


# VISCOUS FEEDBACK

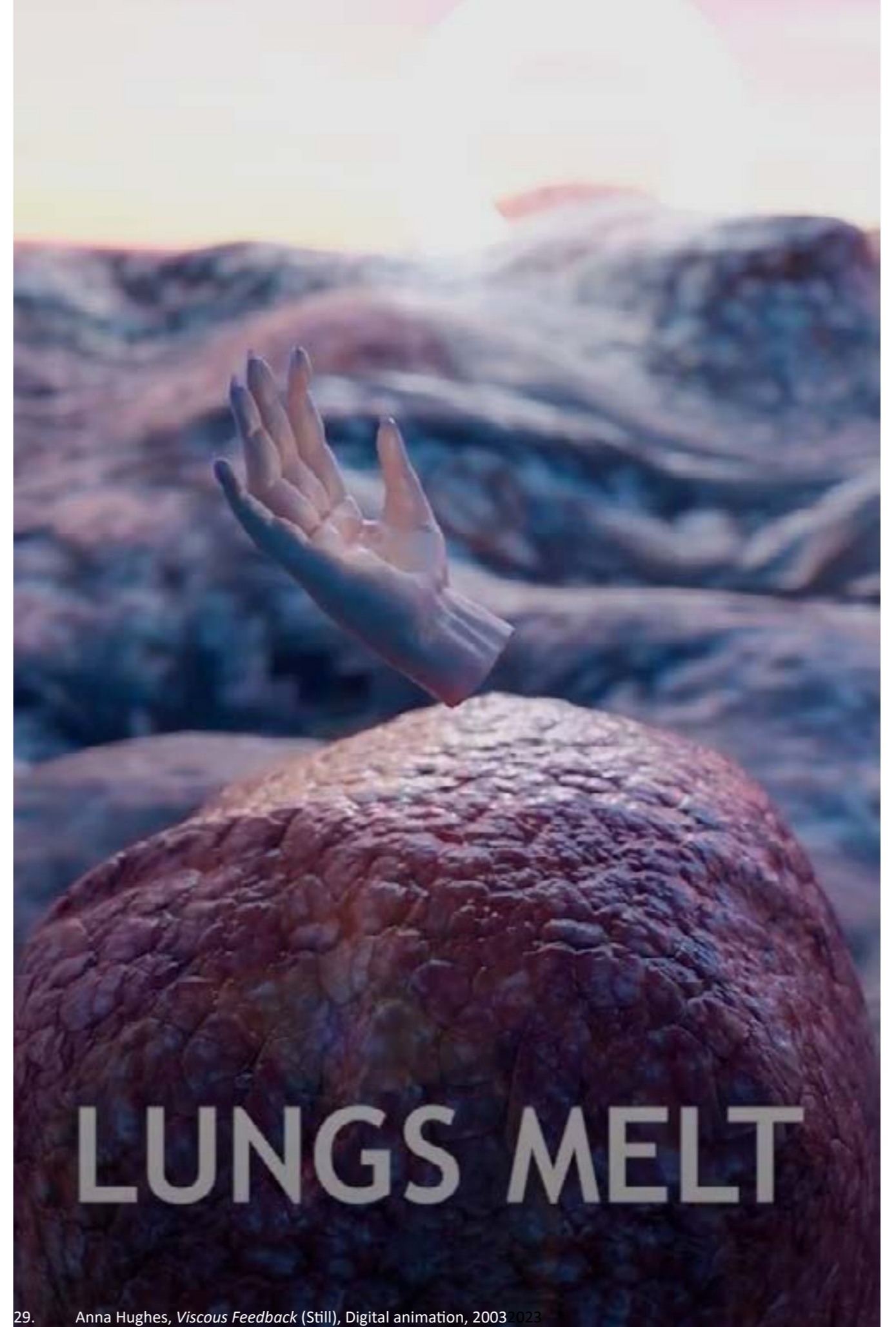
<https://annafhughes.co.uk/VISCOUS>



27. Anna Hughes, *Viscous Feedback* (Still), Digital animation, 2023.



28. Anna Hughes, *Viscous Feedback* (Still), Digital animation, 2023



29. Anna Hughes, *Viscous Feedback* (Still), Digital animation, 20032023



# VISCOUS FEEDBACK

*Viscous Feedback* features the digital hand bouncing up and down on a cushion. I programme a simulation where the cushion reacts to the impact of the hand, forming folds around the hand as it sinks into the cushion. As I animate the hand to float upwards, the cushion simulation reinflates, ready for the next impact. I cover the cushion in an unsettling brain-like material. Materials in *Blender* can be created and edited using “nodes.” Each node in the “node editor” window performs a particular function; the material passes through each one, transforming it according to specific settings. For this material, I edit an existing material chosen from a material plug-in. To make the effect of an uncannily organic surface, I adjust the material settings; I increase the scale of the texture, making the bulbous parts more visible, while I also amplify the sheen setting to make the material look more wet giving the cushion this unsettling organic feel.

Creating this collision scene takes a lot of trial and error to reach my desired effect in *Blender*. I take what I have learned from making the pillow for *I hope you are well*, but this time, instead of a simple in-and-out animation, I use an impact that causes the cushion’s surface to react, emphasising its material properties. The effect involves a cloth and collision simulation. I set the fabric’s stiffness, tension, spring, and elasticity in the simulation’s settings and the air pressure inside the cushion so it can inflate itself back up again. I adjust the impact’s permeability, stickiness, and friction in the collision settings. I control the scene’s gravity in this simulation, grounding the believability of this world. All these settings add to the world-building aspect of this work, where its physics reflects on and transforms the physics around me. I repeat this bouncing hand and cushion collision to create a rhythm for the work, giving the viewer time to sync up with its movements. I

use the impact, inflation, deflation, and repetition to reflect the systemic processes of the body that pump and repeat themselves. I make the landscape undulate and wrinkle like skin, thinking of a body that expands its limits, becoming a landscape. I blur the horizon line using the aperture settings to create depth in this scene. In the “world” setting, I apply an HDRI background to give the scene ambient lighting and to accentuate the object’s material properties while giving my world a sky that surrounds it with blue and pink colours. The bodily world I create stretches out into the distance, responding to my need to find extra space for this rapidly expanding embodiment which I find in digital media.



30. Anna Hughes, *Blender Experiment #8*, Digital image, 2023.

5

---

## A SICKLY CYBERSPACE



31. Anna Hughes, *Digital Hand #7*, Digital image, 2023.

## // PREDICTING THE FUTURE

My digital hand guides me through this tumultuous world of disorienting symptoms; it leads me through cyberspace's aloof yet porous materiality. My digital hand claws through this thick sickness; perhaps it can dig a way out for me. I try hard to picture my future without illness. I look at my digital hand and endeavour to read the lines on its palm. What does the future hold for me if I manage to banish this sickness to my past? The digital hand refuses to reveal such a manifestation. I am still lost. My digital hand is a part of me now, but it points elsewhere. This elsewhere is my sickness, except it is not elsewhere: it is me. I am sick. Now that it is a part of me, my digital hand points back at me: an infinite feedback loop growing stronger in every moment. A future without sickness is one without me. It is not that I like being sick; rather, my world is sick. Any world I attempt to make, even if it comes with the freedom of an undecided future, needs to include sickness if I am to feel like I am a part of it. I do want to know what my future holds, or at least, to hold on to some agential role in its making. I am struggling to see past the present, however, even knowing that sickness will likely be waiting for me in the future. My past feels separate to me also because I was "well" once, and that was a different person. The present is much more distinct for me, shaped by bodily symptoms. If I make a world, does this technological "science-fictioning" need to be set in the future? Simon O'Sullivan and David Burrows argue for *Fictioning* as a method. O'Sullivan and Burrows use fictioning as a "verb", therefore naming the practice of making fiction. For Burrows and O'Sullivan, fictioning is often future-driven, involving "potential realities to come."<sup>193</sup> As opposed to being a practice free from the constraints of reality, O'Sullivan and Burrows argue that fictioning can produce/influence reality (mythopoesis), model new worlds reflecting on present society (myth-science), and use technology to augment society (mythotechnesis).<sup>194</sup> The word "technology"

<sup>193</sup> David Burrows and Simon O'Sullivan, *Fictioning: The Myth-Functions of Contemporary Art and Philosophy* (Edinburgh: Edinburgh University Press, 2019).2.

<sup>194</sup> Burrows and O'Sullivan, 1.

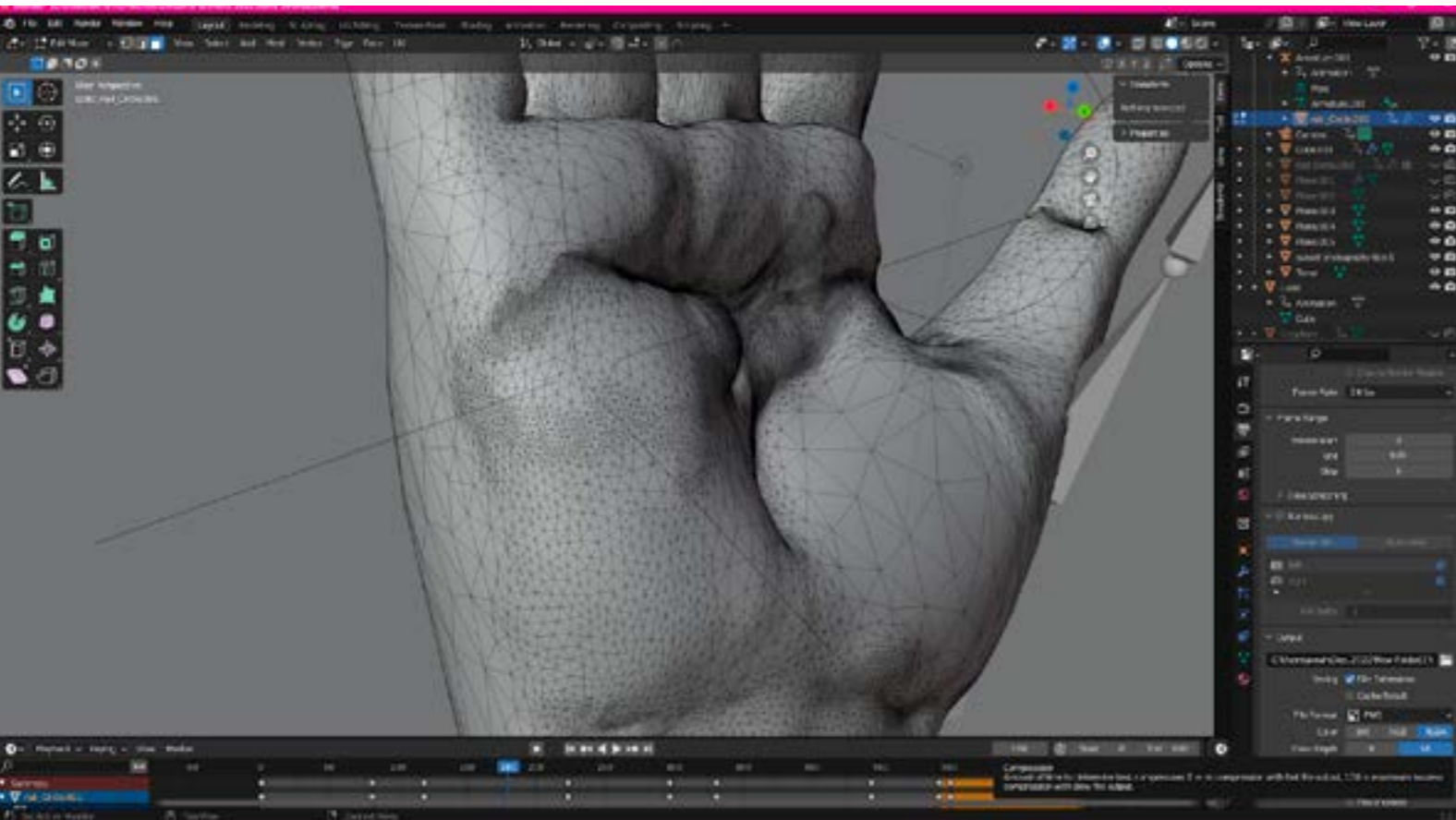
makes me think of a world set in the *future* and the possibilities this future might hold. But even if I am to construct a world set in the future, for it to be a future, I rely on a past to give it meaning. In *science fiction* writing, "for any alternate realm to be considered coherent or tangible, it needs a logic, if not a structure and history."<sup>195</sup> I struggle to think of a "history" for my world because it feels like I have lost this time. Past and future seem equally detached from me. I live in the present, fueled by symptoms that vary and emerge unpredictably from moment to moment. The potential of futurity can still be situated in the present: a practice situated in the *present* exposes *potential futures* embedded within this reality.

