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Un Determination

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Abstract

This practice-led qualitative research investigates the relationship between digital artwork and determination. Technology has emerged as a problem for art. Identified with technological determinism, problem solving and scientific privilege, discussions of technology in art such as that proffered by Mark Titmarsh and the earlier *New Tendencies* movement emphasise technology's social and cultural effects and its creation of structures and frameworks that tend to emphasise its power.

A hybrid term, Un Determination, arising from the practical research component of this thesis, questions these strategies for creating digital art work suggests that the role of technology is not so clearly defined.

This thesis consists of a written dissertation plus artworks made during the research period and exhibited at *VCA Artspace 1,* University of Melbourne in December 2019. This project asks in what ways can Un Determination reveal the negotiation of determination by digital artwork, and proposes that Un Determination is a useful, nuanced framework for encouraging future analysis and artworks.

Phenomena that emerged from preparatory research and *Selfie Video* (2019), *Selfie Cloud* (2018), are used as case studies in discussion of Un Determination during a period of making, researching and contemplation. The exhibition consists of a video of a virtual model of the artist in her studio, and three large scale works each consisting of thirty black acrylic panels hand-printed with white ink.

Given the qualitative research methodology, the dissertation offers insights but no grand narrative – identifying new questions and directions for projects. It examines and refers to artists including *New Tendencies*, Thomas Ruff, Seth Price, Roger Caillois and Dana Schutz and theorists including Martin Heidegger and Donna Haraway.

It is argued that Un Determination is a critical zone for examining digital artwork situated in a deterministic structure, departing from this paradigm.

The dissertation first defines terms used in digital artwork, establishing "digital" as including both handmade and technology-based media, with technology as knowledge situated in and reflecting the social and cultural power structures of contemporary and past times, including zombie code.

Section 2 of the paper considers the concept of Determination from which Un Determination is defined and departs.

Three characteristics of Determination emerged: firstly, the retreat of the artist to creator of

systems; secondly, the creation of boring artwork, through relying upon the strategy of causal necessity and the use of pseudorandomness; and lastly, the reduction of materialisation to idea and a system of representation.

Section 3 builds a case for Un Determination by examining three phenomena emerging from practical research: Case Study 1: Serial Killers: reinstates the artist as poet in the digital artwork, Case Study 2: How I was swallowed by the Blob and more or less lived: disrupts boredom allowing viewers to experience their own death and ascension; and finally; Case Study 3: Please touch me: introduces materialisation, touch and experienced time into digital artwork, identifying and departing from Determination's privileging of vision, its homogenisation of touch and its view of time as duration.

Section 4 identifies questions raised by Un Determination: about the artist as collaborator with technology, data collection as performance and labour in materialisation. In addition, questions arise focusing on the implications of time, inefficiency and touch. The movement of material from idea to its connection with temporality is particularly interesting.

More research is necessary. Ultimately the Un Determination opens up the potential of questioning previously held assumptions about the conceptual structure of digital artwork.

Declaration

This is to certify that

the thesis comprises only my original work towards the masters except where indicated in the Preface,*

due acknowledgement has been made in the text to all other material used,

the thesis is 13,449 words in length, exclusive of tables, maps, bibliographies and appendices.

Alison Kennedy

Preface

Indigo Kuhn assisted in taking photographs, according to my direction in compliance with the requirements of technology. This is noted in the dissertation. Indigo Kuhn is not a professional photographer.

Funding was received to support the practical research of this thesis from the Faculty of Fine Arts and Music Small Grants Scheme 2018.

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UN Determination

There is another world and it is in this one.

--Anonymous, possibly Paul Éluard

Introduction

Problem Statement

This practice-led research investigates the relationship between digital artwork and determination. Technology, identified with technological determinism, problem solving and scientific privilege, has emerged as a problem for art. Discussions of technology in art such as that proffered by Mark Titmarsh[1] and the earlier *New Tendencies* movement emphasise technology's social and cultural effects and its creation of structures and frameworks that tend to emphasise its power.

A hybrid term, Un Determination, which arose from the practical research component of this thesis, questions these strategies for creating digital artwork, suggesting that the role of technology is not so clearly defined.

This thesis predominantly refers to *Selfie Video* (2018) and *Selfie Cloud* (2019), both shown in *VCA Artspace 1*, University of Melbourne in December 2019, as well as works created during the research project.

The structure of the written paper is as follows:

Section 1 briefly outlines the research strategy and method adopted.

Section 2 discusses the underpinning of Un Determination as it relates to artwork. Due to the scope of this project, this paper discusses exemplary ideas based on relevance to the practical work.

Section 3 offers an analysis of phenomena that have emerged from the research work in relation to these ideas.

Section 4, the conclusion, does not offer or purport to offer a grand narrative about technology,

[1] Mark Titmarsh, *Expanded Painting: Ontological Aesthetics and the Essence of Colour* (London, UK.: Bloomsbury, 2017). Titmarsh, for example, argues that Art has become a form of entertainment and that the role of cultural definition that art used to have has been taken by technology. 121.

instead suggesting that, in reconsidering technology, Un Determination can form the basis of further analytic and practical work.

Project Aim

This project consists of work exhibited at *VCA Artspace 1,* University of Melbourne and this paper. Its aim is to ask, in what ways can the Un Determination reveal how digital artworks negotiate determination and to propose Un Determination as a useful, more nuanced framework for encouraging future analysis and digital artworks.

Section 1

Strategy

My work emerges from the chaos and uncertainty of studio practice where the digital artworks assume a life and impetus of their own – eschewing direct intention – as Bolt states, involving wayward independence of artistic intent.[2]

During my practice-led qualitative research, the written exegesis emerged after a period of reflection whilst making digital works – undertaken in an open ended and exploratory manner whilst I undertook general research, contemplation and reading.

Therefore, works produced during this research follow their own particular logic, and are then deliberated upon and analysed to identify phenomena that contribute to the analysis. This project's parameters confine examination exclusively to these phenomena, foreshadowing more work in this area.

Methodology

This research follows the qualitative research methodology of naturalistic inquiry. The basis for the research includes observation, reference to other artworks and the researcher's own experience. The research question narrows and is constantly informed by observation and this iterative research process aims to offer *insight* rather than findings that can be generalised.[3] The aim of this research is to increasingly be able to ask more cogent and critical questions about Un Determination, its use for analysing artwork and its use as the basis of new work.

Merleau-Ponty, in *The Prose of the World,* describes the phenomenological experience of this qualitative methodology. [4] At first, I am new to the text (and by extension the artistic work) then suddenly something unidentifiable piques my engagement. The effect is bodily and creative:

> my thoughts are ablaze, …. I am receiving and giving in the same gesture…. I have brought along what I already know about the meaning of the words, the phrases, and the syntax. I

[2] Barbara Bolt, *Art Beyond Representation: The Performative Power of the Image* (London; New York: I.B. Tauris, 2004), 1.

[3] J Armstrong, "Naturalistic Inquiry," in *Encyclopedia of Research Design*, ed. Neil J. Salkind (Los Angeles: Sage, 2010).

[4] I have used *phenomenon* here to mean something that emerges and appears and is brought to one's notice. The definition of phenomenology that I use is derived from the Greek *phainomenon*– something that presents itself to you and *logy* from the Greek meaning to speak of. It means to examine how the thing – in this case, the artwork – is understood by me drawing on my experiences and research. Thus, I am not adopting Husserl's definition where one performs eidetic reduction or *epoche*.

> have also contributed my whole experience of others and everyday events, with all the questions it left in me—the situations left open and unsettled, as well as those with whose ordinary resolution I am all too familiar.[5]

Method

My practice arises intuitively through reading, thought, experimentation and pursuit of open possibility using both technological and non-technological media in the studio landscape, itself part of the subject of my work. Schilfland poetically writes of the painter Neo Rauch's studio:

> The studio has its clearings and its undergrowth, light and dark zones, its reed beds. Its master …. can never be completely in control any more than... (an artist) can control the incessant weaving and welling up of thoughts, images and dreams ….. You always enter the studio / the self in the morning slightly differently from how you left it the evening before. [6]

My work is practice, the experimentation and application of ideas and effort over time – never controlled, always transformative through what Bolt terms "praxical knowledge": the process of making and the process of "handling" materials and ideas. [7]

Through this research period I have gradually built up a body of work. It is from this work that a logos (or logic) emerges that is the subject of this paper.

The emergence of Un Determination as a problem

This problematisation of the Un Determination (capitalised to indicate that it is used as my construct) specifically arose from my body of work exhibited at the Leipzig (Germany) Baumwoll Spinnerei Artist Residency open studio *(Rundgang),* entitled "Meinst du das oder sagst du das nur so" (Do you mean that or are you just saying it?). The work was intended to respond to Leipzig with the intention of developing a personal digital grammar.

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[5] Maurice Merleau-Ponty, *The Prose of the World*, Northwestern University studies in phenomenology & existential philosophy, (Evanston,: Northwestern University Press, 1973), 11.

[6] Neo Rauch and Wolfgang Büscher, *Neo Rauch : Schilfland : Works on Paper* (München; New York: Prestel, 2009), 8.

7 Barbara Bolt, "The Magic is in the Handling," in *Practice as Research Approaches to Creative Arts Enquiry*, ed. Estelle and Bolt Barrett, Barbara (London: I.B.Tauris & Co, 2012), 34.



Image 1 Alison Kennedy, *Meinst du Das Oder Sagst Du Das Nur So* Installation Image, Baumwollspinnerei Leipzig Rundgang (September 16-17 2017). Photographer Laura Bielau.

Multiple images of the town and environs were used as a basis for a body of two-dimensional computer works combined with digital gestures and printed on papers through a commercial printing process.

The preliminary works: the process

I developed an intuitive system of computer painting combined with virtually cutting and pasting photographic images (both found and authored). I worked with actions mimetic of analogue methods, creating new digital brushes, making gestural strokes with pixels – the "pixy gesture", mixing virtual colours, identifying and zooming in on things that caught my eye, enlarging and replicating details.[8] I quoted, I cut and pasted, I overlaid transparencies, selecting and removing sections of surfaces. I minimised. Then I enlarged to the extent that variations were swallowed through interpolation. I removed positive and negative shapes. I worked sometimes quickly, sometimes slowly, engaging with the emerging work itself rather than referring to original intention.[9]

I engaged with the experimental space of the glowing backlit screen, exploring the work's possibilities – engaging with Bolt's "praxical knowledge" – until my works reached a kind of

[8] As Marshall McLuhan argues, new technology is often invented to improve or make efficient old technology and so the latter is viewed through what he terms a rear view mirror: "our official culture is striving to force the new media to do the work of the old." Marshall McLuhan, Quentin Fiore, and Jerome Agel, *The Medium is the Massage* (California: Ginko Press, 1996.), 52.

[9] However, I'd submit that the difference between the digital touch and the purely physical touch is the sometimes mystifying opaqueness of the connection between cause – movement – and effect – here the created image. As a technician commented to me; "Hell... Photoshop's now over 30 years old…. It's got layers and layers of coding ... No-one really knows what's going on in there." Years of coding modifications have lent an idiosyncrasy to the program. For example, certain actions precipitated random coloured errors (or glitches) on one – and one only – of my computers. No computer expert technician could explain – I simply learnt to work around it, adjusting my actions accordingly.

standstill. [10]

I googled and found a commercial printer nearby. I calibrated my computer to theirs for accuracy. I exhibited a series of twelve works on paper.

I noticed during the exhibition that the digital marks and images had changed. I refused to erase these surprising elements – not brushstrokes or a particular image of material. The things were not entirely authored, not entirely representational and formally inconsistent. Sometimes they appeared playful.

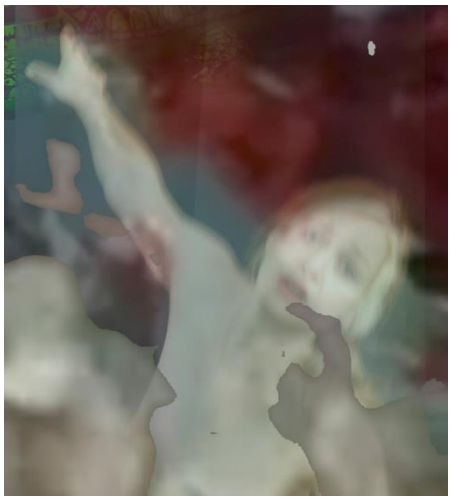


Image 2 Alison Kennedy, *Research image (detail)* 2018. Image of the Un Determination: a surprise element emerges in the bottom right corner mocking the theatrical strategy of the artist.

Sometimes they were flattened amorphous fields of colour. A series of blobby forms emerged.



Image 3 Alison Kennedy. *Research Image* (2017), Image of the Un Determination as Blob.

[10] Bolt, "The Magic is in the Handling", 31.

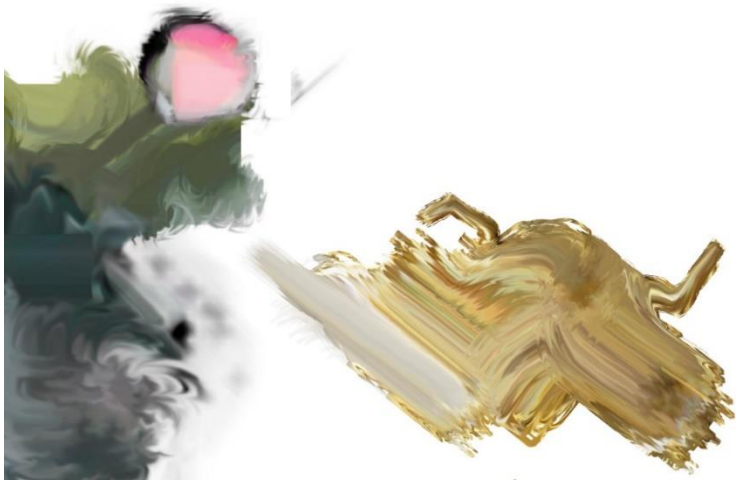


Image 4 Alison Kennedy, *Research Image* (2017), Image of the Un Determination: The pursual of a bull's head by a blobby lusas naturae.

I found myself using the hybrid term Un Determination to identify the things emerging between the printed, the gestural and the technological and also to indicate their cause – somewhere between chance, my intention and technological application.

Initially, the Un Determination represented my frustration – I considered the new elements flaws. After further consideration, I wondered if, to the contrary, this represented a new approach in my work, and whether a closer consideration of the hybrid term would assist my comprehension and creation of digital artwork.

Definitions[11]

Digital is used in this paper in ways that reflect its etymological source: to show or display, and therefore, the pointing fingers of the hand (digits), which were also used for counting, hence something having a numerical basis.[12] Thus, *digital artworks* include both technological and handmade media. In addition, the term includes a sense of being public – in how it shows up and displays itself to others.

Materialisation in this paper means the way in which the artist chooses to display the

[11] Due to the space limitations of this paper, words as defined may change form as appropriate given the syntax of the sentence without changing meaning. They will not be separately defined. For example, materialised will refer to the past tense of materialisation as defined here.
[12] Douglas Harper, "Digit", Online Etymological Dictionary, accessed April 6, 2019, https://www.etymonline.com/word/digital

technologically based work: how it "shows up". This may have a physical materiality – it may emerge as a 3d form and it may have spatial implications, for example, as the “augmented spaces” identified by Manovich’s phenomenological interpretations of space, screens and projections” as adding to space in the tradition of paintings. [13]

Technology is defined broadly in this paper as the application of scientific knowledge to solve a problem. It embraces Latour’s definition of "technoscience" to mean “all the elements tied to the scientific contents no matter how dirty, unexpected or foreign they seem”, the muddied (according to Latour) space where technology, science, marketing, fine art, research, materialism and everything else collide.

