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Contents

Seminar Series Notes and Abstracts:

2018/2019 Seminar Series— Gravity, Epistemology and Representation; A Weightless Exploration

2019/2020 Seminar Series— Analytical Practices; A Fictional Seminar Series

Foreword

Dr Hannah Drayson

Papers:

Alien Perspective, a Speculative Weightless Sketch Stephanie Moran

An Examination of Gravity Beginning with Wings of Desire
Anna Walker

Cashing in on Nostagia from a Galaxy Far, Far Away James Sweeting

Feedback: A Conversation with Knut Aufermann Lucinda Guy and Knut Aufermann

"I Love a Party with a Happy Atmosphere"; Notes on the ontology of interpersonal atmosphere

Hannah Drayson

Transtechnology Research Seminar Series 2018/19 Gravity, Epistemology and Representation: A Weightless Exploration



After William Hogarth's *The Weighing House*. (British, London 1697–1764 London) Metropolitan Museum of Art.

As an integral part of the 2017/2018 seminar series *Revisiting Ideoplasticity:* contingency, action and imagination, we explored the procedural possibilities that a slow conference offers. One of the outcomes of this approach was that we were able to allow concepts and ideas to hang for somewhat longer periods before integrating them into an overall conceptual framework. This brought to the forefront some of the processes of arts research and opened a space in which we could draw parallels between our academic and studio practices. This year we will draw on these insights and continue

to explore the overall thematic of the series of seminars that began in 2007 where creativity, affect and representation are corralled into resituating the correlation between the concept of matter and the concept of reality.

Under the title of *Gravity, Epistemology, and Representation: A Weightless Exploration*, we will follow the slow conference model of previous years. Attending particularly to the impact that the conventional laws of causality in the material world have on the way in which we understand causality in the representation of ideas.

Following our experiment with extending time in the last series, we will be equally adventurous with gravity in 2018/2019. Asking how the general understanding of gravity influences ideas of causality in building up bodies of knowledge. In this we will pay especial attention to creative practices in which the dominant topics and concerns of an enquiry are decoupled from the rhetorical need for coherent connective material. Ranging from; the differential treatment of figure and ground in the visual arts and literature, the displacement of detail with impression, to the techniques of jump cut editing in audio/visual and data driven arts, we will try to reduce the impact on history and theory of material logic in developing connections. In short, we will approach the issues of knowledge and representation from the vantage of a weightless engagement with the world. This approach draws its precedent from one of the foundational projects in Transtechnology Research which was to explore how categorical asymmetries of authority between the matter and spirit have skewed representations and restricted voices. To consider this we joined with ZGAC in Noordwijk in 2004 (http://zgac.org) and proposed a number of projects that explored matter and spirit in a reduced gravity environment culminating in a film that we made in 2006.

Since 2006 this thematic of matter and spirit has (directly or indirectly) underpinned much of our published work and doctoral research, not least in *Light*, *Spirit and Imagination*, and emerging research into microphenomenology and affect. It seems timely to revisit one of the practical origins of our research and bring it to bear on *Gravity, Epistemology and Representation*, through our collaboration on the *Intermission* project (its concern with liminal landscapes) and the *Nouveau Plein Air Lab*— in which we seek to recover and ask how an artistic engagement in the open air can relieve us from habitual orientation and thought patterns in or research.

Program and Dates

The seminar series will be delivered in two phases; from October to December we shall present the abstracts and from December to May there will be paper presentations. The two sessions are separated by a gravitational conference dinner.

10th October 2018: Introduction to the seminar series: Professor Michael Punt. *Tarot in Space (The Movie)*. Dr Hannah Drayson, *The poetics of bass: what is a weightless seminar?*

7th November 2018: *Abstract session 1*. Joanna Griffin, Becalelis Brodskis, Jane Hutchinson, James Sweeting, Stephanie Moran.

12th December 2018: Gravitational conference dinner and abstract session 2. Edith Doove, Lucinda Guy, Paul Finnegan, Nicholas Peres, Jacqui Knight, Anna Walker and Emma Bush.

16th January 2019: Panel 1. Joanna Griffin, Gravity, weightlessness and connectivity: The Angelic seminar series; Becalelis Brodskis, Masked selfies in a weightless dimension; Jane Hutchinson, Balloon flights and phantom rides: The perception of weightlessness and the spiritual dimension of technology.

13th February 2019: Panel 2. Stephanie Moran, Aliens: the experience-worlds of nonhuman entities; Paul Finnegan, The effect of the proliferation and dissemination of images of "impossible" events online on the status of the "laws of nature" within the indexical moving image; James Sweeting, Weight of nostalgia on the Star Wars universe.