## //COMPUTER GRAPHICS, GEOMETRY AND COMPUTATIONAL HANDS

>>> The first "Polygonal" 3D rendered animation was of a hand by Edwin Catmull and Fred Parke in 1972. I am not alone in choosing this as a first model then >>><sup>196</sup>

<sup>195</sup> Burrows and O'Sullivan, 256.

<sup>196</sup> Edwin Catmull and Fred Parke, *A Computer Animated Hand*, 1972.



32. Anna Hughes, *Screenshot of the Digital Hand in 'Edit' Mode in Blender*, Digital image, 2023.

Catmull and Parke's 3D-rendered hand is made up of flat planes. To create more detail, smaller planes can be used resulting in a greater number of planes in the same area. In *Blender's* "Sculpt" mode, I generate smaller planes as I introduce detail. To increase the detail of my entire "mesh", I can apply a "modifier" which gives me the option of using the "Catmull-Clarke" algorithm to divide each individual plane.<sup>197</sup> Exploring the geometry of this bodily project gives me an expanded idea of how to navigate my perception of being a body in a dimensional space: a dimensional space that moves beyond the three-dimensional axis.

<sup>197</sup> This is an algorithm Catmull devised with Clarke and is used in Blender's Subdivision Surface modifier. See: 'Subdivision Surface Modifier — Blender Manual', accessed 22 March 2023, [https://docs.blender.org/manual/en/latest/modeling/modifiers/generate/subdivision\\_surface.html](https://docs.blender.org/manual/en/latest/modeling/modifiers/generate/subdivision_surface.html).

I import my digital hand into this new "blank" world; it hovers in its new world, waiting for instruction. Below the viewfinder is the "timeline." I set my hand's current location to the first frame on the timeline then I move the marker forward into the future. I "grab" my hand and move it to a new location, setting this place in time/space with a new "keyframe." I push my spacebar, and the animation plays out. The animation continuously loops to a given timeframe if I leave it going. This linear timeline and the three-dimensional space allow my digital hand to travel through time. I project my digital hand into the future, all to make a swift return back in time. Because time can be played with in this space, my perception of being in the present becomes confused. Time becomes spatial: it plays out in space. Although represented on a linear timeline, the three-dimensional animation continues to play in a looping motion. The software also gives me the ability to break the linearity of this timeline, dragging the marker back and forth, creating waves of movement in the multiple dimensions of the viewfinder. Working with this non-linearity feels more accessible: a dimensional, disorderly timeframe.

Being dyspraxic, I have never felt akin to linear timelines.<sup>198</sup> Dyspraxia is a developmental disorder that affects movement and coordination. I was diagnosed with dyspraxia before my hEDS diagnosis, and interestingly there is a noticeable crossover of signs and symptoms, meaning that people with hEDS have a greater likelihood of being neurodivergent than the general population.<sup>199</sup> I wonder if hEDS merely shares some of the diagnostic criteria with dyspraxia or hEDS causes dyspraxia as it does many other conditions. In any case, being dyspraxic feels like a noticeable difference when observing how most function. Other than issues with proprioception, dyspraxia likely accounts for my struggle with linear structures. Constructing a diachronic sentence in real-time

<sup>198</sup> At the time of editing (August 2023) I have joined a waiting list for a diagnosis of suspected ADHD. This neurodivergence affirms much of my struggles with order and communication, alongside my existing diagnosis of Dyspraxia.

<sup>199</sup> 'Webinar: Hypermobility and Neurodiversity – The Ehlers-Danlos Support UK', accessed 12 April 2023, <https://www.ehlers-danlos.org/information/webinar-hypermobility-and-neurodiversity/>.

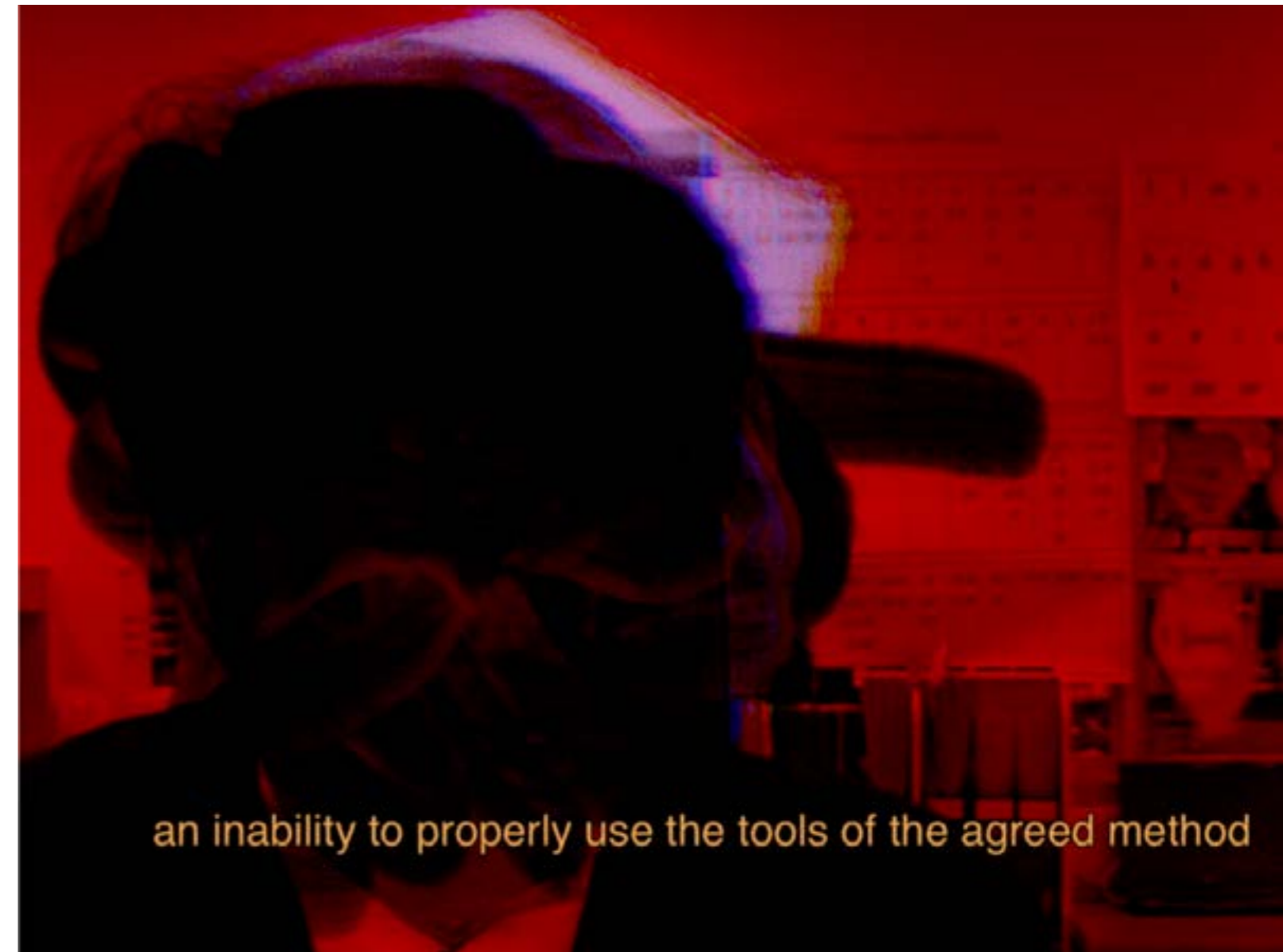
has always been a challenge, but time has become monolithic for me now as a problem, and its linearity is far too rigid. Previously working in sculpture, I now work in a more suitable dimensional medium. Although time-based, my animations play out in space. I reside in “crip time”, which Alison Kafer describes as a “reorientation of time.” Kafer argues that “it is this notion of flexibility (not just ‘extra’ time)” that matters.”<sup>200</sup> Crip time, for me, is more a dimensional form of time: subverting the linearity of time through a bodily topology. Kafer emphasises the need for flexible arrangements because disabled people might take more time to arrive somewhere, and that flexibility entails acceptance of the impossibility of planning for extra time, where flares and disabling barriers arise unpredictably. Flexibility, for me, is the ability to reorientate a particular order continuously. Now with a foggy perception of past/future and a preexisting difficulty with linearity, the linear timeline of *Blender’s* animation function is not a barrier for me: *Blender’s* timeline runs along the bottom of my viewfinder, acting as an aid. The timeline assists me in putting together a sequential animation because the playback is a translation of dimensional space into linearity. The keyframes remember where my digital hand was/is/will be for me, and the software fills in the movement involved in travelling from a to b. I start positioning a finger in the future, go back on the timeline to set previous positions, and watch as the hand moves in the opposite direction becoming a diachronic animation. Postproduction adds another dimension to this flexible timing because I need to think about how this might read for an audience, but for now, I enjoy the looped movements of my digital hand in time/space.