Donna Haraway, in "Modest_Witness@Second_Millenium" adopts Latour’s wide definition of technology, noting that it is embedded in invisible white Eurocentric and patriarchal power relations that create the appearance of scientific objectivity. [14]

According to Haraway, technologies that materialise, that construct an item, that communicate the scientific discovery to a broad audience and to peers are based on these “magical powers” – that both creators and witnesses may rely on to withdraw into privileged silence from general critique. [15] Expert criticism is therefore divided from mere cultural opinion. Jutta Weber commenting on Haraway notes that technology is now synonymous with culture.[16] If Weber’s argument is accepted, it follows therefore that technology as identified by Haraway is not impartial.

Technological Determinism

Armin Medosch in “Technological Determinism in Media Art” similarly argues that the isolating privilege of technological creation through the broad social effects of commerce and market research leads to technological determinism where technology is unquestioningly positioned as “the primary mechanism that shapes history”.[17]

Nikolas Rose assumes a technological deterministic view when discussing the general social effects

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[13] Lev Manovich, "The Poetics of Augmented Space," *Visual Communication*, no. 5 (2006), https://is.muni.cz/el/1421/podzim2012/IM115/um/35739372/Manovich_2006_augm_space.pdf.
[14] Donna Jeanne Haraway, "Modest_Witness@Second_Millenium," in *The Haraway Reader* ed. Donna Jeanne Haraway (U.S.A.: Routledge, 2004), 223-250. Haraway writes (in the context of Robert Boyle (1627-1681) who developed an air pump) that he also constructed technologies that hid the construction process amidst invisible magic privilege that is specifically white, male and European, 225.
[15] Haraway, "Modest_Witness@Second_Millenium", 224.
[16] Jutta Weber, "Making Worlds: Epistemological, Ontological and Political Dimensions of Technoscience," *Poiesis Prax* no. 7 (2010).
[17] Armin Medosch, "Technological Determinism in Media Art" (MA Interactive Digital Media Sussex University, 2005),8.

of this wide understanding of technology. For example he argues that the shift from government health care to a profit driven commercial model transforms a patient into an individual consumer of genetic/ fertility technologies, for instance, itself identified through marketing and regulated only by "audits, standards, benchmarks, and budgets" resulting, in turn, in technology designed to regulate and change the human body in a particular socially acceptable manner.[18]

Rosi Braidotti in *The Posthuman*, also notes a blind spot in autonomous technologies: an "over-confidence about the moral intentionality of the technology itself."[19]

Technology in this paper is situated in and invisibly reflects existing power / social structures. Technological determinism may result from the iterative connection between social conditions and research imposing demands upon and controlling the human body.

Technological Tools

> We shape our tools and thereafter they shape us.
>
> --J.M.Culkin *Saturday Review* (often misattributed to Marshall McLuhan)[20]

It is important to briefly consider the nature of technological tools used to create digital artwork.

Programming

Coding for the purposes of this paper is a series of written instructions entered into a computer to direct its use of data.

An algorithm is a series of instructions that necessarily achieve a particular outcome. A key characteristic of an algorithm is its modular decision-making process [21] and its binary division of data as demonstrated in Chris Nicholson's instruction to computer engineers to consider:

> What outcomes do I *care* about? (my emphasis added) Those outcomes are labels that could be applied to data: for example, spam or not spam in an email filter, good guy or bad guy in fraud detection, angry customer or happy customer in customer relationship management.[22]

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[18]Nikolas S. Rose, *Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century.* (Princeton: Princeton University Press, 2007), 4. See also page 6 for a detailed analysis of how technology changes the body.

[19] Rosi Braidotti, *The Posthuman* (Cambridge, UK: Malden, MA: Polity, 2016), 43.

[20] J.M. Culkin, "A Schoolman's Guide to Marshall McLuhan," *Saturday Review* (1967, March 18), 70.

[21] Casey Reas, Chandler McWilliams, and LUST, *Form + Code In Design, Art, And Architecture* (New York: Princeton Architectural Press, 2010), 13.

[22] Chris Nicholson,"A Beginners Guide to Neural Pathways and Deep Learning.," Skymind, accessed January 7, 2019 https://skymind.ai/wiki/neural-network.

As Sandra Harding notes (in the context of discussing gender), binaries as exemplified above hide diversity and favour the socially and culturally dominant – "the other"[23] is made invisible.[24]

The homonym *Care* in this context indicates what is valued by the coder (and what is ignored and unvalued). It also implies a different and broader Heideggerian understanding. "Care" for Heidegger is one's awareness of possibility in the world achieved through action and one's own concern, itself formed through the process of existing in the world. [25.] A person such as a computer programmer becomes absorbed in how he/she exists in the world as "average everydayness". [26]

Therefore, decisions that a programmer makes reflect not only what he/she identifies as relevant but also values that he/she may be unaware or not fully aware of – arising from the lived experiences of living– breathing, joyousness and grieving.

Another characteristic complicating the coding landscape is the prevalence of *zombie code* authored by strangers at different times when writing applications:

> Some of those strangers will be dead. Their code lives on, even though the fingers that typed it are decomposing in a grave. It's zombie code. But instead of eating your brain, it saves your brain from doing a lot of hard work. Best. Zombie. Ever. [27]

Hypostatized as "zombie" – even a helpful one – the half dead/half alive entity gobbling human brains and spirits that refuses to be defeated – critiques the individual agency in code writing. Code is beyond our control and the control of the programmer – reflecting past values and attitudes.

Conclusion

Technology is not impartial, but a prejudiced culture, reflecting and communicating past and present power structures and privileges – it is suggested white European and patriarchal. Its tools reflect historical experience and the biases of past strangers.

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[23] Sandra G. Harding, *Objectivity and Diversity: Another Logic of Scientific Research* (U.S.A.: University of Chicago Press, 2015), 55.

[24] Raymond Gaita notes that the term "the other" similarly hides diversity – for example in grouping together persons of colour and indigenous people and therefore generalising points of view. Raymond Gaita, "Sleepwalking Through Privilege and Oppression?" (The Wednesday Lectures, The University of Melbourne., Faculty of Arts, 18 September 2019).

[25] Martin Heidegger, *Being and Time*, trans. John Macquarrie & Edward Robinson (USA: Blackwell Publishing, 1962). 57 83. (citation has the German edition page number first, followed by the Macquarrie and Robinson edition page number.)

[26] Heidegger, *Being and Time*, 66 94.

[27]Isaac Lyman, "When you finish reading this, you'll know how to code. You'll be bad at it, but whatever." Noteworthy The Journal Blog, accessed July 11, 2019, https://medium.com/@isaaclyman/when-you-finish-reading-this-youll-know-how-to-code-721339942b51.

The framing of technology is usefully to be shifted from a problem-solving framework to considering it as a network of power structures.

Subquestions

The questions arise – if digital work includes technology embedded in past, present and future power structures, how can it be used as a space of critique of these very systems? Can the artist use technology to create personal expression? Does an artist create digital work as sole author or as collaborator with the unseen and unidentifiable programmers? Can work created with technology be researched using a qualitative phenomenological method given technology's inherent expression of structural paradigms?

Section 2: Determination

This section considers Determination, the relevant underpinning philosophical issues, and its application in early computer art, and offers a provisional definition of Un Determination.

Determination – setting the problem framework

Initially I used the term Un Determination in an offhand way – to characterise the relationship between artist and work – identifying unexpected elements.

I assumed when this project started that digital work using technology would be controlled by me, and the few surprises – considered as errors – would be swiftly rectified. So far, technology has been identified as embodied knowledge situated in a relationship of power questioning the assumption of artistic control over the medium and beginning to challenge the notion of sole author.

Identifying the problem of Determination in digital artwork is best done through comparison of two works, both using the same technological system and the same computer file.



Image 5 (left) Alison Kennedy, Still from *Selfie Video (*2019) and (right) Alison Kennedy, *Selfie Cloud* (2018) (silkscreen on 30 acrylic panels). Photographer Michael Blamey.

I argue that the representational difference or 'gap' between the materialization of the digital artworks is the conceptual space of the Un Determination – which queries the assumptions in the definition in Section 1 that technology's role is predominantly to provide solutions and that

technology can be framed mechanistically. For if this was accurate, would not the two digital works be the same?

Determination

In order to form a provisional definition of Un Determination is first necessary to examine Determination.

Determination – Etymology

Determination is polysemic. Its roots are in ideas of limits, results and conclusions: later extended to "a fixed direction towards a goal or terminal point". [28]

Secondly, the word "determination" is used of will – the quality of having firm resolution, such as a "dogged determination" to proceed when things are uncertain and may have little likelihood of success.[29]

The first element considers Determination as *causal necessity*, where only one future outcome is possible in any situation.[30] This concept is expressed in a broad context by Colman as where:

> every physical event, including human cognition and action, is causally determined by an unbroken chain of past occurrences and therefore makes it possible for us to know future effects with certainty. [31]

Causality refers to immutable cause and effect rules. *Necessity* ties present events to future – thus lending direction and stability to things and events, a sense that things cannot happen otherwise –

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[28]Douglas Harper, "determination," Online Etymological Dictionary, accessed March 28, 2019, https://www.etymonline.com/word/determination#etymonline_v_29646).

[29] "determination". OED Online, Oxford University Press, accessed September 11, 2019, https://www-oed-com.ezp.lib.unimelb.edu.au/view/Entry/51238?redirectedFrom=determination#eid

[30] It has been raised that Determination is not synonymous with predictability, e.g. by Atle Ottesen Søvik, *Free Will, Causality and the Self*, Philosophical Analysis, (Berlin: Walter de Gruyter GmbH, 2016). https://ebookcentral.proquest.com/lib/unimelb/detail.action?docID=4742107. At page 3 footnote 2, Søvik refers to Nicholas Saunders, *Divine Action and Modern Science* (Cambridge: Cambridge University Press, 2002), 87–90, 177–78) who argues that due to chaos theory it is possible for determinism not to have only one possible outcome. However, it should be noted that the context where Saunders argues this is his defence of the existence of God, where he must find an argument to overcome the problem that the more scientific research reveals causes, the less there is room for God.

[31] Alison Colman, "Un/Becoming Digital: The Ontology of Technological Determinism and its Implications for Art Education," *The Journal of Social Theory in Art Education*, no. 25, Arts Module (2005), 300n1.

exemplified by Aristotle's teleological understanding of nature.[32] Technological determinism, as discussed above, exemplifies causal necessity.

The second understanding of Determination avoids necessity, permanency, method and rationality and includes negotiating *chance* and *intention.* It includes using improvisation, impulse, accident, whim and capriciousness. In a teleological context chance is *accident* – i.e. something on the way to a goal or a specific purpose.[33]

The divergent qualities of *Causal necessity* and *chance* within Determination are exemplified by the work of *New Tendencies* (1961-1978) – an initially Zagreb based network[34] of artists creating influential exhibitions, events and a magazine that sought to integrate early versions of computer and systems into art practices. *New Tendencies* considered art as research using common industrial materials including plastic and metal.[35]

François Morellet considered a rule-based system as freeing the work from art history, Abstract Expressionism, the trope of artist as creative genius and demystifying art for the observer through inclusion of technology and psychology.[36] He stated:

> A real experiment should… [be] based on controllable elements, whereby systematic progress would be made by following a program. The development … should run on its own, almost outside the control of the programmer.[37]

Causal necessity relieves the burden of freedom of choice and the burden of control for the artist as programmer. The artist's intention is manifested as design and control of the system, not the end result. Morellet superimposes simple geometric line structures creating complexity – appearing as variance – yet he valorises simplicity in art. Here, the artist adopts a cool and detached stance to the artwork.

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[32] Internet Encyclopedia of Philosophy (A Peer-Reviewed Academic Resource), s.v. "Aristotle", accessed August 30, 2019). https://www.iep.utm.edu/aristotl/#H5

[33] John Dudley, *Aristotle's Concept of Chance Accidents, Cause, Necessity, and Determinism* (Albany: SUNY Press, 2012), https://ebookcentral.proquest.com/lib/unimelb/detail.action?docID=3407025, 364.

[34] As Darko Fritz characterises the movement, according to Armin Medosch, *New Tendencies : Art at the Threshold of the Information Revolution (1961-1978)*, Leonardo (Cambridge, Massachusetts: The MIT Press, 2016), 6.

[35] Margit Rosen et al., *A Little Known Story about a Movement, a Magazine, and the Computer's arrival in Art : New Tendencies and Bit International, 1961-1973* (Germany: ZKM/Publications, 2011).

[36] It should be noted that "programming" in this temporal context doesn't mean computer programming.

[37] Originally published in *Groupe de Recherche d'Art Visuele*. Paris 1962, Galerie Denise René and GRAV (eds) April 1962, n.p.; translated from French and quoted in Rosen et al., *A Little Known Story about a Movement, a Magazine, and the Computer's arrival in Art : New Tendencies and Bit International, 1961-1973,* 92.

Material as idea

With the retreat of the *New Tendencies* artist to system creator, material became conceptual structure. Morellet states that "they represent a choice *material* (my emphasis added) for aesthetic experiments – a material that is obviously much more appropriate than some intuitive, unique work, or even than tests concocted by psychologists."[38] Materialisation, by contrast, is confined to documenting these systematic shenanigans. Hence, the use of silkscreen prints on black formica by Gotthart Muller, the use of paint and canvas strictly to record programming results by Zdeněk Sýkora.[39] *New Tendencies* exemplifies how determinism reframes author to programmer and coordinator, material to idea and materialisation to evidentiary recorder using industrial material.

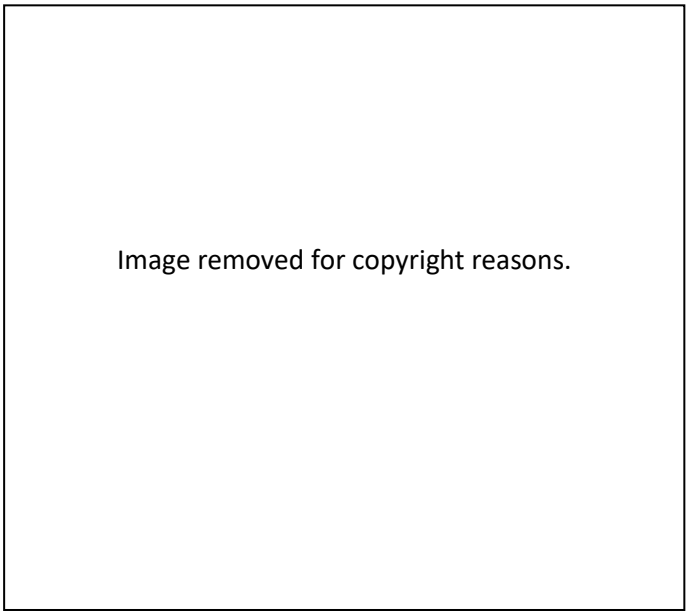


Image 6 Gotthart Muller*, 64/6, 1964*, silkscreen white ink on black formica in Maja Turčić, Vilko Žiljak, Ivana Žiljak-Stanimirović, "Individual Stochastic Screening for the Development of Computer Graphics" Acta Graphica 22(2011)3-4, 69-78. 72.