14th March 2019: Panel 3. [A special Thursday session to take place in the Simulations Lab at Torbay Hospital] Nick Peres and Jacqui Knight. Rethinking causality: recovering the complexity of the patient's reality in A&E assessment.

17th April 2019: Panel 4. Edith Doove, *Observe and interact– permaculture and art*; Lucinda Guy, *Invisible, inaudible and non-existent creative works.*

15th May 2019: Panel 5. Emma Bush, With you I can imagine a place where to be phosphate of calcium is enough; Anna Walker, 'My' Wings of Desire:

Locating the self amidst the complexities of bordered and borderless spaces.

12th June 2019: Reader publication and business meeting.

Seminar Series 2018/19, Panel 1 Abstracts

Joanna Griffin, Gravity, weightlessness and connectivity.

My points of departure are a few examples of connections in Picasso paintings, sometimes referred to as 'passage,' where the outline of a figure is interrupted in ways that suggest the artist's intentionality and another kind of connection of planes referred to as 'arras' (by Leo Steinberg, 1977 when looking at *The Family of Saltimbanques* and *Portrait of the Artist*). I would like to use these inventions of connectivity to reflect more on something that I have noticed through the writings of Hannah Arendt, actually in her footnote references that include the writings of physicists (Max Planck, Neils Bohr, Werner Heisenberg) from the 1930s-1950s. From these references the rise of the term 'phenomenology' to express experience looked like it was part of an adversarial game with physics scientists. Perhaps, so as not to lose the phenomena of affect and experience which exist outside of the rapidly establishing laws of physics and causality. (The work of modernist artists seems also to be reacting to the growing authority and 'extraordinariness of science'). There seems to be a particular need for philosophy to stake the value of experience through the term phenomenology just at the point where laws of physics appeared to break down in the atomic experiments that led to the new branch of quantum physics. I will refer mainly to 'The Conquest of Space and the Stature of Man' (Arendt, 1963).

Becalelis Brodskis, Masked selfies in virtual reality: Documenting an absence of presence in an immersive computer simulations and the presence of the virtual.

Seeing the extremities of your body is one of the senses incorporated in aligning yourself and finding balance within the gravitational pull. When you enter a Virtual Reality this sense is lost. What remains is an awareness of your weighted presence in a space where everything you see is weightless. Any notion of objects, external to you, responding to a gravitational pull is a projection of your memory on a digital weightless form. The contradiction of your weighted presence and the relationship with weightless environment emulates aspects of out-of-body experiences. This paper draws on an experience I had of wearing a mask I created with in this illusionary space.

The fact that I was invisible, in this space, required me to engage my memories and kinaesthetic perceptions in the 3D drawing of my selfportrait. Unlike a material form, this matter could be effortlessly moved or scaled, to a giant or miniature, as I worked on it. I settled on a size I could step into and embody. Inside the mask I began to take selfies of myself. Within this space you can hold a virtual camera and take pictures and video from within the virtual environment. This selfie experience, looking back at myself through the mask, was a relationship between weightless form and my weighted sensation of memories. From this weightless zone, I propose that the only matter that has weight is our memories. I will reflect on this experience through the relationship that Henri Bergson proposes between matter and memory. I would like use this relationship between my weighted self and weightless mask to explore Deleuze's development of an ontology of the virtual and it's relationship to the materiality of the real. Not only in terms of the illusionary objects placed in this space but in order to ask questions that relate to the ontology of the space itself. What is the landscape I am in? What is the nature of the objects placed in it? In so doing, understanding what the affect of dwelling in a virtual landscape could be, and how this may impact on everyday living in what we call the real landscape.

Jane Hutchinson, Balloon flight, panorama and phantom rides: Media technology and spirituality.

This seminar will examine still and moving images of flight in a hot air or gas balloon, painted 360° and moving panorama, and film from the front of a moving train (a phenomenon that became known as a 'phantom ride') made during the 18th, 19th and early 20th Century. Images created of the Earth as it was imagined to appear from above and of flight from an earthbound onlooker will also be presented. The seminar intends that these images will encourage a discussion about an idea that the perception and possibility of being weightless, even disembodied, was made possible through these media-technologies. The seminar suggests that there seems to have been (and still is?) a fascination with disrupting the day-to-day experience of the world, that of being earthbound, and of a desire to experience a disconnection from the ground, from matter; of being 'un-tethered' from the physical world. The paper will speculate that the phenomena of balloon flight, panorama and phantom ride might be interpreted as a use of technology to present the possibility of the spirit.