## //NONLINEAR SYSTEMS/ALTERNATIVE LOGICS

While I struggle with time in multiple ways, my hand continues to move through time/space on

<sup>200</sup> Kafer, *Feminist, Queer, Crip*, 27.

my screen. Kafer convinces me that “time” is political for the crip body. My world has been controlled by strict, linear ideas of time for too long. I struggle to assimilate with the world and its order.



34. Benedict Drew, *Dyspraxic Techno*, Courtesy of Drew and Matt’s Gallery, mixed media installation, 2017.

Artist Benedict Drew’s work: *A Dyspraxic Techno*, includes the words “at times it feels as though the whole system is rigged against us... we are out of sync.”<sup>201</sup> This work speaks to unwavering

<sup>201</sup> ‘A Dyspraxic Techno / Dyslexic Shanty — Benedict Drew’, accessed 26 January 2023, <https://benedictdrew>.

capitalist systems which exclude deviation. Drew puts into practice a different type of logic. As a dyspraxic person, my cognition may seem chaotic to the observer, but my thoughts are not pure chaos: I develop a different logic. The appearance of chaos is simply difference: as if observing a foreign language that does not make sense to you. Drew's work is a bombardment of image and text. He references academia and the rigid confines of pedagogical models. Text in Drew's artwork reads: "An otherness to a consensus that is dominant." This work argues for rethinking cognitive difference; where "deviations" are not judged as inferior to the dominant system. Deviations should be valued for their difference and alternative perspectives. The way I construct my artwork is not random. I have a *sense* of what feels right when I make it: a cloudy logic that is difficult to describe. O'Sullivan and Burrows consider "the relation between narrative and databases" in their work on "fictioning." Burrows and O'Sullivan reference Katherine Hayles:

"she identifies narrative as concerned with, and produced by, the process of selection (which databases do not perform), making narrative a sequential or linear and unfolding mode which is important for the interpretation or production of meaning."<sup>202</sup>

In *Blender's* interface, I programme my digital hand's movements in space/time. I am comforted by the knowledge that this timeline includes past, present and future at the same time. Rather than being a form of prediction, this timeline gives me a different perception of time: time that can be thought of as linear at the same time as being spatial. This spatial narrative is something I can grasp hold of. I make animations readable as sequences in time, but although the output may not adhere to the rules of a popular narrative, my animations do form a narrative that unfolds. The dimensional space that *Blender* operates in acts like a database, but it can also assist translation into linearity; it holds so much potential, but *narrative* carries meaning for me, which is why I need this software to help me.

---

com/A-Dyspraxic-Techno-Dyslexic-Shanty.

<sup>202</sup> Burrows and O'Sullivan, *Fictioning*, 2019, 439.

## //CRIP, HYBRID WORLDING: AI, FICTIONING, LOOPS, REPETITION, ASSEMBLAGES AND CYBERSPACE

Post lockdown, the term "hybrid" rings in my ears. I *am* encouraged by technological hybridity because one of the only fortunate side-effects of the COVID-19 pandemic was better access to everything. I continue to experience the benefits of assistive technology. Still, it feels as if I need to justify the continuation of technological advances and adaptations adopted during the pandemic. While a part of me feels I do not want the "physical" part of this hybridity, I remind myself that digital socialisation is not for everyone either: hybridity holds the potential to cater for different needs.<sup>203</sup>

Memories of Artist Maggie Roberts's work drift into my head. Roberts has also been learning *Blender* in lockdown.<sup>204</sup> For Roberts, who is interested in hybridity and technological mediations, *Blender* allows for a form of 'science-fictioning' that can fuse organic and inorganic parts together:<sup>205</sup> a pulsating mass of an organic machine can be made into one object. Parts of one mesh can be given different materials, so this monstrous object can be programmed to move symbiotically while composed of seemingly disparate parts.

"Human understanding of the fabric of reality is changing. Our categories and boundaries are now under immense pressure. They are cracking and leaking. Maggie's sensory web of image and sound is an attempt to inhabit a fluid complex uncertainty populated by entities on a continuum between the human and the non-human, a mix of the organic, the engineered and the synthetic."<sup>206</sup>

---

<sup>203</sup> See the following article describing phenomena called "zoom fatigue:" Stanford University, 'Four Causes for "Zoom Fatigue" and Their Solutions', *Stanford News* (blog), 23 February 2021, <https://news.stanford.edu/2021/02/23/four-causes-zoom-fatigue-solutions/>.

<sup>204</sup> 'Maggie Roberts (@maggie\_mer) • Instagram Photos and Videos', accessed 16 February 2022, <https://www.instagram.com/p/CCgxROYff-r/>.

<sup>205</sup> This type of making is not exclusive to *Blender* as there are other 3D rendering softwares available, although *Blender* does have the advantage of being more accessible because it is free (as long as you have access to a powerful enough computer).

<sup>206</sup> Maggie Roberts, 'Uncanny Valley: Difficult Kin' (Aspex gallery, Portsmouth, 2019).



34. Maggie Roberts (Orphan Drift), *Conscious Exotica*, mixed media installation, 2018.

A work titled *Conscious Exotica* by Roberts shows an octopus moving along the ocean bed alongside screen recordings of computer-generated 3D mesh-structures.<sup>207</sup> I still find it hard to escape thinking of this relationship between technology and the organic as a literal fusion. However, technology enables Roberts to sync these two videos to be played simultaneously while remaining in separate frames. This work does more than bring together two discrete things: Roberts uses technology to learn from the octopus and understand its form of consciousness. The camera allows me to study the octopus, but in turn, the computer-generated imagery responds to these movements and helps me to think about them differently: as moving topological arrangements. I become immersed and complicit in the movements of the octopus, and I do not feel separate from either of these forms nor does the octopus and the AI: “octopuses and AI (Artificial Intelligence) are both conscious non-human entities that radically challenge our ability to imagine other kinds of life.”<sup>208</sup>

In 2023 leading AI developers warn of the potential for human extinction through AI and call for immediate action to mitigate this threat.<sup>209</sup> AI-generated art’s ethics are also questionable: Johanna Zylinska argues that AI art can become “art as spectacle,” noting how dependant the circulation of this imagery is on platforms such as *Instagram*.<sup>210</sup> While on one hand, Zylinska seems to critique or dismiss much of AI-driven art that is promoted and facilitated by corporations such as *Microsoft*, she identifies ways in which artists can engage with AI

“ I want to suggest that one of the most creative – and most needed – ways in which artists can use AI is by telling better stories about AI, while also imagining better ways of living with AI.”<sup>211</sup>

<sup>207</sup> Roberts.  
<sup>208</sup> Roberts.  
<sup>209</sup> The following website hosts the signed statement on the risk of AI. See: ‘Statement on AI Risk | CAIS’, accessed 22 August 2023, <https://www.safe.ai/statement-on-ai-risk#open-letter>.  
<sup>210</sup> Joanna Zylinska, *AI Art: Machine Visions and Warped Dreams*, First edition (London: Open Humanities Press, 2020), 76.  
<sup>211</sup> Zylinska, *AI Art*. 31

In this way, much as Roberts engages with AI, the artist can critically engage *with*, and work *with* AI. “Artists do not construct these machines just to get ‘help’ but rather to probe the limits of the human idea of creativity and of human-machinic assemblages.”<sup>212</sup> Thereby, AI can be seen less so as a tool, but as a collaboration. Zylinska argues that critiques or fears around AI are often too humanist, pitching humans as inherently possessing a rationalist yet empathetic ethics in contrast to the glitchy “robotic” machine. Yet Zylinska reminds us of the inconsistencies and imperfections of human decision-making, which align us far more with how we perceive artificial intelligence.<sup>213</sup> Ultimately, Zylinska reserves hope for creative ways in which the artist can explore the ethics of AI, and in turn, use this knowledge of AI to better understand our perception of human consciousness and ethics. Zylinska argues that the artist can “[imagine] better ways of living with AI.”<sup>214</sup>

Strangely, AI image-generation software struggles with human hands.<sup>215</sup> Might this give me hope that my niche digital hand-making skills will not render me obsolete? I assume this fault will be rectified eventually, but I am not worried about my digital-imaging skills being superseded by AI.<sup>216</sup> A computer may easily replicate the outcome of my artworks without my hours of digital modelling. However, there is something different generated through spending so much time with this digital hand. My audience cannot directly see this time in the final work, nor do they have the same bond with the hand; however, I need this time to think and to feel something for this work. As written previously, It is difficult to find the language for illness and to give visible form to the intangible.<sup>217</sup> I need this process, and this bond with the work, to work through all the material I

<sup>212</sup> Zylinska, 58.  
<sup>213</sup> Zylinska, 31.  
<sup>214</sup> Zylinska, 31.  
<sup>215</sup> For some interesting images of ai-generated hands see: Pranav Dixit, ‘AI Image Generators Keep Messing Up Hands. Here’s Why’, BuzzFeed News, 31 January 2023, <https://www.buzzfeednews.com/article/pranavdixit/ai-generated-art-hands-fingers-messed-up>.  
<sup>216</sup> In editing this thesis it seems AI has indeed improved its hand-making abilities, see: Pranshu Verma, ‘AI Can Draw Hands Now. That’s Bad News for Deep-Fakes.’, *Washington Post*, 27 March 2023, <https://www.washingtonpost.com/technology/2023/03/26/ai-generated-hands-midjourney/>.  
<sup>217</sup> See page 137 for text on Stephen Dwoskin’s work *Pain Is* and giving language to pain.



have, and to test, explore and materialise my experience. The process indulges me yet allows for the artwork to be made.

Despite enjoying the time spent making the hand, I should remember that software still assists me by doing some of the work for me through its programmed processes. *Blender* augments and generates elements of the imagery for me beyond the “manual” manipulation of a digital mesh. There are shorter ways of doing things with this software, and I use these presets where necessary, e.g. simulations of liquids or gases and pre-made materials. Just because an AI-generated image may result in banal novelty, does not mean technology should be dismissed. AI has the potential to threaten the human species and its dominance. It is already being used for capitalist motives; however, technology can also be used for collaboration and accessibility. Enabling technologies include the use of purpose-built accessibility tools, e.g. AI image description, or more general assistive programmes like *Grammarly*.<sup>218</sup> In a podcast about AI and how it can enable disabled artists, staff at *Shape Arts* are cautiously optimistic about new AI software designed to help writing and the creative process. These programmes even assist them in making their content more accessible for others, for instance software that rewords text in a more accessible way.<sup>219</sup> They warn that these technologies should ideally “[make] our lives easier and more flexible, rather than [make] us do more.” AI can easily succumb to capitalist usage. These tools designed for “productivity” boost output with less input. The worker, in this capital-driven vision, can produce more rather than reduce their workload. Unfortunately, it is capital-driven tech companies who have the means to develop these technologies. However, if using these technologies helps a disabled or neurodivergent person create in ways they want to, then these creative uses of this technology can serve as an example of what technology can be used for beyond unimaginative capital-growth.