[38] Rosen et al., *A Little Known Story about a Movement, a Magazine, and the Computer's arrival in Art: New Tendencies and Bit International, 1961-1973*, 92.

[39] Sýkora emphasises this in describing his process: "It is about the programming of structures. Their characteristics are determined by a type of element, and by the rules they follow. The elements are built up from simple geometric forms – by dividing or joining those forms. These are constructed in such a way that the machine can distinguish them by type and position…" [Zdeněk Sýkora in :tendencije 4, exhib.cat., Galerija suvremene umjetnosti, Zagreb, 1970, n.p. ;translated from the French]" in Rosen et al., *A Little Known Story about a Movement, a Magazine, and the Computer's arrival in Art: New Tendencies and Bit International, 1961-1973,* 393.

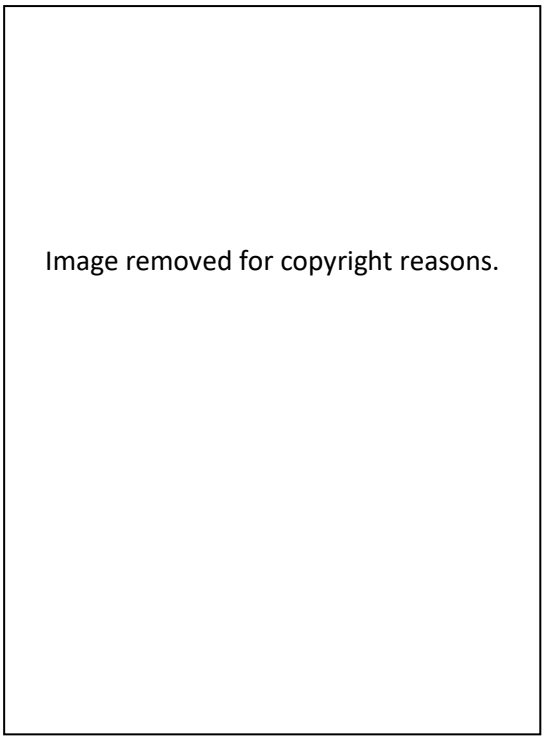


Image 7 Zdeněk Sýkora*, Black and White Structure, 1966–1967*, oil on canvas, 220 × 110 cm, Prague City Gallery, acquisitions 1968. Restorer: Tomáš Lahoda, 2016. In Prague City Gallery, accessed August 16, 2019, http://en.ghmp.cz/past-exhibitions/prague-city-gallery-presents-works-from-its-repositories-zdenek-sykora-black-and-white-structure/.

Boring Art: the problem of Causal Necessity in the Digital Artwork

> The secret of being a bore is to reveal everything.
>
> – Voltaire, *Sept Discours en Vers sur l'Homme* (*Seven Discourses on Man, in Verse*) (1738)

The strategy of transparency of process combined with the retreat of both artist and materialisation to programmer and stenographer respectively, may result in art that fails to engage the observer. As noted by Voltaire, it may lead to boring art.

Umberto Eco in his catalogue essay "Arte Programmata" (Programmed Art) identifies a response to this problem through introducing chance, albeit in a way that “give[s] it boundaries and potential directions.”[40]

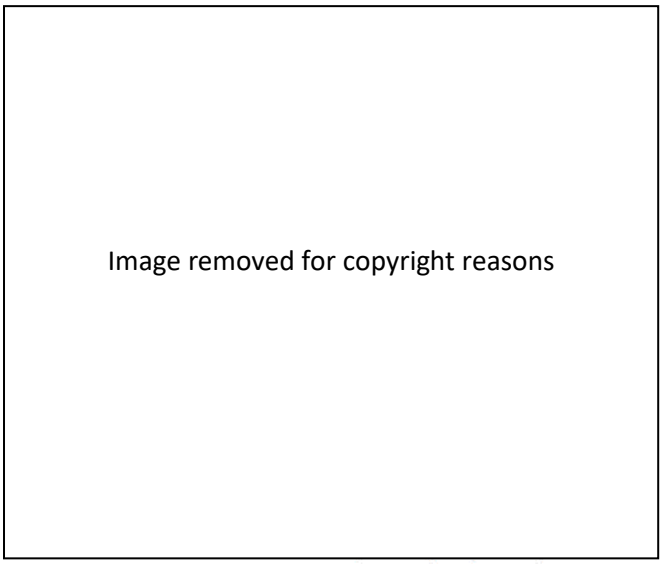


Image 8 Michael Noll, *Selected frames from a computer-generated three-dimensional movie of a randomly changing random object or a new form of "kinetic sculpture".* (1960s) in [DAM] Digital Art Museum, “artworks”, accessed October 2, 2019, http://dam.org/artists/phase-one/a-michael-noll/artworks, exemplifying a response to the problem of boring art through creating variation by pseudorandomness.

This approach, referred to in this paper as *pseudorandomness*[41], subsumes chance to the causally necessary. Michael Noll, another group member writing in 1967, frames the problem as wanting to include obfuscation of process that he identifies as creativity, that he defines as;

> …regarded as the personal and somewhat mysterious domain of man…[whilst]… the computer can only do what it has been programmed to do – which hardly anyone would be generous enough to call creative.[42]

New Tendencies artists created *pseudorandomness* through tactics including audience participation,[43] incorporating random number generators[44] and conceptually reframing the work as a

[40] Umberto Eco “Arte Programmata” (part of *New Tendencies*) in Rosen et al., *A Little Known Story about a Movement, a Magazine, and the Computer's arrival in Art: New Tendencies and Bit International, 1961-1973*. 98-101, 99.
[41] A term coined by Margit Rosen in “Editorial”, Rosen et al., *A Little Known Story about a Movement, a Magazine, and the Computer's arrival in Art: New Tendencies and Bit International, 1961-1973,* 11.
[42] Michael Noll, "The Digital Computer as a Creative Medium," in *A Little Known Story About a Movement, a Magazine, and the Computer's Arrival in Art: New Tendencies and Bit International, 1961-1973.*, ed. Margit Rosen, Peter Weibel, Darko Fritz, Marija Gattin (Germany: ZKM Publications, 2011), 313.
[43] See Michel Fadat’s work *Un Instrument Visual* (1965) Plastic, steel, paper, lamps that allow audience members to alter lamp positions, in Rosen et al., *A Little Known Story about a Movement, a Magazine, and the Computer's arrival in Art: New Tendencies and Bit International, 1961-1973,* 187.
[44] Such as Edward Zajec in: tendencije4, exhib.cat., Galerija suvremene umjetnosti, Zagreb, 1970, n.p., in Rosen et al., *A Little Known Story about a Movement, a Magazine, and the Computer's arrival in Art: New Tendencies and Bit International, 1961-1973,* 392.

series of variations to be contemplated by the audience.[45]

The Strategy of Chance in the artwork

> Those iron hands of necessity which shake the dice-box of chance play their game for an infinite length of time: so that there have to be throws which exactly resemble purposiveness and rationality of every degree.
>
> – Friedrich Nietzsche, *Daybreak: Book II: Aphorism # 130*[46]

It is worthwhile briefly considering counterpoints to the *New Tendencies* understanding of chance as mysticism in artworks.

The basis underpinning the interplay of chance and determinism is beyond the scope of this paper. In the quest to locate the cause of chance, however, relevant ideas include the debate about chance being epistemological (i.e. incomplete knowledge) or ontological[47] (i.e. a matter of natural order) [48], the existence of a malevolent divine power[49], completely without cause,[50] the failure of an omnipotent divine power[51] and the concealment of chance through the 19th century rise of the law

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[45] Refer to Bruno Munari, in *Arte Programmata, Kinetic Art*, exhib. brochure, organised and sponsored by the Olivetti Company, Italy, and circulated by the Smithsonian Institution, printed in 1964, writes as follows: "It is a field of events, an area of previously unknown world of creativity, a fragment of a new reality to be observed in its continual variations." In Rosen et al., *A Little Known Story about a Movement, a Magazine, and the Computer's arrival in Art: New Tendencies and Bit International, 1961-1973,* 176.

[46] Ian Hacking, *The Taming of Chance* (U.K.: Cambridge University Press, 1990), 148.

[47] See Hacking, *The Taming of Chance, 1.* "Throughout the Age of Reason, chance had been called the superstition of the vulgar. Chance, superstition, vulgarity, unreason were of one piece. The rational man, averting his eyes from such things, could cover chaos with a veil of inexorable laws. The world, it was said, might often look haphazard, but only because we do not know the inevitable workings of its inner springs. As for probabilities — whose mathematics was called the doctrine of chances — they were merely the defective but necessary tools of people who know too little."

[48] In Democritus' prescient early theory of atomism, material (seen as consisting of atoms and negative voids) obeys a mechanistic natural order initiated by chance. See John Dudley, *Aristotle's concept of chance: accidents, cause, necessity, and determinism*, SUNY series in ancient Greek philosophy, 2.

[49]David.N. Sedley, *Creationism and its Critics in Antiquity* (Berkeley: University of California Press,, 2008), https://ebookcentral.proquest.com/lib/unimelb/detail.action?docID=470980 Connect to ebook (University of Melbourne only), 134.

[50] Paul Forman argues to the contrary that this complete erosion of causality by Quantum Physics was a cultural framework imposed on scientists to distance themselves from WWI. Paul Forman, "Weimar Culture, Causality, and Quantum Theory, 1918-1927: Adaptation by German Physicists and Mathematicians to a Hostile Intellectual Environment" *Historical Studies in the Physical Sciences* 3 (1971), http://www.jstor.org/stable/27757315, 7.

[51] In "*Essai philosophique sur les probabilités*" (1814) Pierre Laplace wrote: "An intelligence which at a given moment knew all the forces that animate nature, and the respective positions of the beings that compose it, and further possessing the scope to analyse these data, could condense into a single formula the movement of the greatest bodies of the universe and that of the least atom: for such an intelligence nothing would be uncertain, and the past and future alike would be before its eyes." Jonathan Powers, *Philosophy and the New Physics* (London, Methuen, 1982), 138. Quoted in Stephen Kern, *A Cultural History of Causality: Science,*

of probability and the laws of large numbers,[52] and paranoia.[53]

Stallambrass notes an ambiguity in surrealism where the inclusion of chance in the artwork (through André Breton's automatic writing, for example) reveals a belief in the underlying cause of the subconscious, compared to the use of chance in placement of lines on the page.[54] Chance is used to undermine and avoid social mores rather than to indicate causelessness.

Determination and Technology

So far in the discussion of Determination, the digital artwork exemplified by *New Tendencies* artists uses causal necessity subsuming chance as calculated variation – identified as pseudorandomness – as a strategy for including mystery in the artwork to overcome boredom. Yet chance, as discussed above, includes complex causes, all of which may be considered as part of Determination.

How does technological determinism affect the digital artwork?

The next step is to consider how the complexity of technology used in digital art relates to Determination.

It is argued here that technological determinism affects digital work through its *Instrumentality* – its purposeful control of human surrounds and lives for a purpose – and *Productivity* – its regulation of methods of doing and making.[55]

Instrumentality

New Tendencies artists arose out of an elite access to early technological computer research (accessed through the Ulm University of Design). They considered digital artwork to be positioned research rather than as art objects and able to express a Marxist critique of the consumer fetishization of the object, through approaches ranging from raising of consciousness, to new understandings of space and time, to involvement with the more socialist revolutionary political

Murder Novels, and Systems of Thought (Princeton: Princeton University Press, 2004), https://ebookcentral.proquest.com/lib/unimelb/detail.action?docID=457841, 379.

[52]Hacking, *The Taming of Chance,* 1-2.

[53] Sigmund Freud, "Determinism, Chance, and Supertitious Beliefs," in *Psychopathology of Everyday Life* (New York: Macmillan Publishing, 1914), 307. Freud considers the unconscious to be the determining cause and the motive for the action/event. Causation is not linked to rationality.

[54] Julian Stallabrass, "The Mechanical Arts: Science, Mind and Mechanism in Art, France 1918-1931"' (PhD diss., University of London, 1992), 260, referred to in Simone Karen Perks, "The Dice-Box of Chance: The Problem of Causality in Surrealism, Science and the Occult" (PhD diss. The University of Manchester, 2006), 260.

[55] Maarten Franssen, Gert-Jan Lokhorst, and Ibo van de Poel, "Philosophy of Technology", *The Stanford Encyclopedia of Philosophy* (Fall 2018 Edition), Edward N. Zalta (ed.), accessed August 26, 2019, https://plato.stanford.edu/archives/fall2018/entries/technology/

Situationist International. [56] The optimistic framing of digital work was considered as a vehicle for a break from art history, contrasting with the contemporaneous pessimistic critique of technology through analysing its effects. See, for example, Joseph Ellul.[57]

Medosch critiques *New Tendencies,* stating that the reductionist nature of technological determination, coupled with its identification with dominant culture, means it is impossible for digital artwork to do other than reflect the mainstream social position. [58]

Similarly, the contemporary artist and commentator, Hito Steyerl, notes that even rebellious image spam express the forces of hypercapitalism in portraying the human race as "scantily dressed degree-holders with jolly smiles enhanced by orthodontic braces."[59]

Productivity

Aldo Giorgini argues that in the process of an artist using a computer application, the program always compels the artist to "…move with some constraints or on along [sic] some perspective, that are part of the original idea of the program."[60]

Casey and McWilliams argue that the artist must become programmer to overcome this problem; "To go beyond these limitations, it is necessary to customize existing applications through programming or to write your own software."[61] Yet this can be rebutted given the role of zombie code – all programming involves the work of others.

The work of contemporary artist Thomas Ruff demonstrates the technological control of productivity when, referring to his digital photographic practice, he argues that there is a transformation between considering the work on screen and on paper:

> Even though I'm working on finalizing images on a computer screen as a digital file- at a certain point you have to *print them out* (my emphasis added). That's a very important time, because at that point the image isn't virtual anymore. It's a paper print…. That's a very important process – looking at the print, and not looking at the screen. [62]

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[56] Rosen et al., *A Little Known Story about a Movement, a Magazine, and the Computer's arrival in Art : New Tendencies and Bit International, 1961-1973,* 7.
[57] "It is a civilization committed to the quest for continually improved means to carelessly examined ends. Indeed, technique transforms ends into means." Robert K Merton, "Foreword" in Jacques Ellul, *The Technological Society*, trans. John Wilkinson (New York: Knopf, 1964), vi.
[58] Haraway, "Modest_Witness@Second_Millenium", 224.
[59] Hito Steyerl, "In Defence of the Poor Image," *eflux journal*, no. 10 (November 2009), https://www.e-flux.com/journal/10/61362/in-defense-of-the-poor-image/, unpaginated.
[60] Quoted in Esteban García and David Whittinghill, "Art and Code: The Aesthetic Legacy of Aldo Giorgini," *Leonardo* 44, no. 4 (2011),311.
[61]Reas, McWilliams, and LUST, *Form + Code In Design, Art, And Architecture,* 25.
[62] Thomas Ruff, *Taken from a Conversation with Martin Barnes at Thomas Ruff's Studio, Dusseldorf, 23 April 2018*. Tripe | Ruff London, V&A, unpaginated, (back page of publication).