Seminar Series 2018/19 Panel 2

James Sweeting, The weight of nostalgia on the Star Wars universe

Star Wars is massive, both in terms of its fictional universe and the scope of its visual media products that contains the narrative. It has remained in popular consciousness since the release of the first film in 1977. But when the film franchise and Lucasfilm (the studio behind it) came under the ownership of Disney, it had to determine how best to appeal to a transgenerational audience. In other words, creating films that were simultaneously comprehensible for new viewers but also recognised the strong sense of nostalgia older generations had for the franchise. This seminar will be examining how nostalgia for the medium of film impacted original creator George Lucas, as well as other directors involved with the franchise. It will also highlight the struggles that come with the balancing act of appeasing a vocal section of the audience that wants Star Wars films to provide an 'authentic' Star Wars experience that is also something new. As a result, Disney took the route of creating what is referred to as a 'requel' for its first new Star Wars film The Force Awakens (2015). Whilst not a complete account of the entire franchise, the seminar will provide key insights into the influence that nostalgia has upon this high-tech science fiction franchise.

Paul Finnegan, Gravity and the instrumentalization of non-human life

In Aesthetic Theory (1970) Theodor Adorno states that a liberated nature does not yet exist but that art may assist nature to attain what perhaps it wants. It is art's refusal to affirm "the miserable course of the world as the iron law of nature" that makes it the keeper of a promise of a nature to come (Adorno, p.49). Furthermore, this state may only come about through transformed relations of production. Adorno regrets the instrumentalization of nature established both in theory, through Descartes' reduction of organisms to mere mechanism, and practice, through the technological application of Newton's universal laws of motion and gravitation. However, in the context of the animal's broader fate within industrialization, freedom persists where the laws of nature (understood as physical but also moral laws) are suspended or inverted, such as within the gravity defying force field of the circus tent or the carnivalesque Inverso Mundus. Within modernist art, we see a similar refusal of the natural order in Kazimir Malevich's paintings. Paintings such as Supremus

No.58 have no up or down, and the diagonal composition embodies an escape from gravity within painting's terms. For Malevich this escape is a decidedly human-centric affair. The paintings may none-the-less be given a non-anthropocentric reading by tracing an unlikely echo of his diagonal "additional element" to a non-human context. Hubel and Wiesel's 1959 experiments on the visual cortex record a cat's neuronal response to diagonal bars of light that bear a striking resemblance to elements in Malevich's paintings. Although Hubel and Weisel's experiments have a clear significance within the context of neuroscience, this trace of non-human recognition is an invitation to other readings. This paper thus explores a non-anthropocentric escape from the laws of nature, and accompanied by Adorno's call for an art that by refusing such laws promises a non-instrumentalized nature, applies Adorno's aesthetic theory non-anthropocentrically.

Stephanie Moran, Alien physics: the perception space-time of nonhuman beings

Where alien is defined as "anything – and everything – to everything else" (Bogost, 2012, p.34), what might constitute an alien physics? How might this be represented? Physics is the science that studies matter and its motion and behavior through space and time, and the related entities of energy and force. Its main goal is to understand how the universe behaves; it generally understands this from an anthropocentric perspective – our bodies are our primary apparatus for comprehending the world, and the tools we use are generally extensions of that. Other organisms, such as fish, snails, dolphins or bats- existing in nonhuman environments, 'umwelts', or experience-worlds- experience physics differently. Different species have other relationships to gravity, as in birds' flight, or the marine creatures inhabiting the relatively weightless umwelt of the ocean. Their perception of time is different to that of humans too. Fish, which hunt fast-moving prey, experience their environment as if in slow motion. Their vision perceives at the equivalent of thirty frames per second rather than the human eighteen; so a fish moment is one thirtieth of a second, while human moments are one eighteenth of a second (Uexküll, 2010, p.72-73). Nonhuman experiences are inaccessible to human cognition; understanding can only be approached via phenomenological reimagination based on the available information, which has many gaping holes. This paper will sketch out some visual and theoretical ideas for structuring relationships between alien

experience-worlds, through the triangulation of gravity, epistemology and representation as a framework.

Seminar Series 2018/19 Panel 3

Nick Peres and Jacqui Knight, *Recovering the complexity of patients reality in A&E assessment*. Hosted by the Simulations Lab at Torbay Hospital

This seminar emerges from the *TaACT* project that regards medical simulation as an apprenticeship model of educational activity that increasingly utilises an eclectic mix of media, technologies and approaches from arts, gaming, theatre, film and the aviation industry to replicate clinical scenarios in this high-risk profession. One aspect of *TaACT* is to reflect on ways in which this understanding of simulation can enhance the acquisition of 'soft skills' during this apprenticeship.