<sup>218</sup> ‘My Grammarly- Grammarly’, accessed 3 September 2023, <https://app.grammarly.com/>.

<sup>219</sup> ‘Stream Now: Can AI Improve Accessibility in the Arts?’, *Shape Arts*, 5 July 2023, <https://www.shapearts.org.uk/Blog/shape-arts-podcast-episode-two>.

My digital hand becomes embodied via a virtual feedback loop that I cultivate using technology such as the AI; this circulatory movement allows me to thrive in cyberspace. Simon O’Sullivan and David Burrows address feedback loops in their writing around “fictioning.” The narrative presented does not need to be radically different from actual events but can function as a reflection on real events. Ultimately, although fictioning names practices that are not entirely true to reality, these practices can still have real-world impacts through their influence on people. In this way, fictioning is a powerful method: the practitioner can attempt to manipulate the future. So much of Burrows and O’Sullivan’s work around fictioning involves technology. “A radical mythotechnesis is to fiction a feedback loop between non-conscious (embodied and material but also mechanic) processes and thought.”<sup>220</sup> Burrows and O’Sullivan seek relationships between the material processes of organic bodies and the mechanisms of hardware. I see an obvious connection between my hand and the physical clicks that instigate computer processes: hardware (my body) touching other hardware (the physical components of the computer). The software I use involves specific programming that will respond and generate imagery for me. The feedback loop moves from my body to the software and back to me as I encounter the imagery and learn from it. The exciting part of the 3D software is the temporal gap: the imagery is not generated in real-time. It takes imagination, knowledge of possible outcomes, trial and error, or luck to generate a desired outcome. I find it difficult to fully picture my imagery in advance, so I rely heavily on waiting for the computer to finish the rendering process to find out what I want to make: not necessarily that it *looks* right, but that it *feels* right. I often have to make changes and re-render frames repeatedly to get the right feel. My imaging begins with infinite possibilities, and the result emerges through rendering. I rely on this software to do some of the cognition for me. It is a relief to allow the computer to perform some of this work for me as my fatigue kicks in: the computer compensates for my lack of energy and foggy moments. The continuous movement into one another, affecting one another, creates a dependency

<sup>220</sup> Burrows and O’Sullivan, *Fictioning*, 2019, 438.

that dismisses any hierarchy between the two. A visible gap exists between my body and this practice, but our feedback blurs and erases this boundary. I can feel it, even when this might not seem possible for a digital practice. Similarly, Maggie Roberts' science fictioning considers this reciprocity. Roberts identifies the *otherness* often given to non-human forms of consciousness and realises their outputs in equally material, embodied and intelligent ways.

>>>

On a particularly nauseous and brain-fog-induced day, I play around with the AI programme *Chat GPT* on my laptop in bed.<sup>221</sup> My brain is just not working. I intend to produce a fragmented, poem-like text to feature in a new video work for an impending deadline. I input text from my thesis abstract, enter more words, and tell it to write a poem. I am intrigued, but the result was not what I had in mind. I continue to play with the programme and give it directions like “rewrite the poem with shorter lines.” Eventually, I get a result that I am happier with, but it is still not right. I start writing something on my blank document. For some reason, it flows. I am strangely inspired, and within minutes my work is done. I have a better idea of what I wanted to write. Despite not using the text *Chat GPT* had written, AI did help me write this text. I would not have been able to write this text without my play in *Chat GPT*. Similarly, I would not have been able to write this text without severe brain fog, which dulled my inhibitions when writing. Technology helped me work with my sickness. I should not have to force myself to be productive when I am particularly unwell, and this exploration did derive from the drive to “carry on,” which is hard to shake. However, as I eased into it and had fun, the technology allowed me to work in a way that did not strain or work against my struggling cognition.

<sup>221</sup> “ChatGPT”, accessed 31 August 2023, <https://chat.openai.com>.

## QUIET MY MY BODY'S INCESSANT MATTERING

INTIMACY TENDERED  
VISCOUS FEEDBACK  
DIGITAL DIRT  
BEYOND CAPITAL'S HOLD  
REVERBERATING WITH ME  
DEEPER  
THICKER  
GROTESQUE  
THE RHYTHM SEDIMENTS  
DISSOLVING WITH MY POROUS BEING  
THIS SICKNESS SWALLOWS  
TISSUE BREAKS DOWN  
BLENDING FLESH  
DIGITAL LIMB WITH PROSTHETIC CONNECTION  
AT A DISTANCE  
PLEASE MESH MY BODY  
LET ME SCREEN  
BOLD CLICKING  
REGURGITATES  
WANDERING WE MEAT  
HE SHIFTS IMMEASURABLY  
MY NECK CRACKS  
ABUNDANT KEYSTROKES  
BRILLIANCE  
DIAGNOSE THIS  
DISLOCATE ME  
IT'S EXTRAORDINARY  
I FLOAT VIGOROUSLY  
HANDS FURTHER  
I MOROSE  
BENDING IN  
IT CONSUMES  
BELLOWS THIS CHANCE  
SICKENING ME  
I BELATE  
DISPROPORTIONATELY

## // MAKING A SICK WORLD

“Design, then, understood in its broadest sense, is an important aspect of world-building. But a world is more than a design and a world-building practice that produces more than designs - that, in particular, addresses how relations between entities and things actually manifest and have continuity - can be called a worlding.”<sup>222</sup>

The “world” I make in *Blender* is not necessarily set in the future. The world I make is not separate from my present world, nor does it prophesize. The world I present is simply a revelation of parts of this world that are unseen, or extensions of seen things, the likes of which tend to manifest in a different medium. Manifesting my subjective experience in a different medium allows for an element of constructive fantasy. Therefore I create a world of sorts, or a world within a world, or a “nested dimension” governed by the same rules, but resulting in a world that looks and feels radically different. This nested, extended reality that I create relies on its relation to my “real” world for it to hold some sort of continuity and become meaningful. This desire for meaningfulness is why I cannot escape futurity in my work. I have a desire to impact the present, and by extension, the future, and this is played out through my figuration that extends “reality” and reveals possibilities. I do hope to impact the future on some level. The software I use fortunately takes care of some of this world-building for me: *Blender* offers many different forms of simulation, including those that create organic matter. The fluid simulator holds a wealth of “real world” effects, including viscosity control, flow types, speed, foam/spray, particles and duration. To add another believable dimension to this liquid, gravity can be controlled, a source of wind, and other “collision” objects included; the addition of settings and other elements all affect the outcome of the liquid and its movements. All the settings I use greatly affect my digital hand’s place in its world. In *Blender*’s “world” setting, a HDRI (High-Dynamic-range image) can be added, enhancing the object and giving the entire scene

<sup>222</sup> Burrows and O’Sullivan, *Fictioning*, 2019, 27.

the believability of being in(of) a world. The HDRI presents as a 360-image background around the object, taking over the grey grid. The HDRI can be used as a background, but this is not always desirable: the HDRI is about lighting and the atmosphere it creates.

Artist Danielle Brathwaite-Shirley references an early video-game aesthetic within her work. For Brathwaite-Shirley, the aesthetic of early computer games reminds her of a youth growing up black and trans. Character customisable role-play video games allowed her to create a character she could identify with at a time when black trans representation was even more limited than it is today.<sup>223</sup> I do not have such a relationship with computer-game aesthetics; I choose a photo-realistic render engine that closely mimics real-world conditions. The result is a world that looks closer to our own than a stylised world. GPU power is also a factor within these worlds because playing/interacting in real time requires an extremely powerful computer using such realistic graphics. Brathwaite-Shirley’s artwork brings into question the marginalisation of black trans people, simultaneously creating space for them while asserting the need for their inclusion beyond cyberspace. Worlds created “in” cyberspace can be impactful on the “real” world then. I intend to use a virtual medium in a way that enables me, while at the same time, I produce a virtual world that can affect other bodies. The virtual and the “real world” function together, questioning the need for distinction between the two, and allowing for the virtual to hold its own agency in this world.

If the virtual is not its own discrete world, the virtual reality headset is not always needed to create an immersive experience: one need not shut out everything else to experience the virtual. My first virtual reality experience gave me “virtual reality sickness,” a feeling similar to motion

<sup>223</sup> Brathwaite-Shirley spoke about this in a talk about her work. See: Danielle Brathwaite-Shirley, ‘From The Ground Up : Resistant Archives’ (The Urgency of the Arts Lecture series, Royal College of Art, 2 December 2020).

sickness.<sup>224</sup> Today, nausea reminds me of my body and grounds me in an embodied state. This feeling of nausea while in an “immersive” experience reminds me of the limits of this technology that is supposed to isolate the body. Another experience of a virtual reality headset was visiting Lindsay Seers and Keith Sargent’s *Cold Light* exhibition at Matt’s Gallery, London. It resulted in a jarring experience of a gallery assistant troubleshooting my headset that did not work immediately.<sup>225</sup> The headsets were located in a different part of the gallery outside the main installation. This installation comprised of robotics, projections and objects that were far more of an accomplished world. The press release notes:

“The artists have developed a language of blending objects, environments, light, sound, VR and CGI to contemplate quantum theory in a search for truths. Their work references human, animal and plant life with an ultimate desire for a new philosophy of metaphysical thought that can chime with the science it evokes.”<sup>226</sup>

While this example failed to incorporate the VR experience within its otherwise immersive exhibition, I am not completely averse to using virtual reality headsets because one can still be made aware of their body through sensual stimulation in this reality, and with developed technology, virtual reality could host incredible affective content. Still, with my work concerning the body, it seems counterproductive to try and fail to limit existing senses when experiencing the work, especially when, for many, their body will still *feel* like it is very much present. This interaction with one’s perception of being a body is where virtual reality headsets fall short, but perhaps one day, this technology will evolve as a more seamless experience.

<sup>224</sup> The following article gives an in depth, scientific look into the causes of virtual reality sickness. See: Eunhee Chang, Hyun Taek Kim, and Byoungyun Yoo, ‘Virtual Reality Sickness: A Review of Causes and Measurements’, *International Journal of Human–Computer Interaction* 36, no. 17 (20 October 2020): 1658–82, <https://doi.org/10.1080/10447318.2020.1778351>. no. 17 (20 October 2020)

<sup>225</sup> Lindsay Seers and Keith Sargent, *Cold Light*, 2022, Mixed media installation, 2022.