On this understanding, one prints out the work with the aim of achieving "Excellent reproduction of … artwork, reproducing all details."[63] Once again, materialisation withdraws from the artwork, entering into what Bolt argues is a "system" of representation – "that fixes the world as an object and resource for human subjects" aimed at accuracy and complete verisimilitude.[64] For Ruff the artist's creative work is concluded in the technological sphere calibrated for accurate reproduction, and materialises through a process of causal necessity aiming at verisimilitude. Yet, digital work combines both.

As Alison Colman notes, artwork involving technology "rooted in a utopian determinist perspective, and the technology's 'intended' purpose that instigates and drives the work's creation" will tend to "showcase technology itself". [65]

Colman concludes that technological work chosen to exhibit mastery over the media will not question its assumptions.

Conclusion

This discussion identifies three ways in which determination manifests in the digital artwork:

1. The retreat of the artist to creator of systems, where technology (in its tools and its instrumentality and productivity) reflects the dominant culture – rendering critique of this culture impossible – for example in the art of François Morellet. Positioning the artist as programmer will not necessarily overcome this problem, given the use of zombie code.
2. Boredom in artwork created through generating art through the strategy of causal necessity and the use of pseudorandomness to overcome this (as seen in the work of *New Tendencies* artists Gotthart Muller, Zdeněk Sýkora and Michael Noll); and
3. The reduction of materialisation to idea and a system of representation as exemplified in the work of Thomas Ruff.

[63] "Fine art inkjet giclee & canvas printing" accessed December 14,2018, https://www.colourfactory.com.au/fine-art-print-services-melbourne/fine-art-inkjet-giclee-printing-melbourne/ .
[64] Bolt, *Art Beyond Representation: The Performative Power of the Image,* 12.
[65] Colman, "Un/Becoming Digital: The Ontology of Technological Determinism and its Implications for Art Education", 279.

Un Determination: Provisional definition

"Un"

The prefix Un- primarily connotes negation, but it can also be used to indicate the freeing up of potential (e.g. unfrock), the bringing something out (e.g. unbosom) or reduction and unsettling (e.g. unmask)."[66]

Un Determination can be provisionally defined as the recognition of potential arising from opposing, negotiating and revealing the characteristics of Determination discussed above.[67] In this paper it will be discussed in terms of digital work made as part of the research process.

Un Determination as zone

Un Determination is best understood as a zone, analogous to Irit Rogoff's discussion of "Borders" in *Terra Infirma.*[68] Rogoff refers to and adopts Deleuze's understanding of line of flight[69] something that carries us away – as a line of movement such as the retreat of an army. Writing in the context of geographical nation borders, she argues for a conceptual disidentification zone, a voided zone in the midst of division.

Rogoff notes that this enables;

> at once an ability to see through the structures that we are living in and to analyse them in a theoretically informed way, while at the same time to recognise that for all of one's critical apparatus, one is nevertheless living out those very conditions.[70]

Rogoff additionally writes that this requires combining insight based on experience as well as

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[66] OED Online. Oxford University Press, s.v "un", accessed May 2, 2019, https://en.oxforddictionaries.com/definition/un-.

[67] When the Un Determination first emerged as a conceit I called it a "neologism". This misnomer was substituted, after consideration, by "hybrid" whose etymology (from Douglas Harper "hybrid", Online Etymology Dictionary, accessed March 27, 2019 https://www.etymonline.com/word/hybrid#etymonline_v_16099.) goes back to both the progeny of two diverse plants or animals and more obliquely to "hubris", violent "presumption towards the Gods." The Un Determination exemplifies a hybrid -- the disruptive, impossible offspring upsetting divine hierarchy. It is a unique and troubled creation.

[68] Irit Rogoff, *Terra Infirma Geography's Visual Culture* (London: Routledge, 2000), https://ebookcentral.proquest.com/lib/unimelb/detail.action?docID=1111666, Chapter 4.

[69] Gilles Deleuze and Felix Guattari, "Politics," in *On the Line, tr. John Johnston* (New York: Semiotexte, 1983), 70.

[70] Irit Rogoff, "Exhausted Geographies", 2013, paper delivered as part of a research residency at the Musée des Civilisations de l'Europe et de la Méditerranée, Marseille, accessed April 21, 2019, http://ateccarem.tumblr.com/exhaustedgeographies, unpaginated.

rational analysis; "…it requires that the experiential dimension of what we are living out be brought into contact with the analytical."[71]

The Un Determination as zone is a cautiously optimistic approach (also consistent with Rogoff's stance) eschewing utopian thought, recognising the complexities inherent in digital artwork dispersing meaning in a zone of disidentification.

[71]Rogoff, "Exhausted Geographies", unpaginated.

Section 3: Case Studies

Overview

Section 3 discusses how Un Determination can function as a tool for analysis and suggest future investigations.

It examines as case studies three phenomena emerging from the digital artwork produced during this research period, that correspond to the three characteristics of Determination noted above. The phenomena emerge from the works *Selfie Video* (2019), a thirteen minute animated video, and *Selfie Cloud* (2018), a compilation of 30 individual silkscreened acrylic panels.

Case Study1: Serial Killers: the Un Determination reinstates the artist as poet in digital artwork

Selfie Video (2019) is an animation of a virtual three-dimensional object (myself in my studio) created from a series of two dimensional images – a *serial method* as defined by Bochner[72] – that uses a predetermined systemic method to create a work.

Selfie Cloud (2018) is created from a large number of consecutive images taken of me in my studio by an (increasingly reluctant) assistant, according to imperatives set by technology. The aim of this is to provide the necessary data for photogrammetry software, that is designed with the purpose of transforming images of small items such as museum exhibits into virtual models. Photogrammetry is often assumed to use Euclidian least squares mathematical technique to avoid bias, but upon closer analysis it exemplifies the bias of technological tools discussed earlier, including unexplained and often unidentified and hidden aestheticizing algorithms. [73]

This preparatory work is a series of tedious, repetitive actions and movements. The labour for cultural production here is senseless – it is removed both from the human senses (to touch, to taste, to view), being concerned more with data collection) and it appears systematic yet lacking in any particular driving reason. This senselessness derives not from the idiosyncrasies of the genius artist but from a commercial computer application standing aloof and apart from any art institution. Like Heidegger's ordinary everydayness, the cultural production here is withdrawn and virtually

[72] Mel Bochner, "Serial Attitude," *Artforum* 6, no. 4, December (1967), 22.
[73] Irene Aicardi et al., "Recent Trends in Cultural Heritage 3D Survey: The Photogrammetric Computer Vision Approach," *Journal of Cultural Heritage* no. 32 (2018): 264.

undetectable in its unremarkableness, revealing itself not in the things used, but in the way they are used: the performance.

Even then, the work is created by a non professional photographer, in a private studio space, with the artist earnestly performing as object – the work has no strategy for revealing itself as public



Image 9 Image of a corner of my studio performing exactly as it is – making-do. Photographer Alison Kennedy.

performance to an audience. The poetics of this preparatory work is at once regulated and haphazard, making do with spontaneous things of the moment that haphazardly appear in the studio. It includes risk of failure, with no particular analysis of this other than the awareness of its "make do" spontaneous character.

Time and motion analysis: the series as Determination.

By contrast Eadweard Muybridge uses a deterministic technique in creating a series. He photographs a moving woman against a backdrop that measures height, and places the series of images horizontally parallel to each other. The naked woman performs a tightly controlled movement captured from two viewpoints in twelve images each. The inscription under this series locates this work squarely as a component of a larger scientific study of time and motion – assuming, as Mitchell points out, the role of darkroom photography as evidentiary record – as index, bearing a direct role to the referent.[74] Time is located throughout this series through Muybridge's creation of a

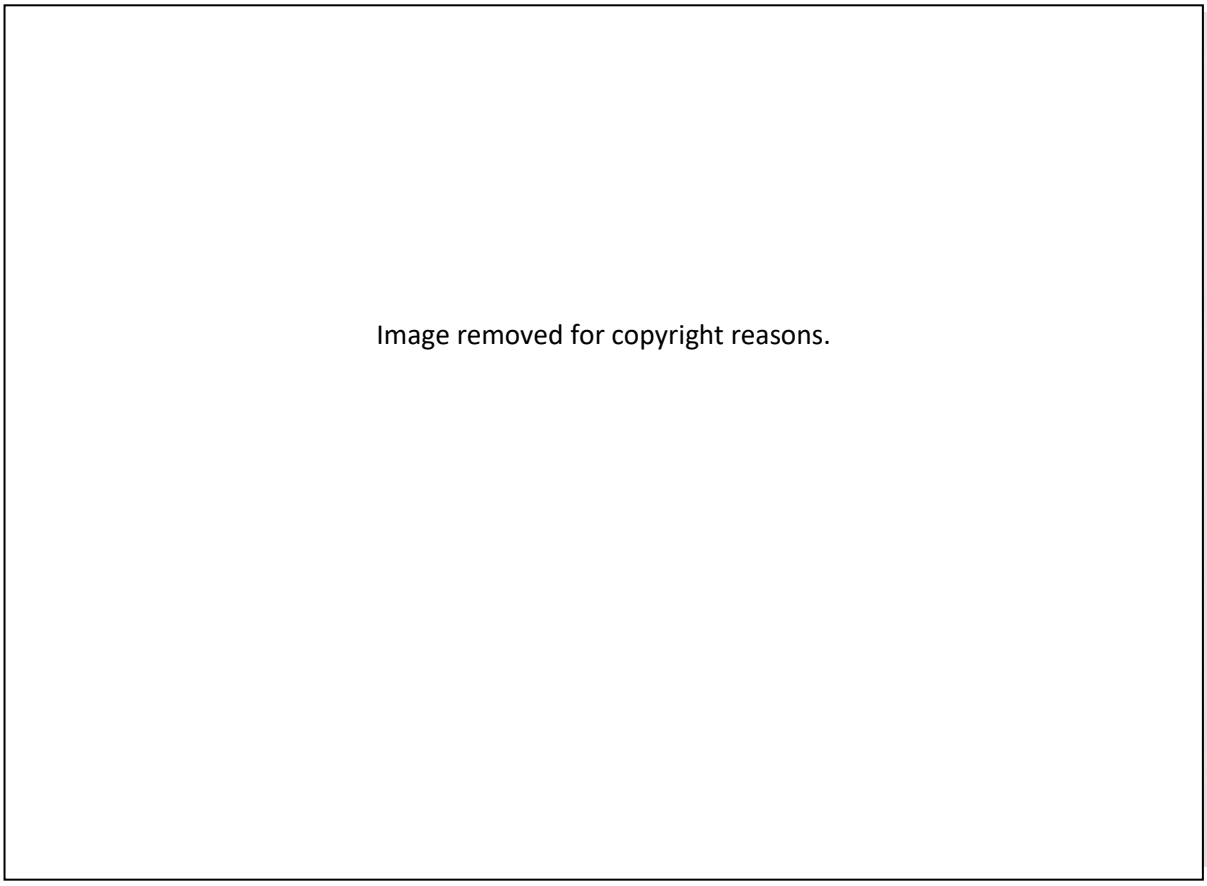


Image 10 Eadweard Muybridge, *Motion Study: Woman and Jug*, (1887), collotype on paper from collection of Ruth Chandler Williamson Gallery, Scripps College, accessed September 1, 2019, https://library-artstor-org.ezp.lib.unimelb.edu.au/#/asset/AWILLIAMSONIG_10313361794.

mechanical clockwork apparatus for taking the photos equal times apart[75] – as duration – (that is the

[74] "Traditional chemical-based photography, we are told, had an indexical relation to the referent; it was physically compelled to form an image by the light rays emanating or reflecting from the subject. This image or likeness was thus doubly referential, a double copy in that it was both an impression and a trace, on the one hand, and a copy or analog, on the other. Both index and icon, it provided a kind of double-entry bookkeeping of the real." W. J. T. Mitchell, *Image Science: Iconology, Visual Culture, and Media Aesthetics* (U.S.A.: The University of Chicago Press, 2015), 49.

[75] Phillip Prodger and Tom Gunning, *Time Stands Still: Muybridge and the Instantaneous Photography Movement* (Oxford: Oxford University Press, 2003), 189. As Prodger notes, this mechanical method has the

"length of time during which anything happens") [76] and as the subject of study. Muybridge systemically breaks down the movement of the woman, imposing a logic of representation by displaying it in multiples. The outcome is a series of collotype prints (involving gelatine prints and photo emulsion) recording this system and the effect of the body's actions involved in space and time (including and subsuming) human variation – or pseudorandomness. This series of works was prepared to assist the Gilbreths' quest to improve efficient body movement through engineering, following Taylorism, and aims to control not only what workers do but to locate the "One Best Way" of doing it. [77]

Muybridge does not capture just duration but causal necessity – presenting the images in a tight series of rectangles. The interstitial spaces vary, broader when dividing the work horizontally and narrower between each image, confirming the images are to be read consecutively in two lines from left to right. The controlled movements display causality and necessity. The technology is indexical and regulatory; time is now duration. The vulnerable human subject performs according to the instructions of the invisible scientist. Muybridge creates a power system exemplifying Determination.

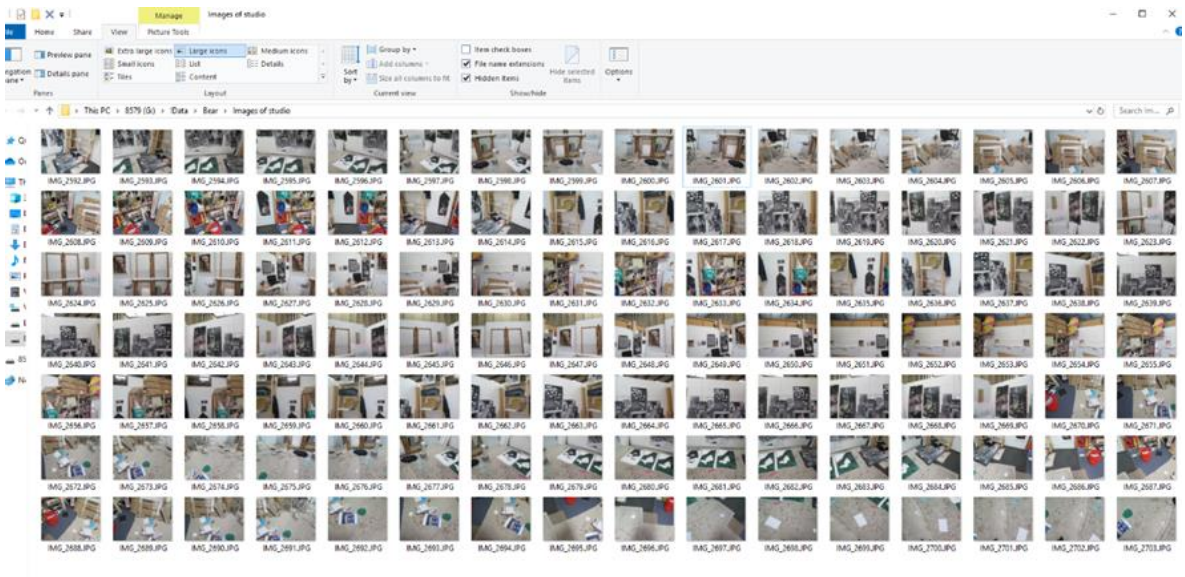


Image 11 Alison Kennedy *Screen Shot Image of Partial Series of Digital Images* used as data for *Selfie Video* (2019).

advantage of allowing for change of pace – unlike the previous method used that relied upon the subject of the experiment physically activating a tripwire.

[76]. Douglas Harper, "duration", accessed September 21, 2019, Online Etymological Dictionary, https://www.etymonline.com/word/duration.

[77] Sharon L. Corwin, "Picturing Efficiency: Precisionism, Scientific Management, and the Effacement of Labor" *Faculty Scholarship* (2003), https://digitalcommons.colby.edu/faculty_scholarship/63: 139. Corwin notes this approach formed the basis of Precisionist Art – that represented the moral efficiency of American manufacturing whilst removing all trace of the labour from the artwork that that created it.

The series above created as part of *Selfie Video* (2019) departs from Determination. The images have a different logos, not to document regulation of movement but to provide data identifying common spatial points of a static object. There is no necessary order in their display. They will be algorithmically cross referenced to excise uncertainty in positioning caused by, for example, movement. The assistant must step around me creating a series of images that overlap. For each step she takes three photos: one that overlaps with the previous and one with the next. She circles around me in increasingly smaller circles that also overlap horizontally, performing a vertiginous movement series choreographed by the needs of the technological application. Paradoxically, this appears as a doubtful stutter – anxiously aiming to record everything through incessant repetition.

By contrast, I must perform as a motionless object. Both subject and photographer are both controlled by a gaze – not, as noted above, the camera's gaze and not the gaze of the centrally positioned person controlling the peripheral,[78] who is after all wearing a VR equipment mask, but the scrutiny that occurs later by technology to identify relevant data it can later use – and the related control of both bodies. As Foucault notes of Jeremy Bentham's Panopticon structure, however, the scrutiny is as controlling as it is asymmetric – it has unknown location and mysterious parameters. [79] Five hundred images are taken for *Selfie Video* (2019) and submitted to the technology for approval and over four hundred are rejected – for unknown reasons.

The Un Determination manifests here as process. The artist pushes the technology well beyond its stated purpose, negotiates the demands of a technology seeking to control bodily performance by including the average everyday performances of the studio, the artist herself and the assistant who all turn up as they are and make do with what they have – with, unlike Muybridge's series, no performative strategy but with a willingness to expand the technology for a new purpose and intent.

[78] Such as Bentham's Panopticon structure. See Ben F Barton and S. Martha lee Barton, "Modes of Power in Technical and Professional Visuals," *Journal of Business and Technical Communication* 7, no. 1 (Jan 1993).
[79] Barton and Barton, "Modes of Power in Technical and Professional Visuals."

Surface as Transformation

*Selfie Video (*2019) also produces a transformation of the virtual object into surfaces.

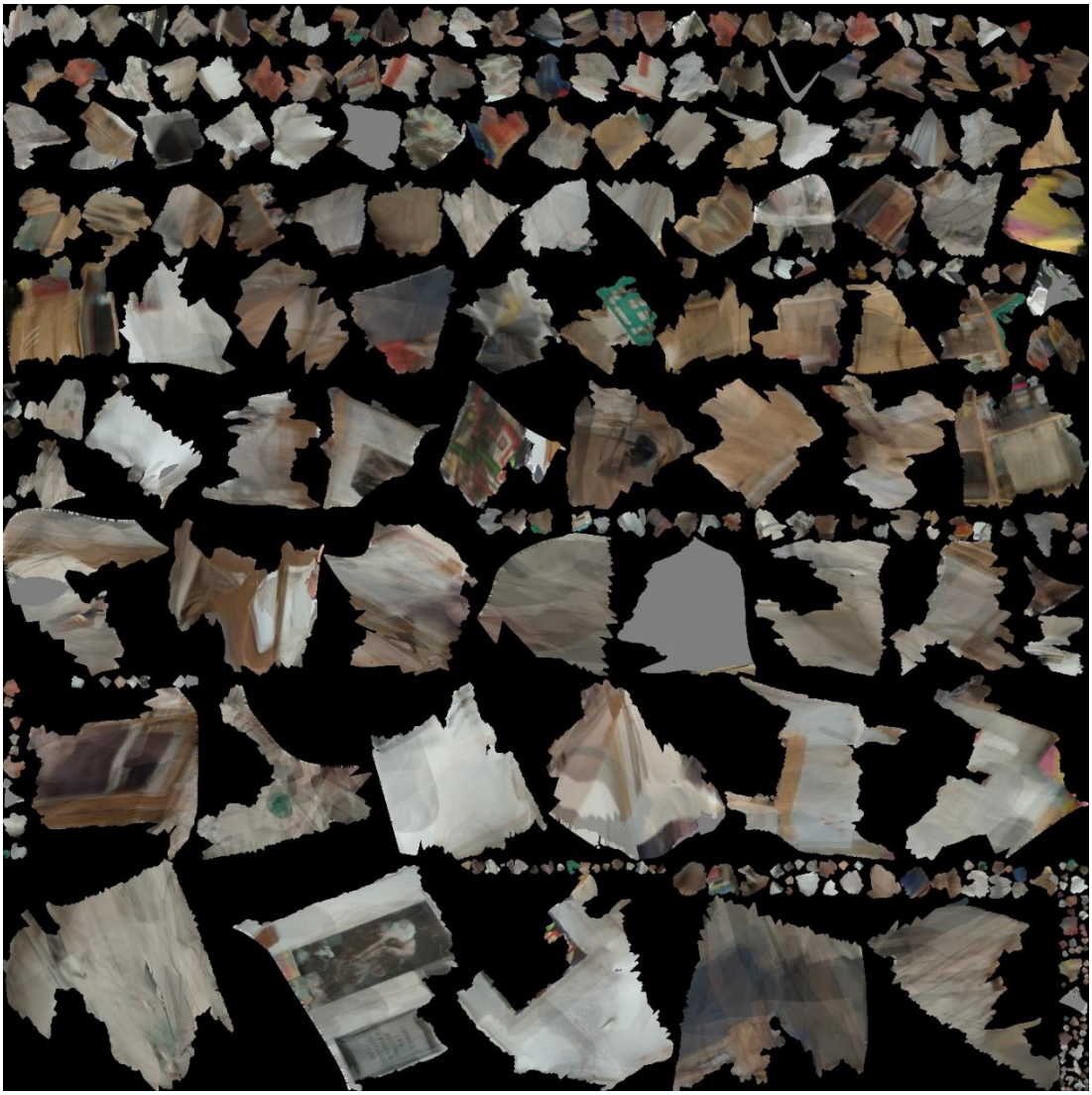


Image 12 Alison Kennedy *Selfie Video (2019)* un series.

The Cut

> Where we have spoken openly we have actually said nothing. But where we have written something in code and in pictures, we have concealed the truth…
>
> – Alexander Roob, *Alchemy & Mysticism: the Hermetic Museum*[80]

The final presentation of this hierarchy of surfaces is peculiar – both particular to myself and

[80] Alexander Roob, *Alchemy & Mysticism: the Hermetic Museum* (Köln: Taschen, 1997), 11.

surrounding space – and strange – existing between object and image and between portrait of the artist and surroundings that have been spontaneously generated by technology according to its own logic. Here, the technology creates the terrain it maps.[81]

The surfaces represent the relationship of inside to outside the blurred images combining the casual debris of the studio with an occasional glimpse of hand or a flesh tone. As Samuel Beckett writes:

> …an outside and an inside and me in the middle, perhaps that's what I am, the thing that divides the world in two, on the one side the outside, on the other the inside, that can be as thin as foil, I'm neither one side nor the other, I'm in the middle, I'm the partition, I've two surfaces and no thickness…[82]

To have two surfaces and no depth – is to be a cut actively slicing the world into two flat representations. The technology shows me up as if my identity has physically merged with the tools and equipment, I use for creating work, to the extent I'm no longer physically depicted there.

Or possibly the technology presents a series of clearly ordered windows. The fragments appear to have been placed where they can fit the overall surface. There is no suggestion of how to read this – the eye is free to wander, settling on things that grab its interest. The work can be seen in terms of Heidegger's "*Lichtung*" (or clearing in the forest), where not only are one's activities involving a network of equipment (such as myself in my studio) illuminated, but also what is unknown, the surrounding darkness hiding things and activities as yet unrevealed.[83] The negative spaces in the series of surfaces expresses the interior world.

The series of surfaces are also provisional. Unlike Muybridge's series that displays research results, they do not express temporality, or an understanding embedded in bodily experiences (as described by Merleau-Ponty, whose ideas I referred to at the beginning of this paper). Instead, they show up as a set of conditional forms given to the artist, suggesting that sense or understanding might arrive soon: a non series. The forms are separated and spaced out – unlike Muybridge's continuous strip works. The series of fragments present as ciphers – both in the sense of being created by algorithms seeking to communicate meaning in a coded[84] form and in the sense of the fragments' own initial meaninglessness and unimportance that anticipates being able to generate or attract meaning later

[81]Simon O'Sullivan, *Art Encounters Deleuze and Guattari: Thought Beyond Representation* (London: Palgrave Macmillan, Macmillan Publishers Limited 2006), 35.
[82] Samuel Beckett, *The Unnamable*, trans. Samuel Beckett, *The Collected Works of Samuel Beckett*, (New York: Grove Press, 1970), 34.
[83] Heidegger, *Being and Time,* footnote H, 133 171.
[84] "cipher". OED Online. Oxford University Press. accessed September 19, 2019, https://www-oed-com.ezp.lib.unimelb.edu.au/view/Entry/33155?rskey=3TzUBU&result=1#eid

through re-interpretation.

This non series can be considered in light of Roger Caillois' work *The Writing on Stones* which acknowledges a scientific understanding of his collection of stones whilst considering them as disclosing a particular poetry.[85] He writes of his collection that they are:

> an irreversible cut made into the fabric of the universe…which attests to itself and to the hidden laws of our shared formation…[86]

This approach is identified as "material mysticism" [87] – where the search for finding poetic wonder is not confined to pure subjectivity, referring also to the objective qualities of the thing – its invisible rationale that seeks a cause. Caillois, writing of the stone entitled *The Portrait* (below) acknowledges both that the lines and fissures are provided according to natural law and that they provide a kind of poetry.

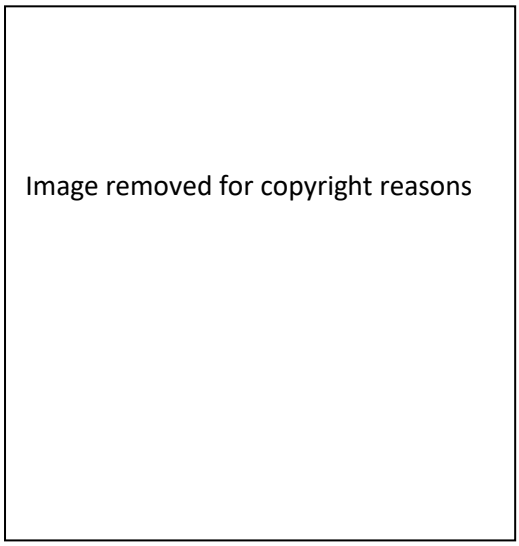


Image 13 Roger Caillois *The Portrait* limestone, (Tuscany 150 x 86 mm) Cut Stone. in Roger Caillois, *The Writing of Stones*, trans. Barbara Bray (U.S.A.: University of Virginia, 1985), 97.

Caillois then proceeds to interpret the stone as portrait, as suggesting a seascape, a man riding a horse and (cheekily given the split between Caillois and members of the surrealist movement) as representing Duchamp's *Nu descendant un escalier*.[88] He writes of the skill of the craftsman in cutting the stone at the right place and at the right time to express the interpretations that reveal

[85] Roger Caillois, *The Writing of Stones*, trans. Barbara Bray (U.S.A.: University of Virginia, 1985).
[86] An excerpt from prose poem *Les Pierres* (the Stones) quoted in Massimiliano Gioni and Natalie Bell, *The Keeper* (New York: New Museum, New York, 2016), 108.
[87] Both in Marina Warner, "The Writing of Stones: Roger Caillois's Imaginary Logic," *Cabinet* no. 29 (Spring 2008), http://www.cabinetmagazine.org/issues/29/warner.php, (unpaginated), and Margaret Yourcenar's Introduction to Caillois, *The Writing of Stones,* xiv.
[88] Caillois, *The Writing of Stones,* 96.

themselves.[89] Before or after the cut the revelations are lost, he writes.

Here, timing is not duration, not the performative anxious stutter of the controlled photographer and the performing subject, not the efficiency of the engineer, but a moment of mystic revelation coupled with one decisive action.

The non series of surfaces offered up by the mysteries of technology provides a similar cut into a larger, more complex ordering system. There is an opaque system at work here that involves programming – combining human experience, past histories as well as calculations. Yet a strange poetry is revealed.

This surface presents a running person, a face profile, the actual face of a person. The person is

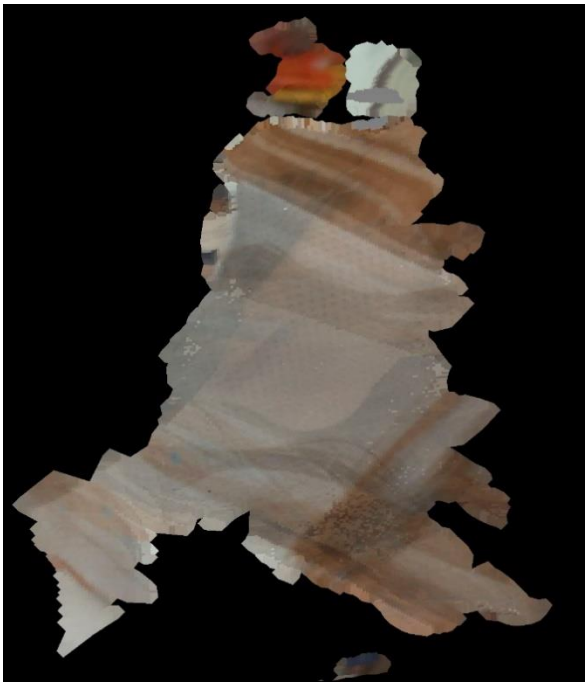


Image 14 Alison Kennedy *Selfie Video (2019)* un series (detail).

dancing or running, he or she may be wearing a hat. I as subject also know that the image is part of a constructed model so I also know that the colours refer to a permanent stain on my studio drop sheet floor, the strange faint strings refer to my hair, the redness is part of a model I am experimenting with in my studio. Yet simultaneously the images emerge and disappear – I endlessly imagine.

Caillois in naming his stone *The Portrait* conceptually frames the work. My work is already framed for me by the technology – I know it emerges from my *Selfie Video* (2019) work, I know the

[89] Caillois, *The Writing of Stones,* 101.

processes used to create it, yet this is a private communication from the technology to me, which reveals its portrait of me. “Here you are,” it says – “this is what I think of you.”