<sup>226</sup> Lindsay Seers, ‘Matt’s Gallery Press Release Nine Elms’, n.d.

## // RHYTHM AND STRUCTURE

There comes a time when I must leave the comfort of *Blender*: I use other software to bring together my animations. My digital hand is rendered out as many static frames which I put together in *Premiere Pro* to form a video sequence. Each sequence can be cut and reassembled with other sequences to form a new order for the imagery. How do I make these decisions when I am already aware I struggle with linear narratives? Sound has been helping me a lot recently. I do not start with a soundtrack, but, usually, somewhere in the middle of editing a video, I grow restless and switch to different software: to a different sense altogether. Armed with a feel for the final outcome of my video work, I begin to make a soundtrack in *Logic Pro X*. I start by trying out a number of the built-in instruments, and once I find one that seems right, I begin to put together a melody or soundscape. I continue with this process, layering the sounds (vocal and instrumental), all against a beat. I am pleased this software includes voice-altering functions that smooth and tune my vocals. Within this software, and with my limited music knowledge, there are elements I can turn to to form a structure. Each composition adheres to a time signature that helps anchor the tracks in relation to a reproducible duration. I use *Logic Pro X*’s drum machine designer, which automatically puts together a customisable percussion track based on specific settings. The percussion sets up a rhythm that repeats elements of itself while producing moments of variation. Each beat acts as friction on the surface of this sprawling soundtrack. The beats give the surface of this track texture, adding to this sound’s dimensionality. Similarly to *Blender*, the software presents me with timelines. Each track runs horizontally along the screen stacked on top of each other to form layers of sound. However, I do not imagine this sound as layers because the tracks are made to be heard as one composition. Using a dual channel function, I give further dimensionality to this one composition, each track used at the same time as another transforms their collective experience as a textural surface.

As I make this work, I have been undergoing confirmatory tests for Postural Orthostatic Tachycardia Syndrome, for which my heart rate has been recorded in multiple ways. My heart rate is measured numerically, which appears as a line on the ECG monitor. Like the timeline in *Blender*, the soundtrack helps me keep to linear time. Being so immersed in bodily functions, my experience of time seems far more sensual than the graph that denotes my heart rate. When I stand upright, the graph spikes while I feel my heart thump, I begin to sweat and feel nauseated; my muscles twitch, my back aches, and I feel dizzy. This nauseating atmosphere is governed by variations in intensity: pulsating repetitions and sensations that seem to surround me like an air of prickly variation. I export the composition as one track and import this into my video project in *Premiere Pro*. I am relieved that I now have a tangible logic to work with. Drawing from the rhythmic variations of my body, I use this track to make sense of all the material I have collected.

“The technology, from turntables and vinyl to samplers and synthesisers, produced new sounds and rhythms, and calls forth new kinds of bodies adequate and appropriate to them. It is a sonic fiction not for you, but for something you might become through listening to the sound (when listening also involves bodily reaction).”<sup>227</sup>

For O’Sullivan and Burrows, sound calls forth a visceral reaction while drawing from embodied experience. Sound can distance itself from linguistic conventions especially when it is used in such a way as to set up an embodied experience, as does many of the “sonic” examples O’Sullivan and Burrows use.<sup>228</sup> Being able to move on from the linear conventions of language allows music to resonate with bodies that have been alienated by harmful logic imposed by language. Perhaps it is music’s close relation with dance, or it is the sort of cultural phenomena that sound draws together:

<sup>227</sup> David Burrows and Simon O’Sullivan, *Fictioning : The Myth-Functions of Contemporary Art and Philosophy* (Edinburgh, UK: Edinburgh University Press, 2019), 225, <http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=2409358&authtype=shib&site=ehost-live&authtype=ip,shib&custid=ns010826>.

<sup>228</sup> Burrows and O’Sullivan, *Fictioning*, 2019, 217.

individual visceral reactions in the body that can simultaneously be experienced en masse. Either way, sound can be used to interrupt alienating structures through an emphasis on visceral, reactive and entangled embodiments.

Shifting back to *Premiere Pro*, I begin to work into the imagery. The rhythm of the track guides me. The different textures of sound help me consider the variation in intensity and the different sensations I want to draw on. The soundtrack acts as a linear guide giving me more to work with to create a textural atmosphere. As opposed to simply stringing different scenes together in a chain of different parts, I layer sequences using different overlay settings, varying opacities and transition effects. The result of this layering is not of a *layered* image: these images bleed into one another, sliding into different moments, shifting into a different intensity. Repetition becomes an important technique, drawing from this musical framework. Repetition gives emphasis and builds tension, embedding motifs which begin to evolve and shift organically from frame to frame. Past becoming present. In the final making of this work, I continue to loop back and forth from *Logic Pro* to *Premiere Pro* until I have made a video that seems right: the work that I had “envisioned” all along and could not have made without the assistance of computer programmes to assist me. A futuristic coalition, taking place in the present.



35. Anna Hughes, *I Can Feel It* (Installation Shot), Unruly Encounters, Southwark Park Gallery, London, Digital image, 2022.



36. Anna Hughes, *Viscous Feedback* (Installation Shot) Earthwise, Beaconsfield Gallery, London. Digital animation, 2023.



37. Anna Hughes, *Viscous Feedback* (Installation Shot), Tuesday, ICA, London, Digital animation, 2023.



38. Anna Hughes, *Quiet My Body's Inessant Mattering*, (Installation Shot), Hopscotch, Copeland Gallery, London, Digital animation, 2023.

## // OUTRO:

### WHEN THE SICK RULE THE WORLD MORTALITY WILL BE SEXY

"When the sick rule the world perfume will be outlawed

When the sick rule the world hotel rooms will be obsolete, aeroplanes will be obsolete, new cars will be obsolete.

When the sick rule the world fragrance-free auto shops will keep the old cars running smoothly.

When the sick rule the world roses, gardenias, freesias, and other fragrant flowers will no longer be grown.

When the sick rule the world there will be no restaurants.

When the sick rule the world Calvin Klein will design aluminium foil window dressings and our porcelain walls will be decorated by Limoges

When the sick rule the world the well will be servants, and all the well will try to become sick so they too can have servants.

When the sick rule the limbs of the well will be chopped off in the middle of the night, the well one still alive, flailing and screaming.

When the sick rule the world mortality will be sexy.

When the sick rule the world, all writing will be short and succinct, no paragraphs will be longer than two sentences so we can comprehend them through the brain fog the well bring to us daily."<sup>229</sup>

I am trying to imagine what a world ruled by the sick might look like. Dodie Bellamy's proposition/mantra/manifesto does not literally call for the continuation of a ruling body. The proposition of the sick turning the table on the well might feel absurd; Bellamy does not simply call for equality nor equity; she calls for more. Bellamy's call for a complete overthrow of the ruling systems is a call for change. Where one might find some of Bellamy's declarations absurd or excessively violent, she constructs an all too familiar reality that the sick know too well: one where the world is designed for a particular kind of human, albeit at the direct expense of others. To the well, this world Bellamy constructs might seem strange and inaccessible to them, but for the sick, this new, unfamiliar world feels a familiar plea.

For my project, the words "when the sick rule the world, mortality will be sexy" resonate. While I write this from a sick perspective, mortality connects me with the well. The prospect of death and its perception can help both the sick and the well if we shift our attitude towards it. Therefore, a project that finds ways to work with bodily change can serve the sick and the well harmed by the looming prospect of bodily decline. If mortality was sexy, the sick and the well might find a mutual fascination with life as it magnificently descends and marvel at this process as it appears to us in the present. My project presents a digital world that reveals the sensuality of sickness. Sensuality easily slips at times into being sexy, which might seem implausible for a project made through sickness, but digital technology has aided this revelation. Technology does not need to be designed, or used with the well in mind, and through a sick/sensual understanding, technology can offer a better future for both the sick and the well.

<sup>229</sup> Dodie Bellamy, *When the Sick Rule the World*, Semiotext(e) Active Agents Series (South Pasadena, California: Semiotext(e), 2015), 25–37.



# CONCLUSION: TOUCHING MY SICK BODY AT A DISTANCE

With this thesis, I have worked through many difficult and seemingly conflicting realities regarding being sick and practising digitally. I give these phenomena space to exist without resorting to comparison. Cyberspace gives me *extra* space. It proves that space can be more than a measurable area of land. Closeness does not need to operate with an ocular-centric notion of proximity: cyberspace allows for “touch” at a distance. This is if we allow touch to be more than a basic form of friction. Through a topology that can bend, stretch and jump, cyberspace opens up means to touch at a distance. Affect and virtuality lead this touch. Embodiment in cyberspace is not as incompatible as it might seem when the body's presence is felt through virtual sensations. Acknowledging embodiment in cyberspace opens up possibilities for new and exciting sensual encounters, not just for those who “need” it. In turn, acknowledging embodiment in cyberspace ensures those who are marginalised because of their bodies are not neglected in this digitally mediated world.

Because I struggle with my “physical” mobility, I choose to make art in digital media. It is a choice made because it suits my needs as a sick body. Rather than focusing only on how this work enables me, I have set out to argue that this sick knowledge offers great insight into creative methods in which to live as a changing body with others. Sickness is not a super-power (certainly not in the neoliberal version of disabled empowerment), but it can heighten things: like the feeling of one's bodily processes and the knowledge of to what extent a body can affect and be affected by the socio-politics and environment around it. Sickness has given me all this. It is not something to be celebrated, but it is something, and with this project, I have argued the significance of this stance.

## //BEING SICK IN CYBERSPACE

In the context of this project, cyberspace has a reciprocal relationship to my illness: cyberspace has enabled me to make art, and my illness has shaped my understanding of cyberspace. Many sick people like myself turn to computation due to the physical strain and excess bodily movement involved in other methods. Digital media offers ways in which a person unable to travel or access things can participate in some way. All this brings up problems for understanding this practice: the digital practice can be considered a *concession* made because of one's limitations. It is thereby shrouded in both a qualitative assumption and a sense of loss.<sup>230</sup> These assumptions hold troubling connotations that stem from and feed into ideas around illness and disability: disability leads to adaptive methods that deviate from those established by the abled. When these methods are thought of as inferior, disability, in general, becomes an inferior mode of being in comparison to abled practices. Instead, adaptive methods are distinct practices which should be celebrated for their creative response to the creative body. By extension, disabled adaptations can be facilitated, nurtured and learnt from if accepted as agential within a society. A disabled person is thereby “valued,” not in a neoliberal sense of (economic) contribution, but as an important component within a creative system.

## //ORIGINAL CONTRIBUTION

My original contribution acts as both a different understanding of cyberspace, a reorientation and a progression on disability/crip theory. Together, these theories work to enhance the other. The coalition of cyberfeminism, new-materialism and crip theory grounds my original theory. I draw from cyberfeminist approaches to cyberspace, like Xenofeminism, to learn how alternative systems

---

<sup>230</sup> See page 52 for reference to Ed Atkin's writing around loss.

that coopt cyberspace can create new social alternatives in response to patriarchal power.<sup>231</sup> With this empowering emancipation in mind, I strengthen a cyberfeminist optimism for digital media and its radical potential with an understanding of “mattering” in the quantum field (after Barad).<sup>232</sup> The quantum field relies on the virtual activity of matter, and this virtual movement creates space that can produce encounters appearing to subvert distance. My knowledge of embodiment is shaped through being sick and exploring disability and crip theory. This knowledge gives me material to understand the materiality of virtual activity. The experience of feeling the body through symptoms while being immersed in cyberspace affirms this. Moving beyond an ocular-centric notion of digital media, I draw from sickness to focus on the influence and production of virtual sensuality. Digital media is material, but its materiality lies in its virtual mattering, allowing for an alternative version of mobility that does not rely on a measurable distance.

This work gives a different understanding of disability to popular models today. I differ from the *Social Model of Disability* because, although the treatment and care of bodies are important, I emphasise the materiality and self-actualisation of sickness and disability. Therefore, beyond one’s environment, sickness/disability becomes a mode of being that is both materially and socially different from others but not essentially wrong or a negative occurrence. I firmly reject negative and exclusionary ideas around disability, but at the same time, I dismiss unwavering positivity concerning difference. Neoliberalism uses positivity to affirm a disorienting split between mind and body (mind over matter). In my work, I embrace being a body as a vital influence and co-presence *with* digital practice. Crip theory gives me the impetus to seek a subversive and self-actualizing form of disabled agency.<sup>233</sup> I find crip theory useful to understand the sociopolitics of being a marginalised body and how difference creates cohesion. My work uses crip theory in this way but shifts its focus

<sup>231</sup> See page 75 for more on Xenofeminism.

<sup>232</sup> Karen Barad.

<sup>233</sup> See page 140 for more on crip theory.

towards how the mattering of being sick and/or disabled generates a particular form of embodied knowledge that can be accepted and even learnt from. Embodiment and co-existence in time/space is therefore crucial for this ethics of cyberspace centred around enabling lateral self-actualisation. Ultimately I form a sick theory of digital art practice and its relationship to embodiment, asserting that digital practices are always embodied through virtual movement, and this project works with and enhances this sick agency.

### //PRESENTATION:

For this project I have tested the presentation of the work in multiple ways including, on a screen, projected, and hosted on a webpage. I have also played around with different seating including a mattress-like floor cushion, beanbags and a hard-back chair. All these presentations gave different effects, and worked better depending on the space, its lighting and amount of room. The seating options worked better for different individual needs. In all of this, I am thankful that digital media is portable: it can adapt, grow, shrink, and travel, appearing easily in different locations. This openness and mobility of digital media is what interests me. For the moment, this work rests in digital space, hosted on a website, easily accessible through links given in this thesis. The works are ready to adapt should they be called upon to appear in a different location and in a different presentation.

### //QUESTIONS:

How can I emphasise the sensuousness of cyber-embodiment while resisting making a representation that occludes the corporeal body?

Informed by sickness/disability, Embodiment in cyberspace can be expressed and interacted

with in ways that do not exclude or only represent the body. Working in 3D digital rendering, I purposely bring in the problem of representation by using lifelike rendering techniques. My focus for this project is the digital hand that I have modelled. I point towards an “original” thing in the “real” world with this digital hand.<sup>234</sup> Still, I use it in ways that move beyond this representational function: it works with my digital art practice, taking on and participating in new meaning with the potential to create additional “affects” (drawing from Simon O’Sullivan’s approach to art and its meaning).<sup>235</sup> It is important for this work that there is a recognisability to the digital media because, as I learn from the experience of disability, adaptive practices should not be thought of as inferior.

Beyond the recognisable image of a hand, my framing of digital practice moves beyond the aesthetic of the imagery. The aesthetic devices within my imagery are still important; the aesthetic (both visual and sonic) drives the movement of digital practice. In this sense, cyberspace is not a space that contains things but a virtual space of movement and potential instigators that expand and activate with interaction. Because of this illness, my reality has changed in its structuring: through intensities, fluctuations and sensations. This abundant and active virtual structuring of being a body flows easily with the virtuality of digital media because so much of the activity is made up of affect. Embodiment in digital media is a particular method for participating and practising digitally. This method is an adaptive approach to interacting with virtuality. My contribution is this approach that embraces the excess virtuality as part of my method, where I draw from the sensual intensities of my embodiment to stage potential encounters that activate virtually. Yet, these encounters can both express and affect the “physical” body.

The digital hand features in all three of the works shown. It has helped me to feel my way through

---

<sup>234</sup> See page 49 for text on the digital hand's relation to the original.  
<sup>235</sup> O’Sullivan.

these works. Acting as a recognisable anchor point: the figurativeness of the hand draws the viewer in. One can instantly recognise oneself in the work and realise what it points to: me, you, or someone elsewhere. It also points back at itself, becoming what it is: *a* hand or *the* hand. The uncanny needs this recognition; it operates by first drawing one in through the comfort of the familiar. The body is familiar to everyone who possesses one. But the body can surprise you. My body has led me astray; once familiar, it has become unruly and relentlessly vocal. There are glimmers of bodily familiarity in cyberspace: avatars and images that look familiar, but things can move, multiply and spread differently in this space. Much as the sick body expands and moves differently from the healthy. My body has become more than familiar, which is where the uncanny kicks in: it shifts in unnerving ways while remaining recognisable.<sup>236</sup>

Because so much of this shifting is invisible and indescribable with words, art has given me a way to express this shifting of my body. *Blender* has given me scope to expand the remit of my imagery, allowing me to make things and make them move and interact in ways that would otherwise be too difficult for my body to replicate in a different medium. In the work *Quiet My Body’s Incessant Mattering*, the digital hand presses its finger into an eyeball that compacts in response.<sup>237</sup> Surrounding the finger and eyeball is a cave-like structure encrusted with hundreds of red jelly-like bubbles. The scene itself is familiar in ways; it reminds me of a body, but if a body was a landscape. The flooring and arch structures undulate and dimple like soft flesh. I use “subsurface scattering,” this material mimics the density and light absorption of skin, making for a soft surface. The bubbles are densely packed and distributed organically. The bubble material is translucent, with a liquid-like sheen. In the background is a ring light, another familiar image; it helps light the screen, drawing out all the features of these materials. With music, I build tension and overlay words which flow seamlessly

---

<sup>236</sup> See page 113 for Julia Kristeva's use of the uncanny and page 110 for the "uncanny valley."  
<sup>237</sup> Anna Hughes, *Quiet My Body’s Incessant Mattering*, Digital animation, 2023.

from bodily to computation.

The earlier work, *I Can Feel It*, and works made before, featured many different scenes that quickly flow into one another.<sup>238</sup> My experience of being a body often feels chaotic. Coming to terms with my own neurodivergence, I realise how fast and seemingly chaotic my own cognition is.<sup>239</sup> Although impressive in its ambition, I choose to slow things down for later works, focusing on one scene at a time for the viewer's benefit and giving myself time to focus on this one thing. The viewer has time to be drawn into the scene and take in the imagery. The work *Viscous Feedback* shows the digital hand bouncing up and down on a cushion. The hand sinks into the cushion, and the cushion compacts, creating folds in the surface.<sup>240</sup> These folds are very satisfying to me as they reflect the impact of the hand's contact. The hand and the cushion noticeably interact with each other. The surface of the cushion is a brain-like texture. It has a sheen and indentations, making for an organic and grotesque surface. The bouncing of the hand loops as the video plays out. With this continuous motion, the viewer is lulled into the work and its materiality. The sound and text layer the context of this embodied digital work. The body is digitally mediated in these works, becoming comforting, familiar, sumptuous and grotesque.

//Can a sick/disabled perspective that embraces the difference and pleasure of non-normative embodiments enhance a new materialist understanding of cyberspace, and how does this differ from virtual disembodied emancipation or neoliberal versions of disabled liberation?

Embodiment is not exclusive to sick/disabled people, but sickness can certainly heighten the experience of being embodied. This is not to claim that sick/disabled people have a superpower.

<sup>238</sup> Anna Hughes, *I Can Feel It*, Digital animation, 2022.

<sup>239</sup> See page 157 on Dyspraxia.

<sup>240</sup> Anna Hughes, *Viscous Feedback*, Digital animation, 2023.