The Un Determination has cut through the extraneous material at exactly the right moment – a transformed Caillois’ Florentine craftsman, it recasts me as replicant. And what does it actually represent? If we look closely at *Selfie 2019* (surface series), what shows up is that all facial features have been erased. At one point a hand is suggested. By portraying me as a series of ciphers it is suggested not that I will be ontologically completed by the work, but to the contrary, that incompleteness and fragmentation is inevitable. Departing from Determination, the interior world, here represented by the gaps between fragments, is unfathomable. There is no clear artistic system or intent here. It seems not to be for display. I am not the sole author of this particular work. I am physically spread over a series of images of objects like a thin coating – the images are peculiar, nonsensical – depicting my merging with everyday items (in what Heidegger would call a system of “unthought"[90] only to reach understanding when they "break".[91]

[90] “'Unthought’ means that it is not thematically apprehended for deliberate thinking about things; instead, … we find our bearings in regard to them…when we enter here through the door, we do not apprehend the seats, and the same holds for the door knob.” Martin Heidegger, *The Basic Problems in Phenomenology* (1927)quoted in Hubert L. Dreyfus, *Being-in-the-World: A Commentary on Heidegger's Being and Time, Division I* (England: The M.I.T Press, 1991), 66.
[91] Heidegger, *Being and Time,* 76 107.

Case Study 2: How I was swallowed by the Blob and more or less lived: The Un Determination overcomes boring digital artwork.

The Appearance of the Blob Part 1

As I worked through early works (referred to in Section 1), the formal aspect of my work became formless. It developed from initial digital brushstrokes to a number of shapeless blobs. As I worked, patterning and difference in the works were smoothed over.

This process relies on *interpolation* using algorithms to average out gaps between known points and to remove "noise" or "error." [92] In doing so, pixels are not simply added, but the *entire* image is analysed or consumed then recreated to a large, loose, formless grouping of pixels or data.

What is the Blob?

The Blob in technical computing terms is a "Binary Large Object" storing a large amount of unidentified data on a database (including images, movies, text and audio files). [93]

Irvin Yeaworth's 1958 movie, *The Blob*[94], has a plotline where an amorphous gloopy blob invades and consumes the inhabitants of a village – afterwards glowing with a red light. Eventually it consumes a cinema audience and the real audience must confront the possibility of its consumption then transformation into glowing mass.

Blobs here are a form of homogenisation consuming then obliterating *difference* to create a new image and material form levelling out contradiction. It is to be contrasted with the scopic view of the film portrayed in Michelangelo Antonioni's 1966 film *Blow-Up,* where a photographer enlarges a disturbing detail in an image to the point where the grain and the image are displayed as pattern.[95] The viewer must decide through an apophenic process whether a crime has been committed. The film questions the need for unambiguous meaning – yet assumes that images will dissolve into patterning to form some sort of understanding. Thomas Ruff creates work using a similar method, in a digital context, compressing found images to the smallest size and worst quality then enlarging

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[92] Franz Leberl, "Photogrammetric Interpolation," *Photogrammetric Engineering and Remote Sensing* 5, no. 41 (May 1975).603. The various different styles of interpolation are beyond the scope of this paper.
93 *Techopedia, s.v.* "Blob Storage", accessed January 15, 2018, https://www.techopedia.com/definition/32166/blob-storage.
[94] Irvin Yeaworth, dir. *The Blob.* United States,: Paramount Pictures,1958. DVD.
[95] Michelangelo Antonioni, dir. *Blow-Up*. Great Britain,: Metro-Goldwyn-Mayer,1966. DVD.

them to exploit visual inconsistencies between pixel blocks.[96]

If meaning is created through apophenia, then the Blob either removes it and creates meaninglessness or substitutes an alternative form of understanding.

Daughter of Blob

The Blob shows up in *Selfie Video* (2019) as a mass of egesta-like material and form that has overtaken my torso. In doing so it swallows my head (associated with enlightenment reason and analysis) – it removes anything to do with the intellect, substituting something far more base.

Susan Sontag argues that in the science fiction disaster film the monster is almost welcomed, saving us from boredom of the small town minutiae. [97] Similarly, the Blob, exemplifying the Un Determination, paradoxically saves the digital artwork from dullness not by adding meaning through apophenia but by erasing it. It refuses to enter into a conceptual space defined by Barthes as the expected studium and the exceptional deathly surprise of the punctum for example, instead, through interpolation, erasing and remaking in an act of aesthetic horror and apocalypse.[98]

Sontag also argues that the havoc created by monsters such as the Blob is eventually remedied through a standard narrative plot (generally involving a young male white scientist hero). Yet in *Selfie Video* (2019) the central figure is stuck, trapped, moving in slow circles, never to leave. Departing from determination, the viewer can experience the impossible thrill of their own death – and in the case of *Selfie Video* (2019) – ascension through pedal extremities.

[96] Ingrid Hoelzl and Marie Remi, "CODEC: On Thomas Ruff's JPEGS," *Digital Creativity* 25, no. 1 (2014), http://dx.doi.org/10.1080/14626268.2013.817434.
[97] Susan Sontag, "The Imagination of Disaster," in *Against Interpretation and Other Essays* (United States: Pcador, New York, 1990), 223-250.
[98] Roland Barthes, *Camera Lucida*, trans. Richard Howes (London: Vintage Books, 2000), 27.

The painter Dana Schutz asks a similar existential question in her work 2004 painting *Face Eater.*[99] "What if people could eat themselves?"[100]

Image removed for copyright reasons



Image 15 (left) Dana Schutz*: Face Eater,* (2004). Oil on canvas48cmx40cm "Dana Schutz" accessed July 30 2019, https://www.saatchigallery.com/artists/artpages/schutz_face_eater.htm. *(right)* Alison Kennedy *Selfie (Video)* 2019 (still.)

Watching the entirety of *Selfie Video* (2019) suggests what is left when one eats oneself – my head as consuming orifice becomes the place for expulsion. Instead of salvation through thought, I descend to inky blankness through my right foot. In *Face Eater*, Schutz suggests that our actions in creating are self destructive. The work presents a living-dead-like portrait, the face reduced to a giant orifice furiously responding to primal need. There is no intellectual rationality of consideration here. Yet even as the face is consumed, we see a trace of the face – eyes and a proboscis – for consumption or as a site for the sense of smell. In *Selfie Video* (2019), the entirety of the torso is gone, we look down from an elevated height then suddenly we ourselves disappear into birth-canal-like orifice.

*Selfie Video (*2019) shatters the boredom of the expected avatar further through its expression of a central void that appears as physical terrain. Like early science fiction writer Jules Verne's *Voyage to the Centre of the Earth* it expresses the fantasy of a co-existing world – but one that sits inside me (Image 17).

[99] Dana Schutz, *Face Eater,* 2004, C 2008. Moderna Museet (Courtesy of Zach Feuer Gallery, New York).
[100] Steven Litt, "What if People Could Eat Themselves?", *ARTnews* (2015), accessed June 10, 2019, http://www.artnews.com/2015/10/23/what-if-people-could-eat-themselves-dana-schutz-on-her-macabre-paintings-in-2007/.

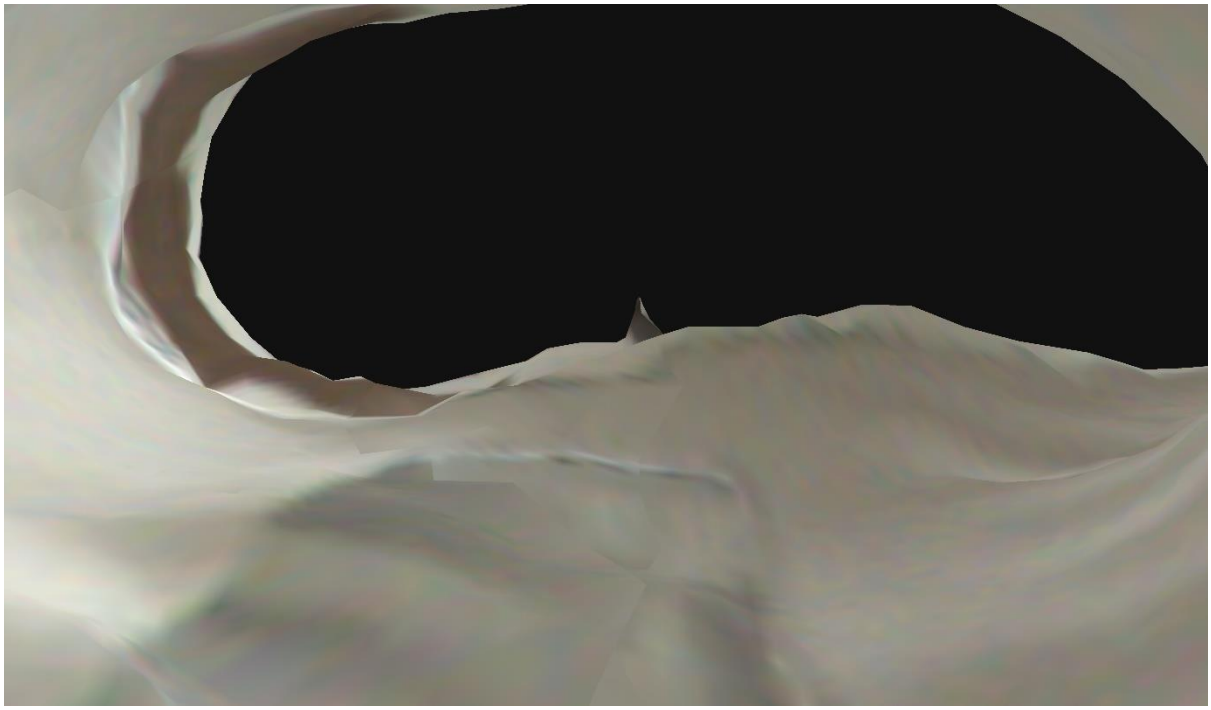


Image 16 Alison Kennedy, *Selfie Video* (2019), (still; immediately before ascension.)

Image removed for copyright reasons.

Image 17 Still from Jules Verne's *Journey to the Center of the Earth,* directed by Henry Levin (1959; United States, 20th Century Fox, 1959).

Case Study 3: Please touch me: the Un Determination welcomes materiality into the Digital Artwork.

Un Determination was initially identified as located in the gap between *Selfie Video* (2019) and *Selfie Cloud* (2018) (refer to *Image 6*). Created by the same technological process, the same data and the same structure, the images are markedly different. Un Determination has been identified already as repositioning the artist in digital artwork as poet and, through the appearance of the blob, overcoming the problem of boring digital artwork through disruptive negation of meaning and horror. The next step is to consider how Un Determination repositions materiality.

Process of Selfie Cloud (2018)

After creating the files that later became *Selfie Video* (2019), I wanted to see how technological structure can affect the undervalued and overlooked – to place the female artist squarely in the centre of a huge still screen as someone working, unaware of the camera, simply going about her business. I wanted to expose the underlying structure of the medium through enlargement and through exposing the media itself as an object – similar to the conceit used in Antonioni's movie *Blow-Up*[101] – aiming to unveil "a sign of virtuous materiality of the image" [102], a level of truth that emerges from considering the media itself as well as the subject.

The point cloud[103] of the subject of the video was screen printed by hand onto thirty high impact black shiny polyacrylic sheets.[104] I used a grid defined by industry: a series of 40cm x 60cm panels saw cut by a sympathetic small factory.

[101] Antonioni, *Blow-Up*.
[102] David Campany,"Thomas Ruff: Aesthetic of the Pixel,"*Iann Magazine*, No. 2 (2008), https://davidcampany.com/thomas-ruff-the-aesthetics-of-the-pixel/ \
[103] A point cloud is a gathering of measurements gathered from data images each expressed as points existing in space in relation to a fixed origin and placed in accordance to a x,y,z axis. It can be considered as a kind of information skeleton.
[104] Initially I sought to refer to the degraded television screen of popular culture and investigated the use of printing on discarded smashed windscreens, then an intact windscreen. Neither of these approaches was successful due to the inability of the inks I tested to adhere to the material.

In making *Selfie Cloud* (2018), I responded to Seth Price's 2004 work, *White Breast*, where a female body part is vacuum formed and displayed on a glossy white plastic polyacrylic panel. [105] I wanted to portray the situation of myself as a female artist in a/my studio amidst tools of work with the view of portraying equipment (both technological and not) as situated in the midst of an artistic process and through and participating in technological media. Price fragments, polishes and represents the fragmented human element with anatomical precision and clarity. I wanted, as counterpoint, to make public the entire studio world and the artist's action.

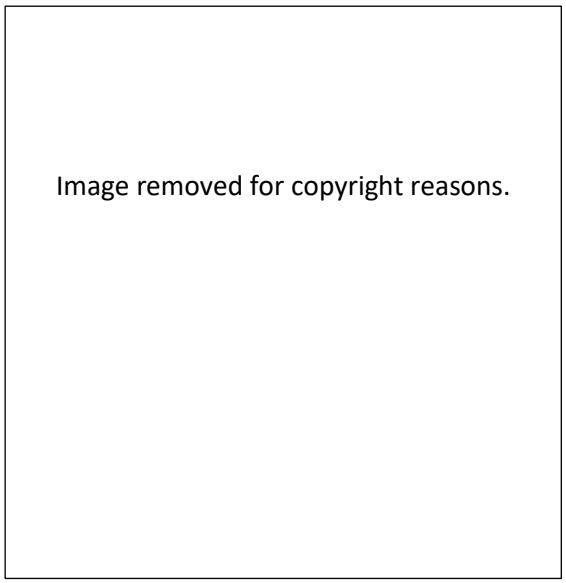


Image 18 Seth Price *White Breast (2004),* Vacuum Formed High Impact Polystyrene from 54 by 31 in. 137.2 by 78.7 cm, MutualArt ,accessed May,12 2019, https://www.mutualart.com/Artwork/WHITE-BREAST/180EA03F2CD8B61B.

Polly Staple comments that Price's work, in its use of plastic, refers to the unparalleled optimism post World War 2 – where plastic was considered as a material able to create anything in any quantity.[106] It is also argued that the vacuum-packed technique is analogous to creating a relief print [107] and that it at once creates an object[108] and obliterates it – it is no longer there.[109] The untrimmed excess of the process in *White Breast* forms a ragged frame acknowledging the paean of industrialisation. Price's work in this way exemplifies a deterministic approach to art – the artist is detached from the work, a creator of series that is reproduced in a representational system. Additionally, he extends this process to the audience who, due to its negation, can never access the object.

[105] Seth Price *White Breast*, accessed May 12, 2019, https://www.mutualart.com/Artwork/WHITE-BREAST/180EA03F2CD8B61B.
[106] Polly Staple, "The Producer," *Frieze*, no. 118 (18 October 2008), https://frieze.com/article/producer.
[107] Seth Price, Beatrix Ruf, and Michael Newman, *Price, Seth* (Zurich: JRP/ Ringier Kunstverlag AG, 2010).
[108] Price, Ruf, and Newman, *Price, Seth,* 67.
[109] Christopher Bollen, "Christopher Bollen in Conversation with Seth Price," in *Folklore U.S. Seth Price*, ed. Bettina Funcke (London: Koenig Books, 2014), 12.