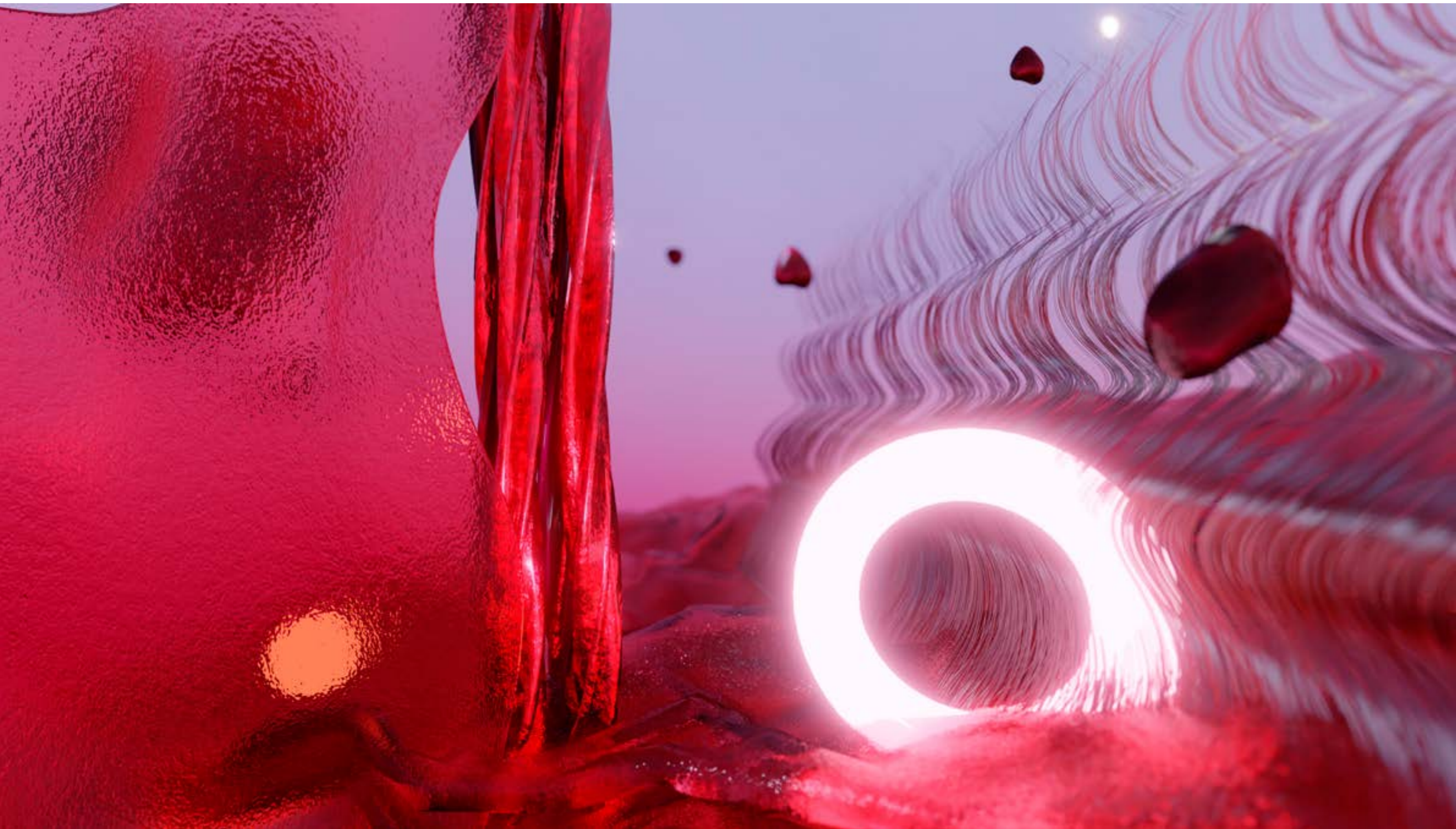
Snyder and Mitchell write about the “able-disabled” and claim that disabled people who achieve in “exceptional” ways (especially in ways that conform to able-bodied physical activities) are used as “inspirational” figures in a neoliberal society.<sup>241</sup> The emphasis is on the individual and their willpower, and not any of the social support or circumstances that got them there. Because of this emphasis, the need for social support is undermined, and these “super-human” representations leave behind those struggling especially through government austerity measures. Deciding to change methods during this project allowed me to make art that suited my body's needs. Digital making allowed me to make art with much less physical strain than a prior sculptural practice. Because of this shift, I have been led to consider a) how my experience of sickness affects my work in digital media and b) the social and political significance of being and creating as a sick body in digital media. Sickness gives me a particular sense of being a body, one that makes it more difficult to separate mind and body (the mind/body dualism) because symptoms mean the body is present in one's thoughts while doing anything.<sup>242</sup> This heightened sense of being a body while immersed in digital media, gives a greater sense of how digital media operates in relation to the “physical” body: at the same time. To emphasise both the *withness* of bodies to digital media and other bodies, and, in turn, the *withness* of cyberspace and “real life,” allows for those heavily affected by the biopolitics of being a body to be included in this digital space.<sup>243</sup> It is therefore important to acknowledge how bodies interact with, bleed into, and hold a presence in cyberspace, as well as the effect cyberspace has on bodies. Therefore, this work operates in response to my body, allowing me to make in ways that suit me and not in a way that leads me to push myself “against all odds,” to become the “able-disabled.”<sup>244</sup> My choice of method is a response to my body, while in content, I draw from embodied experiences.

<sup>241</sup> See page 94 for text on the able-disabled.

<sup>242</sup> For more detail on the cartesian mind/body dualism in relation to this project, see page 94.

<sup>243</sup> See page 83 for more on the digital-divide and for how people who receive hate and discrimination because of their bodies will have a greater sense of the biopolitics of being a body. For this project I do focus on disability because it is my specialism as a body, but I keep in mind the intersections of marginalisation within this project and its remit.

<sup>244</sup> For more on the “able-disabled” see page 94.



39. Anna Hughes, *Blender Experiment #9*, Digital image, 2023.

Instead of explicitly reproducing bodily matter, being a body is composed of both virtual and "physical" matter, which I emphasise through textures, intensities and the affects which are generated by the work. This all circles back to acknowledging that the body cannot be escaped in virtuality, and instead, the body works *with* virtuality.

//What production techniques have the potential to instigate affective encounters, and how might this computationally enabled fictioning contribute to the sociopolitics of cyberspace?

The digital software programme *Blender* allows me to make imagery that figuratively points towards bodily matter. However, the software enables me to work with, transform, study and animate this matter. There is so much more to bodily matter than that which can be seen or heard, and my experience of illness has emphasised the importance of virtuality and "invisible" sensations. My way into expressing the invisible is through its intensities and affects; the figurative elements perform a greater function than merely representing. Computational software allows me to draw on intensities through fictioned explorations of the body.<sup>245</sup> The animation features of *Blender* enable me to explore the relationship between time/space and the body, considering how pace and tension feed one's relation to embodiment. All this software gives me the ability to materialise this experience that is largely virtual. Art and this particular software give me the desperately needed ability to express myself as a sick body when my symptoms are often misunderstood, downplayed, or unnoticed by others. Moving into the post-production phases of this software, video editing software (Adobe Premiere Pro) enables me to piece together this imagery and express it in a diachronic structure when my neurodivergence makes linearity difficult. The inclusion of sound enhances the atmospheric space of the work, where it moves beyond linearity to become an air of intense

variation and pacing. The inbuilt instruments of *Logic Pro X* allow me to search for a sound that *feels* right with the piece, and I can start to build, loop and layer sounds that work with this imagery. This fictioned space is both speculative and pre-existing: the virtuality I express is already there, but these expressions I create through my sound and imagery propel this work into a future where virtuality and the virtuality of the body are acknowledged as part of our embodiment and physical space, leaving no "vulnerable" body behind in our digital emancipation.

---

<sup>245</sup> See page 154 for text on fictioning.

# BIBLIOGRAPHY

- 3Dio. "Professional Binaural Microphones." Accessed March 22, 2023. <https://3diosound.com/>.
- Hypermobility Syndrome- Womens Only Group | Facebook. Accessed August 5, 2023. <https://www.facebook.com/groups/382799295132062>.
- Drew, Benedict. "A Dyspraxic Techno / Dyslexic Shanty." Accessed January 26, 2023. <https://benedictdrew.com/A-Dyspraxic-Techno-Dyslexic-Shanty>.
- Palmer, Abi. "Crip Casino." Accessed January 26, 2023. <https://www.abipalmer.com/cripcasino>.
- Adidas Metaverse. Accessed August 7, 2023. <https://www.adidas.com/metaverse>.
- Anonymous. "History of ASMR." ASMR University (blog), July 2, 2015. <https://asmruniversity.com/history-of-asmr/>.
- Archev, Karen, et al. *More than Real: Art in the Digital Age; 2018 Verbier Art Summit*. Edited by Daniel Birnbaum and Michelle Kuo. Verbier Art Summit Series 2. London: Koenig Books, 2018.
- ArkDes. "WEIRD SENSATION FEELS GOOD: The World of ASMR." Design Museum, London, n.d.
- "Art Monthly: Article: I Object – Maria Walsh on Art and the New Objecthood." Accessed January 27, 2021. <http://www.artmonthly.co.uk/magazine/site/article/i-object-by-maria-walsh-november-2013>.
- "ASMR 50+ Triggers over 3 Hours (NO TALKING) Ear Cleaning, Massage, Tapping, Peeling, Umbrella & MORE - YouTube." Accessed December 19, 2019. <https://www.youtube.com/watch?v=oXp0hTkXiks&t=2187s>.
- Atkins, Ed. *Ribbons*. 2014. HD Video.
- Baker, Carl, et al. "COVID-19 and the Digital Divide," December 17, 2020. <https://post.parliament.uk/covid-19-and-the-digital-divide/>.
- Barad, K. "TransMaterialities: Trans\*/Matter/Realities and Queer Political Imaginings." *GLQ: A Journal of Lesbian and Gay Studies* 21, no. 2–3 (January 1, 2015): 387–422. <https://doi.org/10.1215/10642684-2843239>.
- Barad, Karen. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham and London: Duke University Press, 2007.
- Barratt, Emma L., and Nick J. Davis. "Autonomous Sensory Meridian Response (ASMR): A Flow-like Mental State." *PeerJ* 3 (March 26, 2015): e851. <https://doi.org/10.7717/peerj.851>.
- Baudrillard, Jean. *Simulacra and Simulation*. The Body, in Theory. Ann Arbor: University of Michigan Press, 1994.
- BBC News. "The Retailers Setting up Shop in the Metaverse." July 3, 2022, sec. Business. <https://www.bbc.com/news/business-61979150>.
- Bellamy, Dodie. *When the Sick Rule the World*. Semiotext(e) Active Agents Series. South Pasadena, California: Semiotext(e), 2015.
- Braidotti, Rosi. *Nomadic Theory: The Portable Rosi Braidotti*. Gender and Culture. New York: Columbia University Press, 2011.
- Brathwaite-Shirley, Danielle. 'From The Ground Up : Resistant Archives'. Presented at The Urgency of the Arts Lecture series, Royal College of Art, December 2, 2020.
- 'Built to Scale — MURMURS LA'. Accessed February 22, 2020. <https://murmurs.la/Built-to-Scale>.
- Burrows, David, and Simon O'Sullivan. *Fictioning: The Myth-Functions of Contemporary Art and Philosophy*. Edinburgh: Edinburgh University Press, 2019.
- Castori, Marco. 'Ehlers-Danlos Syndrome, Hypermobility Type: An Underdiagnosed Hereditary Connective Tissue Disorder with Mucocutaneous, Articular, and Systemic Manifestations'. *ISRN Dermatology* 2012 (November 22, 2012): 751768. <https://doi.org/10.5402/2012/751768>.
- Catmull, Edwin, and Fred Parke. *A Computer Animated Hand*. 1972.
- Chang, Eunhee, Hyun Taek Kim, and Byoungyun Yoo. 'Virtual Reality Sickness: A Review of Causes and Measurements'. *International Journal of Human-Computer Interaction* 36, no. 17 (October 20, 2020): 1658–82. <https://doi.org/10.1080/10447318.2020.1778351>.
- Cuboniks, Laboria. 'Laboria Cuboniks | Xenofeminism'. Accessed September 16, 2019. <https://www.laboriacuboniks.net/>.
- Demmler, Joanne C, et al. 'Diagnosed Prevalence of Ehlers-Danlos Syndrome and Hypermobility Spectrum Disorder in Wales, UK: A National Electronic Cohort Study and Case-Control Comparison'. *BMJ Open* 9, no. 11 (November 2019): e031365. <https://doi.org/10.1136/bmjopen-2019-031365>.
- Devereux, Cecily. 'Hysteria, Feminism, and Gender Revisited: The Case of the Second Wave'. *English Studies in Canada* 40, no. 1 (March 2014): 19–45. <https://doi.org/10.1353/esc.2014.0004>.
- Devlin, Hannah, and Hannah Devlin Science correspondent. 'Scientists Make "Slightly Sweaty" Robot Finger with Living Skin'. *The Guardian*, June 9, 2022, sec. Science. <https://www.theguardian.com/science/2022/jun/09/scientists-make-slightly-sweaty-robotic-finger-with-living-skin>.
- Digital connection in the metaverse. 'Digital Connection in the Metaverse | Meta'. Accessed August 7, 2023. <https://about.meta.com/uk/metaverse/>.
- Dixit, Pranav. 'AI Image Generators Keep Messing Up Hands. Here's Why.' *BuzzFeed News*, January 31, 2023. <https://www.buzzfeednews.com/article/pranavdixit/ai-generated-art-hands-fingers-messed-up>.
- 'DIY Edible Fake Blood: 4 Recipes- YouTube'. Accessed February 25, 2020. <https://www.youtube.com/watch?v=PiiMqe9arlk&t=50s>.
- Drew, Benedict. *Dyspraxic Techno*, Courtesy of Matt's Gallery. 2017. Mixed media installation.
- Ed Atkins Interview: Something Is Missing, 2017. <https://www.youtube.com/watch?v=H1iwLbwxKys>.
- Edimo, Cynthia O., et al. 'The Dermatological Aspects of hEDS in Women'. *International Journal of Women's Dermatology* 7, no. 3 (January 29, 2021): 285–89. <https://doi.org/10.1016/j.ijwd.2021.01.020>.