Touch

In this case study I argue that Un Determination reveals itself in the complex relationship of the digital artwork to the sense of touch. While the primary meaning of the word touch is about physical contact, it has been used from the fourteenth century to mean making an emotional connection.[110]

For the surrealist Marcel Jean, in the context of the surrealist ready-mades, Touch is the primary way of identifying an object:

> Touch is the current means of exploration, of discovering objects: here is a spoon, a watch, a button, a shell, some seeds: here is a box that if you touch it, is an orchestra; that insect, if you don't draw near, is perhaps a leaf.[111]

And again, the irony occurs that ready-mades are experienced in a vitrine creating "bodily reactions through disturbance and incompletion, attraction and repulsion."[112]

Printing is a highly tactile technology. Past uses of the word "print" include, in Middle English, "precious prentes of crist" for stigmata, the mystical appearance of Jesus' wounds on other's bodies, and "to perceiven the print of sight" meaning to sense the gaze of someone on one's body. To print therefore implies sight and touch. [113]

The Smokeless Gun

In 2013, Cody Wilson uploaded blueprints for a 3d printable gun onto the internet. He refers to his project as creating an object in limbo – a potential object.[114] As Jakobsen notes, this identifies "The sense that digital is fictitious and material is real …[as]… a division … dogging the current analysis of technology."[115] The technological object, sitting behind the divide of the screen, is pure potential. It is assumed by both Wilson and Jakobsen that its materialisation will occur exactly as planned and as

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[110] Douglas Harper, "Print," accessed May 12, 2019, https://www.etymonline.com/search?q=print.
[111] Marcel Jean, "Arrivée de la belle époque," *Cahiers d'art* 2:1–2 (1936), 60. Quoted in Janine A. Mileaf, *Please Touch: Dada and Surrealist Objects After the Readymade*, Interfaces : Studies in Visual Culture, (Hanover and London: Dartmouth College Press, 2010), 138.
[112] Mileaf, *Please Touch: Dada and Surrealist Objects After the Readymade,* 17.
[113] Douglas Harper, "Print."
[114] Mark McDaniel, "Guns, Code, and Freedom: Cody Wilson on his war against power, the irreversible course of the 3D-printed gun, and America's Weimar moment", *Reason Magazine* 49, no. 11. It should be noted that Wilson had tactical reasons for this argument – wishing to invoke a First Amendment Defence arguing that printing from a technological source, combined with mass distribution and with real life privacy is aligned with freedom of speech, rather than arguing a Second Amendment Defence that relies in the right to bear arms.
[115] Lise Skytte Jakobsen, "Holding Your Scream in Your Hand. 3D Printing as Inter-Dimensional Experience in Contemporary Artworks by Alicia Framis, Martin Erik Andersen and Hito Steyerl " *ACTA UNIV. SAPIENTIAE, FILM AND MEDIA STUDIES*, no. 10 (2015): 28.

it is represented – in other words as a matter of deterministic causal necessity. The screen, meaning at once to protect, divide and to obscure[116] means that we cannot touch the object – only the smooth slippery surface. The screen itself is a paradoxical object – it is only if opaque that its "thingness" emerges – and it needs opacity to be able to later transparently show the object behind it.[117]

Wilson with his loaded statement identifies the contingency of the object that we are screened from, it can be seen yet not touched and so is never identifiable, never able to be scaled or used for its purpose. Similarly, Price's use of industrial acrylic sheeting, in a strategy analogous to Morellet of *New Tendencies,* emphasises that, as discussed previously, the material is the idea, the materialisation is a smooth barrier to experience. It does not deny the ability of the observer to touch, it simply homogenises the experience. No matter what object shows up visibly, it all feels like acrylic and glass. Determination privileges sight.

Un Determination and the Blur

Both Hito Steyerl and Paul Virilio[118]consider that the digital image's relationship to speed, and consumerism, visually manifests as blur. "Blur", a term often used yet rarely completely defined, is according to the Oxford English Dictionary "A thing that cannot be seen or heard clearly" – a fuzzy, incomplete image. [119] For example, Steyerl, "In Defence of the Poor Image" associates blur with loss – of both detail and colour and as the apotheosis of the clarity of the valuable "rich image". [120] Steyerl further argues in "The Spam of the Earth: Withdrawal from Representation", that the blur is the inexpensive, low-resolution glamorous advertising spam-image circulated at high speed and avoiding the messy human situation. [121] The imperfect is shameful, dooming necessarily flawed people to internalised invisibility through self-editing and embarrassment. Virilio, in his 1994 book *The Vision Machine,* even gloomily predicts that the speedy screen image will result in the decline in

[116] OED online, Oxford University Press, s.v. "screen", accessed September 20, 2019, https://www-oed-com.ezp.lib.unimelb.edu.au/search?searchType=dictionary&q=screen&_searchBtn=Search. Also noted by Paul Elliman in Paul Elliman, "Designed Screens," *Typotheque* (29 November 2004), https://www.typotheque.com/articles/designed_screens.
[117] Nanna Verhoeff, "Grasping the Screen: Towards a Conceptualization of Touch, Mobility and Multiplicity " in *Digital Material: Tracing New Media in Everyday Life and Technology*, ed. M. Van de Boomen and S.E.A. Lammes (Amsterdam: Amsterdam University Press, 2010), 124.
[118]Paul Virilio, *The Vision Machine*, trans. Julie Rose (London: The British Film Institute, 1994).
[119] OED online, Oxford University Press, s.v. "Blur", accessed May 1, 2019, https://en.oxforddictionaries.com/definition/blur.
[120] Steyerl, "In Defence of the Poor Image."
[121] Hito Steyerl, "The Spam of the Earth: Withdrawal from Representation," *e-flux journal* no. 32 (February 2012), https://www.e-flux.com/journal/32/68260/the-spam-of-the-earth-withdrawal-from-representation/.

vision through ossification of ocular muscles. [122]

The Un Determination.

The Un Determination in *Selfie Cloud* (2018) confronts the screen's deterministic privilege of vision, its homogenising effect on touch and its representation of time as duration.

Paul Virilio in *The Vision Machine* quotes Rodin, and by extension critiques Muybridge's photographic depiction of duration: "It is art that tells the truth and photography that lies. For in reality *time does not stand still*."[123] The lived sense of vision, as opposed to photographic record, enables us to experience time. It is argued here that the lived experience of time, through cultural production, results in the materialisation of digital artwork beyond that of the provisional object.

Selfie Cloud (2018): The Silkscreen Process

Screenprinting laboriously adds the touch of the hand. The labour consists of scaling then dividing an image, creating a transparency, affixing it to screens via photosensitive emulsion, forcing ink through screens via hand pressed squeegee then removing both ink and emulsion with a strictly defined progression of chemicals. The process is simultaneously straightforward and complex. Timing is crucial. Ink dries quickly on the screen and creates patches on the work. The squeegee must be drawn evenly over the screen to catch every detail. Only one chance to get it right due to the delicacy of the materials. Dust must be encouraged to resist the siren call of static. The acrylic panel and screen must be persuaded to align every time. I adjust the touch of my actions to the idiosyncrasy of the tools – one squeegee and one screen become my favourites – I understand their weighting, flexibility and their tension. Room heating must be consistent to avoid instantaneous patchiness of the screen. The entire process must run smoothly and avoid stasis.

I look at myself in the mirror. My eyes red rimmed and streaming through safety equipment, jauntily askew, hair wet, plastered flat to my forehead, ink and chemicals everywhere. Ten down only twenty panels to go. There is a word for the glint I see in my eyes.

Un Determination.

[122] Virilio, *The Vision Machine,* 2.
[123] Virilio, *The Vision Machine,* 2.

The Purpose of Touch

What is the purpose of this hidden labour in creating the digital artwork? It cannot be to simply add variation to the image and hence meaning through apotheosis, analogous to Ruff's low resolution degradation of the image, noted earlier.

Selfie Cloud (2018) is created through inefficiency – both in screen printing activities and in its performative creation of the Un Series. It adopts a stance opposing Muybridge's time and motion study and of time as duration. It is undocumented, involving the body in movements made for uncertain purposes that may have no overall practical function. At any moment they may be revealed to be futile.

Heidegger's notion of "care" (as discussed earlier in relation to algorithms) here is exemplified by the use of the interrelated body of tools used in screenprinting and of being absorbed in this task to the extent of "Busily losing … [oneself] …in the object of ...[one's] concern". [124]

We become aware of this work's significance when the skill (as Dreyfus terms it the "skillful coping") in using these tools is interrupted – for example, through the ink mysteriously drying unevenly on the screen.[125] We become suddenly cognisant of the process and aware that we are using the tool. The equipment is revealed as "un-ready to hand."

My creative work exemplifies this. It is full of hesitation, remaking things and pausing in thought, and my use of the equipment is interrupted (for instance due to room scheduling and the complexity of the process). I am very aware of the finiteness of time. It creates personal Un Determination through this experience – the commitment and belief that something worthwhile is being created even in a situation, as Rogoff identifies, of criticality, when it knowingly inhabits a deterministic system.

The white ink on the dark reflective background recognises the impenetrable darkness emerging simultaneously with the white marks. The body manifests in the screen, stigmata-like, each clear white inky dot representing a calculated data point and expressing the technological gaze discussed above, whilst meeting the gaze of the observer in the reflected surface.

It opposes the deterministic view of the acrylic sheet – instead reflecting self, in Duchamp's words, as

[124] Heidegger, *Being and Time,* 410 463
[125] Dreyfus, *Being-in-the-World: A Commentary on Heidegger's Being and Time, Division I,* 67.

"shadow-caster" / a company of shadow/ casters/ represented by all/ the sources of light/ (sun, moon, stars, candles, fire -) [126]



Image 19 Installation image of the unmoving *Selfie Cloud 2018* behind the blurry and moving artist. Photographer Michael Blamey.

In this way, the Un Determination connects the lived experience of time with the touch of material (rather than action) for the artist and experienced time with recognition of self or being emotionally touched for the observer.

The Difference between *Selfie Video* (2019) and *Selfie Cloud* (2018)

> But there's always been variations between images. This is no different.
>
> Comment at first showing of *Selfie Video* (2019) and *Selfie Cloud* (2018)

Mitchell argues that images exist in a continuum from the creation of images through techniques such as dark room photography to highly technological such as those found in the digital artwork. [127] Any "alteration" to the image, not the direct intention of the artist, he argues, is analogous to any hand-caused smear, for example. The Un Determination is helpful in questioning this approach. The

[126] Arturo Schwartz, *Duchamp, Marcel, 1887-1968. Notes and Projects for the Large Glass.*, trans. George H. Hamilton, Cleve Gray, and Arturo Schwartz (London: Thames & Hudson, 1969), 90.
[127] W. J. T. Mitchell, *What Do Pictures Want?: the lives and loves of images* (Chicago, Ill.: University of Chicago Press, 2005), 212.

creation of technological images is more political, situated and structural than Mitchell identifies. The difference may not be attributed to a particular action or algorithm – like attributing a specific breath for the clouding of a lens mirror or photographic paper – but the Un Determination is helpful in pointing out that it lies deep within the process as manifestation of causal necessity, chance, historic opinions, poetry, time and touch throughout the digital artwork.

The body in *Selfie Cloud* (2018) is a constellation of data dots and specks. The body in *Selfie Video* (2019) is partially eroded. However, like hope, a fragment of the left hand faintly emerges. The index finger, associated with reason, power and judgement[128], is obliterated, the thumb (often associated with oral pleasure)[129] is gone, and what remains is the vulnerability of the fourth and fifth fingers. The human condition portrayed before you is fragile, soporific, and we (and particularly the artist) are implicated. Do not "ouch" the artwork, the Un Determination reveals, as we are more vulnerable than we know.

[128] Milo Tyndel, M.D., "Freud's 'The Moses of Michelangelo': An Etiological Viewpoint", Canadian Journal of Psychiatry, Vol. 18 no 5 (1973): 445-447.
[129] See Hassell A. Simpson, "A Butcher's Thumb: Oral-Digital Consciousness in *The Big Sleep* and Other Novels of Raymond Chandler", *Journal of Popular Culture* 25, no. 1 (1991).

Section 4: Conclusion

> I had grown to my desk….and the wood had entered into my soul.
>
> –Charles Lamb, *Elia, and the Last Essays of Elia*

The aim of this research is to ask in what ways Un Determination reveals the negotiation of determination by digital artworks and to propose Un Determination as a useful, more nuanced framework for encouraging future analysis and digital artworks.

Given the qualitative research methodology of this research, this section offers a summary of major insights discussed but offers no conclusions – instead identifying new questions that may be used to initiate further analytical research and additional projects, rather than offering a grand narrative.

Summary of Insight

This project argues for the hybrid term Un Determination to be considered as a critical zone for examining the digital artwork. Un Determination acknowledges that the digital artwork may be situated in a deterministic structure, yet the work itself can depart from this framework. This paper makes the case for Un Determination through considering the works or practical research, *Selfie Video* (2019) and *Selfie Cloud (*2018) in addition to initial preparatory research works in the exhibition *Meinst du das oder sagst du das nur so* (2017).

In order to understand the nature of Un Determination, it was initially necessary to define the terms used in digital artwork. This led to establishing "digital" as including both handmade and technology-based media, with technology as knowledge situated in and reflecting the social and cultural power structures of contemporary and past times, including zombie code.

Section 2 of the paper initially considered determination, to define the state from which Un Determination was defined and departed.

Three main characteristics of Determination emerged as follows:

1. The retreat of the artist to creator of systems, where technology (both in its tools and its instrumentality and productivity) reflects the dominant culture – rendering critique of this culture impossible – for example the art of François Morellet. Positioning the artist as programmer will not necessarily overcome this problem, given the use of zombie code.
2. Boredom in artwork created through generating art through the strategy of causal necessity

and the use of pseudorandomness to overcome this (as seen in the work of *New Tendencies* artists Gotthart Muller, Zdeněk Sýkora and Michael Noll); and

3. The reduction of materialisation to idea and a system of representation as exemplified in the work of Thomas Ruff.

A provisional definition of Un Determination was proffered as the recognition of potential arising from opposing, negotiating and revealing the characteristics of Determination in digital artworks. I then proposed Un Determination as a conceptual zone which, recognising the complexity of digital artwork, could exist within the very system it is critiquing.

Section 3 built a case that Un Determination can be used as an analytic tool by examining three phenomena that emerged from *Selfie Video* (2019) and *Selfie Cloud (*2018.) Presented as Case Studies, these phenomena were as follows:

Case Study 1: Serial Killers: the reinstatement of the artist as poet in the digital artwork. This examines Un Determination as disrupter of a series such as that created by Eadweard Muybridge's time and motion study. It identified a hidden digital artwork spontaneously created by technology in the form of a portrait of the artist as un series (a term coined in Case Study 1) of surfaces. I then analysed this in light of Roger Caillois' *The Writing of Stones*.

Case Study 2: How I was swallowed by the Blob and more or less lived: the Un Determination overcomes boring digital artwork. This identifies how *Selfie Video* (2019) exemplifies the Blob in light of Susan Sontag's analysis of horror movies and Dana Schutz' painting *FaceEater;* and disrupts the boredom of pseudorandomness by allowing viewers to experience their own death and eventual ascension through pedal extremities; and

Case Study 3: Please touch me: the Un Determination reintroduces materialisation into digital art through examining *Selfie Cloud* (2018) in light of Seth Price's work *White Breast* and confronting Determination's privilege of vision, its homogenising effect on touch and its representation of time as duration. It suggests, as an alternative, the recognition of lived experience of time coupled with the touch of material (rather than action) for the artist and experienced time coupled with recognition of self (or being emotionally touched) for the observer. It also questions the Deterministic understanding of duration and material as idea.

More questions

The ability of Un Determination to analyse digital artwork and propose new works by reconsidering the complexity of the digital artwork has just begun. In particular, questions are raised about the

role of artist as collaborator or performer with technology, the roles played in data collection as performance and the labour in materialisation, the integration of additional materials that may be situated outside technological tradition, such as clay and papier mâché, the reassessment of applications that are unquestioningly used, such as autocorrect and its effect on expressive text, and the structure of photoshop. In addition, questions arise about the necessity of digital artwork to include technology at all instead focusing on the implications of time, inefficiency and touch that have emerged. The movement of material from idea to its connection with temporality is particularly interesting.