'Ellimacs Sfx Makeup- YouTube'. Accessed January 6, 2020. <https://www.youtube.com/user/macsmoser>.

'#EnoughIsEnough – The Ehlers-Danlos Support UK'. Accessed August 18, 2023. <https://www.ehlers-danlos.org/enough/>.

Fiumano Clase. 'Libby Heaney- Works'. Accessed January 26, 2023. <https://www.fiumanoclase.com/artists/188-libby-heaney/works/>.

Fournier, Lauren. *Autotheory as Feminist Practice in Art, Writing, and Criticism*. Cambridge, Massachusetts: The MIT Press, 2021.

'GLUT'. Accessed February 23, 2023. <https://glut.website/#text>.

GOV.UK. 'Portraying Disability'. Accessed February 1, 2023. <https://www.gov.uk/government/publications/inclusive-communication/portraying-disability>.

Hamberg, Katarina. 'Gender Bias in Medicine'. *Women's Health* 4, no. 3 (May 1, 2008): 237–43. <https://doi.org/10.2217/17455057.4.3.237>.

Hamraie, Aimi, and Kelly Fritsch. 'Crip Technoscience Manifesto'. *Catalyst: Feminism, Theory, Technoscience* 5, no. 1 (April 1, 2019): 1–33. <https://doi.org/10.28968/cftt.v5i1.29607>.

Hedva, Johanna. 'GLUT', 2021. <http://glut.website/>.

Hedva, Johanna. 'My Body Is a Prison of Pain so I Want to Leave It Like a Mystic But I Also Love It & Want It to Matter Politically'. Presented at the Human Resources, Women's Centre for Creative Work, 2015.

'Hypermobile EDS and Hypermobility Spectrum Disorders – The Ehlers-Danlos Support UK'. Accessed March 17, 2023. <https://www.ehlers-danlos.org/what-is-eds/information-on-eds/hypermobile-eds-and-hypermobility-spectrum-disorders/>.

'Index- Cyberfeminism Index'. Accessed February 18, 2022. <https://cyberfeminismindex.com/>.

Kafer, Alison. *Feminist, Queer, Crip*. Indiana University Press, 2013. <https://muse.jhu.edu/chapter/843101>.

Kristeva, Julia, and Leon S. Roudiez. *Powers of Horror: An Essay on Abjection*. Nachdr. European Perspectives. New York, NY: Columbia Univ. Press, 2010.

Lazard, Carolyn. 'How to Be a Person in the Age of Autoimmunity', n.d., 11.

Lyotard, Jean-François. *Libidinal Economy*. Theories of Contemporary Culture. Bloomington: Indiana University Press, 1993.

'Maggie Roberts (@maggie\_mer) • Instagram Photos and Videos'. Accessed February 16, 2022. <https://www.instagram.com/p/CCgxROYff-r/>.

Mason, Freddie. 'The Viscous: Slime, Stickiness, Fondling, Mixtures'. Royal College of Art, 2019. [https://researchonline.rca.ac.uk/4264/1/Freddie\\_Mason\\_unredactedPhD\\_2019.pdf](https://researchonline.rca.ac.uk/4264/1/Freddie_Mason_unredactedPhD_2019.pdf).

McRuer, Robert. *Crip Theory: Cultural Signs of Queerness and Disability*. Cultural Front. New York: New York University Press, 2006.

Mitchell, David T., and Sharon L. Snyder. *The Biopolitics of Disability: Neoliberalism, Ablenationalism, and Peripheral Embodiment*. Corporealities: Discourses of Disability. Ann Arbor: University of Michigan Press, 2015.

Morowitz, Laura. 'The Monster Within: "The Munsters," "The Addams Family" and the American Family in the 1960s'. *Critical Studies in Television* 2, no. 1 (Spring 2007): 35–56.

'My EDS Survival Kit (Part 1) – Chronically Jenni'. Accessed August 5, 2023. <https://chronicallyjenni.com/2019/09/20/my-eds-survival-kit-part-1/>.

nhs.uk. 'Dissociative Disorders', February 12, 2021. <https://www.nhs.uk/mental-health/conditions/dissociative-disorders/>.

O'Sullivan, Simon. 'THE AESTHETICS OF AFFECT: Thinking Art beyond Representation'. *Angelaki* 6, no. 3 (December 2001): 125–35. <https://doi.org/10.1080/09697250120087987>.

Palmer, Abi. *National Health Shrine*, Collective, Edinburgh. 2019. Mixed media installation.

'Parenting Objects — Blender Manual'. Accessed March 14, 2023. <https://docs.blender.org/manual/en/2.79/editors/3d-view/object/properties/relations/parents.html>.

Russell, Legacy. *Glitch Feminism: A Manifesto*. London, New York: Verso, 2020.

Roberts, Maggie. *Conscious Exotica*. 2018. Mixed media installation.

Roberts, Maggie. 'Uncanny Valley: Difficult Kin'. Aspex gallery, Portsmouth, 2019.

Ryan, Frances. 'Covid Lockdown Opening up World for People with Disabilities'. *The Guardian*, April 20, 2020, sec. World news. <https://www.theguardian.com/world/2020/apr/20/covid-lockdown-opening-up-world-for-people-with-disabilities>.

Seers, Lindsay. 'Matt's Gallery Press Release Nine Elms', n.d.

Seers, Lindsay, and Keith Sargent. *Cold Light*. 2022. Mixed media installation.

Shabot, Sara Cohen. 'Grotesque Bodies: A Response to Disembodied Cyborgs'. *Journal of Gender Studies* 15, no. 3 (n.d.): 223–35.

Shabot, Sara Cohen. 'The Grotesque Body: Fleshing Out the Subject'. *The Shock of the Other*, n.d., 57–67.

Shape Arts. 'Social Model of Disability'. Accessed April 21, 2022. <https://www.shapearts.org.uk/news/social-model-of-disability>.

Shape Arts. 'Stream Now: Can AI Improve Accessibility in the Arts?', July 5, 2023. <https://www.shapearts.org.uk/Blog/shape-arts-podcast-episode-two>.

Siebers, Tobin. *Disability Theory. Corporealities*. Ann Arbor: University of Michigan Press, 2008.

'Simple Deform Modifier — Blender Manual'. Accessed March 14, 2023. [https://docs.blender.org/manual/en/latest/modeling/modifiers/deform/simple\\_deform.html](https://docs.blender.org/manual/en/latest/modeling/modifiers/deform/simple_deform.html).

'Statement on AI Risk | CAIS'. Accessed August 22, 2023. <https://www.safe.ai/statement-on-ai-risk#open-letter>.



'STELARC | THIRD HAND'. Accessed July 3, 2023. <http://stelarc.org/?catID=20265>.

'Subdivision Surface Modifier — Blender Manual'. Accessed March 22, 2023. [https://docs.blender.org/manual/en/latest/modeling/modifiers/generate/subdivision\\_surface.html](https://docs.blender.org/manual/en/latest/modeling/modifiers/generate/subdivision_surface.html).

'Subsurface Scattering — Blender Manual'. Accessed March 21, 2023. [https://docs.blender.org/manual/en/latest/render/shader\\_nodes/shader/sss.html](https://docs.blender.org/manual/en/latest/render/shader_nodes/shader/sss.html).

Tate. "Finger Gloves', Rebecca Horn, 1972'. Tate. Accessed January 31, 2023. <https://www.tate.org.uk/art/artworks/horn-finger-gloves-t07845>.

The White Pube. 'Tai Shani @ Gathering'. Accessed January 30, 2023. <https://thewhitepuke.co.uk/art-reviews/tai-shani/>.

Tolbert, Amanda N., and Kristin L. Drogos. 'Tweens' Wishful Identification and Parasocial Relationships With YouTubers'. *Frontiers in Psychology* 10 (2019). <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.02781>.

University College London Hospitals NHS Foundation Trust. 'Rheumatology'. Accessed August 21, 2023. <https://www.uclh.nhs.uk/our-services/find-service/medical-specialties-1/rheumatology>.

University, Stanford. 'Four Causes for "Zoom Fatigue" and Their Solutions'. *Stanford News (blog)*, February 23, 2021. <https://news.stanford.edu/2021/02/23/four-causes-zoom-fatigue-solutions/>.

Verma, Pranshu. 'AI Can Draw Hands Now. That's Bad News for Deep-Fakes.' *Washington Post*, March 27, 2023. <https://www.washingtonpost.com/technology/2023/03/26/ai-generated-hands-midjourney/>.

Vimeo. 'My Body Is a Prison of Pain so I Want to Leave It Like a Mystic But I Also Love It & Want It to Matter Politically'. Accessed March 12, 2020. <https://vimeo.com/144782433>.

'Webinar: Hypermobility and Neurodiversity – The Ehlers-Danlos Support UK'. Accessed April 12, 2023. <https://www.ehlers-danlos.org/information/webinar-hypermobility-and-neurodiversity/>.

Zylinska, Joanna. *AI Art: Machine Visions and Warped Dreams*. First edition. London: Open Humanities Press, 2020.

Zylinska, Joanna. *Bioethics in the Age of New Media*. Cambridge, Mass: MIT Press, 2009.