More research is necessary. Ultimately the Un Determination opens up the potential of questioning previously held assumptions about the conceptual structure of digital artwork.

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Appendix

Images of Works installed in VCA Artspace 1:5-15 December 2019.



Image 20 Installation image of Alison Kennedy, *ICU* (2019) silkscreen on 30 acrylic panels and *Selfie Video* (2019). Photographer Chris Bowes.



Image 21 Installation image of Alison Kennedy, *Selfie Video* (2019) and *Tree* (2019) silkscreen on 30 acrylic panels. Photographer Chris Bowes.



Image 22 Installation image of Alison Kennedy, *Selfie Video* (2019), *Tree* (2019) silkscreen on 30 acrylic panels and *Selfie Cloud* (2018) silkscreen on 30 acrylic panels. Photographer Chris Bowes.



Image 23 Installation image of Alison Kennedy, *ICU* (2019), 240 cm x 300cm, silkscreen on 30 acrylic panels. Photographer Chris Bowes.



Image 24 Image of detail of *ICU* (2019). Photographer Chris Bowes.

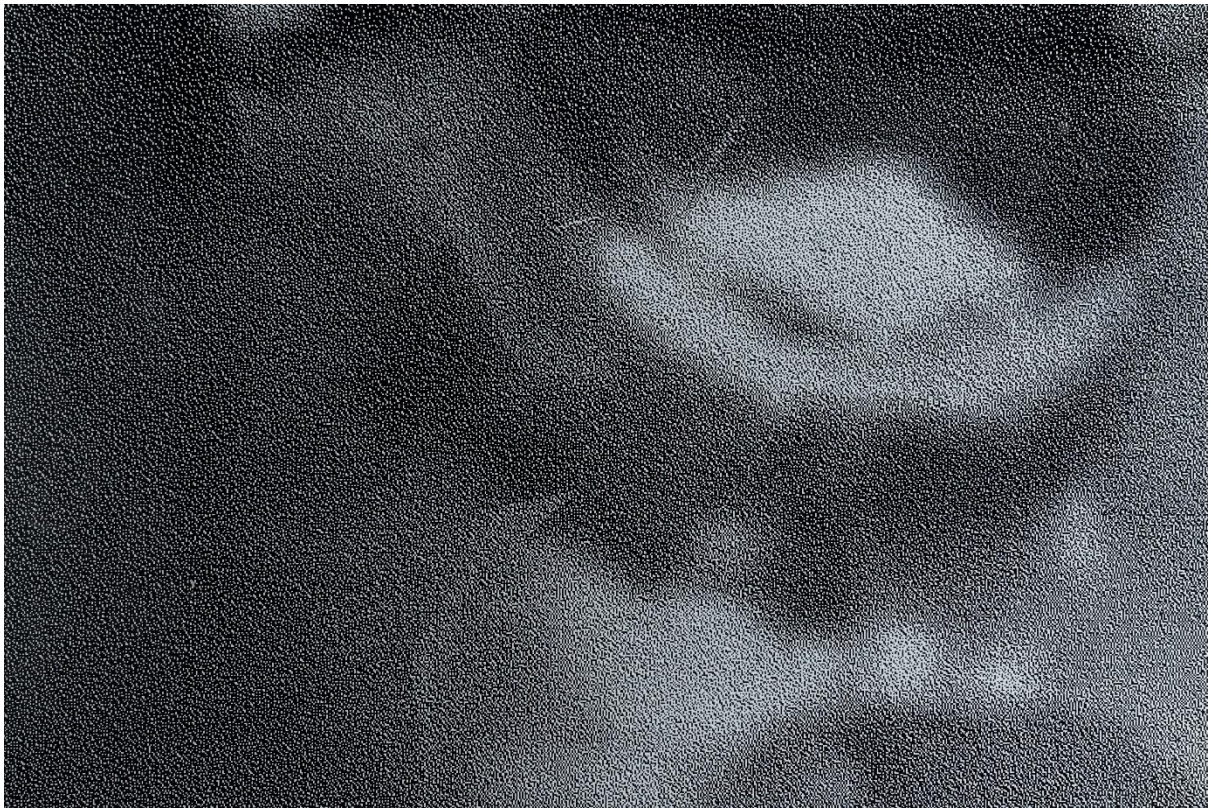


Image 25 Image of detail of *ICU* (2019). Photographer Chris Bowes.

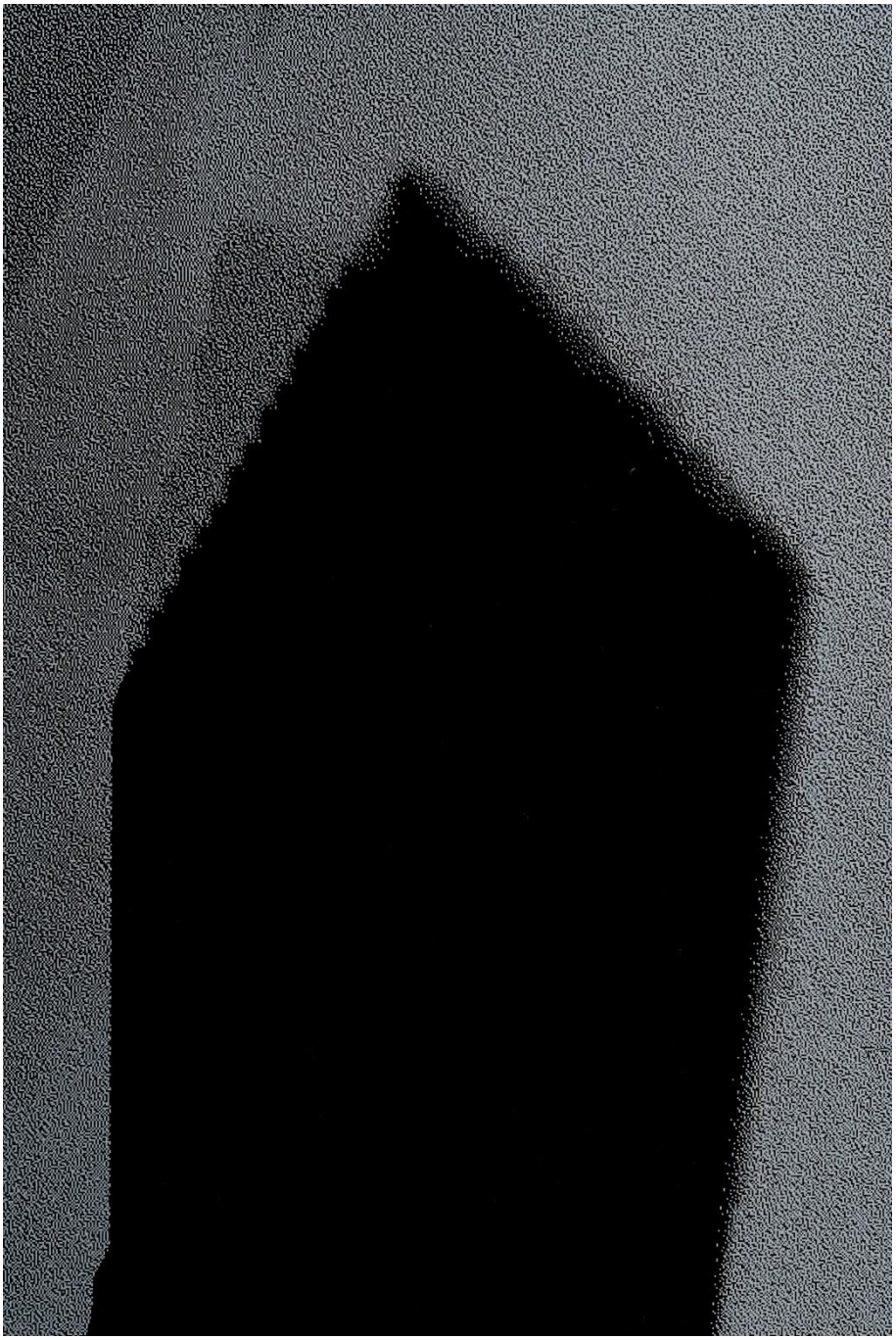


Image 26 Image of detail of *ICU* (2019). Photographer Chris Bowes.

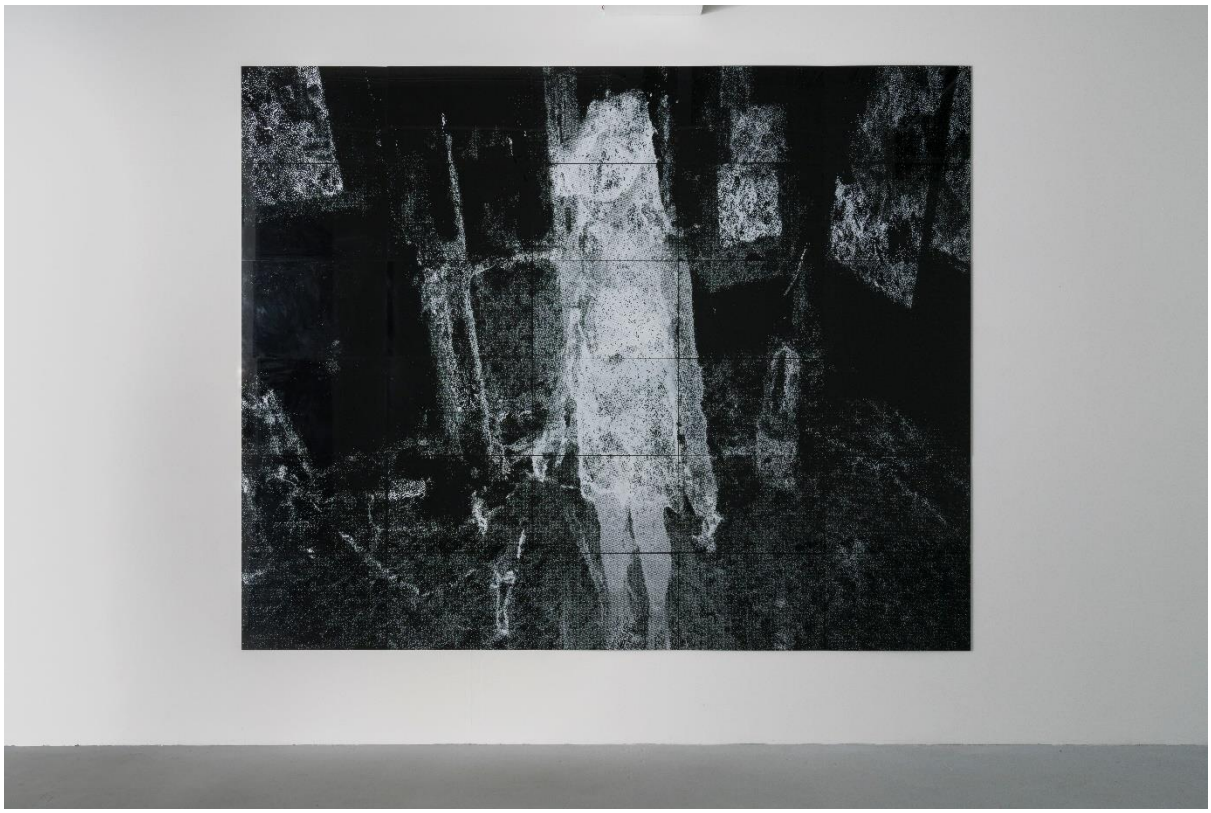


Image 27 Installation image of Alison Kennedy, *Selfie Cloud* (2018), 240 cm x 300cm, silkscreen on 30 acrylic panels. Photographer Chris Bowes.



Image 28 Image of detail of *Selfie Cloud* (2018). Photographer Chris Bowes.

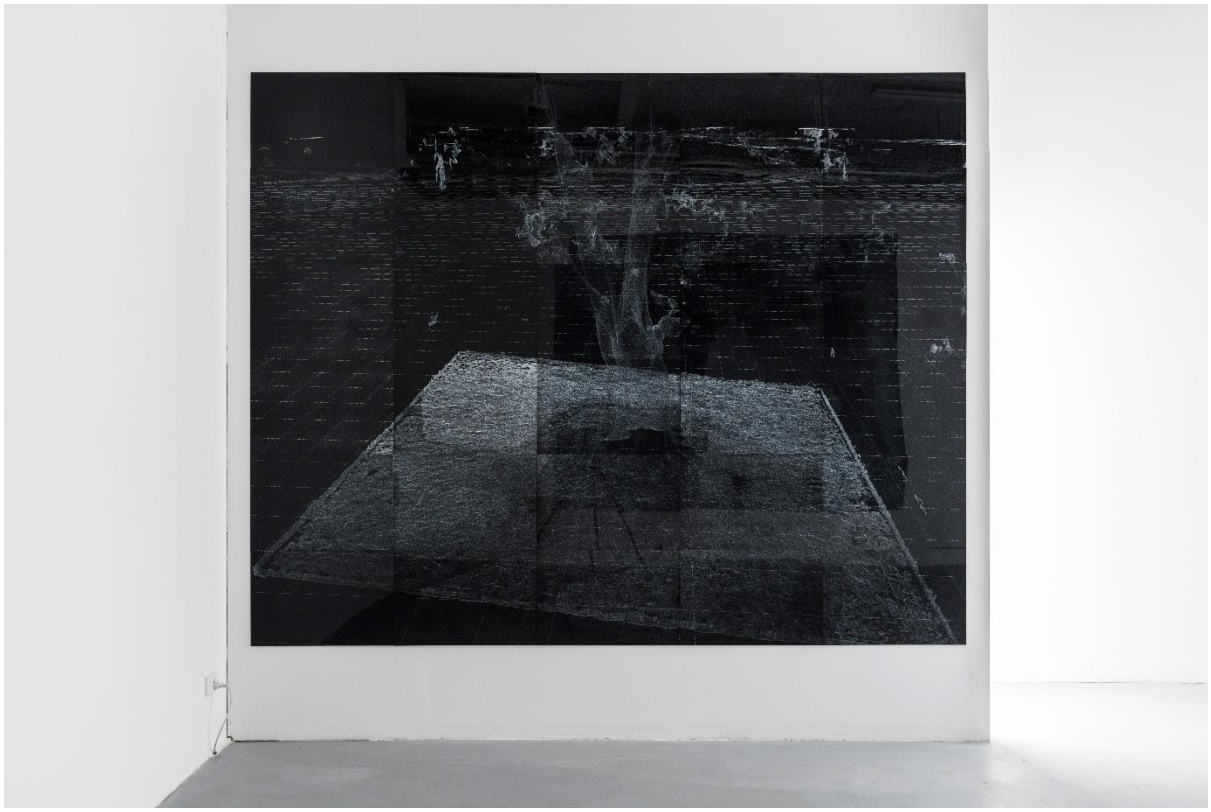


Image 29 Installation image of Alison Kennedy, *Tree* (2019), 240 cm x 300cm, silkscreen on 30 acrylic panels. Photographer Chris Bowes.



Image 30 Image of detail of *Tree* (2019). Photographer Chris Bowes.



Image 31 Image of still from *Selfie Video* (2019). Photographer Alison Kennedy.