The problem: In medical practice the diagnosis and care of the patient typically unfolds in stories, and we recognise that the central event of health care occurs when the patient gives a personal account to the clinician who skillfully understands these stories as both a material and psychological expression. Yet, while simulations using an animatronic manikin effectively imitate physiological responses such as a palpable pulse rate, breathing sounds, and monitor readouts—acting as a proxy for human patient—, they provide limited opportunities to acquire interpretative skills (telling cues, gestures, inferences, tone of voice etc). Consequently, within this interactive training environment, a carefully crafted narrative plays an important role in the presentation of symptoms to stimulate a personally contextualised response to the patient. Nonetheless, the construction of realistic scenarios in medical simulation is fraught with discontent. Narratives are typically technologically dependent on high realism and high fidelity, and often tend to reveal the limits of simulation rather than provide opportunities to develop necessary soft skills. TaACT is concerned to use media theory and a sensitivity to visual intelligence to address this problem.

Invited seminar participants will experience a type of simulation different

to the typical emergency response scenario that specifically addresses soft skills training during a stage of a patient pathway through the hospital. We intend that this simulation offers a view of medical training that positions you simultaneously as both impartial observers and active participants. We will then participate in a debriefing session that provides a post simulation space for all to critically reflect upon the procedures, interactions and outcomes. We will also discuss two trends in the simulation community that appear to be developing uncritically and without adequate evaluation. First, an apparent fascination with seductive high-fidelity simulation realized through sophisticated technology and second the technological appropriation of learning in the psychological domain under the rationale of 'integration (Bligh and Bleakley, 2006).

John Bligh & Alan Bleakley (2006) "Distributing menus to hungry learners: can learning by simulation become simulation of learning?", *Medical Teacher*, 28:7, 606-613.



360 camera image of the demonstration simulation at the Simulations Lab at Torbay Hospital

Seminar Series 2018/19 Panel 4

Lucinda Guy. Invisible, inaudible and non-existent creative works

The majority of radio broadcasters use automated playout systems in their studios to manage and control their output, offering listeners predictable content, meeting advertisers needs and staying within the confines of regulatory expectations. The messy, unpredictable, atmospherically sensitive nature of transmission suggests that it may be better suited to algorithms and infrastructures that bring about open ended, unpredictable, unstable, and complex results. My research considers how non-commercial, socially inclusive, community broadcasters might find such systems in the work of radio artists.

After 10 or 25 seconds of signal failure the emergency loop is turned on. But why is the pre-recorded programme called an "emergency" loop? Where is the emergency, when something doesn't play for a change? Who defined this silence as an emergency? (Israel, U., 2018 in Aufermann, et al, p.64).

Fear of silence is a fundamental motive that drives broadcasters to adopt automated playout systems. This seminar seeks to re-examine radio's relationship with silence, in order to explore the other paths it may have taken, and offer new ways for people to contribute and listen.

We will consider: The ephemerality and immateriality of radio broadcasting, representations of 'nothing' in 20th century art and music and the theme of dead air, silence and silence detection in radio broadcasts. Whether deliberate or accidental, embodied or digital, silence in the radio studio survives the transmission process almost as effectively as sound. I will reflect on how these quiet moments speak to us about broadcast culture, from revered and stately one-minute public silences, to the studio disruptions of free radio and radio art compositions.

Aufermann, K., Hahmann, H., Washington, S. and Wendt, (2018) R. Radio Revolten. Leipzig: Spectormag, p64.

Edith Doove. Observe and interact - permaculture and art

Although permaculture was first developed as "a creative design process

based on whole-systems thinking informed by ethics and design principles" which today is widely accepted as a method for sustainable gardening and agriculture, this paper looks at its applicability within arts. Discussing a proposal by Edith Doove and Nathalie Hunter for *The Drawing Lab, Paris* that makes use of permaculture principles, this includes the importance of Alexander Humboldt and Francis Ponge.

Sustainability. Australia: Holmgren Design. Permaculture Principles, https://permaculture-principles.com/

Ponge, F. (1994) La Fabrique du Pré. Lausanne: Skira Walla, N. – The Embodied Activist – Where Permaculture Meets the Arts in Contact Quarterly, Summer/Fall 2008, http://www.bcollective.org/ESSAYS/nala.CQ.pdf

Wulf, A. (2015) *The Invention of Nature – Alexander von Humboldt's New World.* London: John Murray.

Seminar Series 2018/19 Panel 5

Anna Walker, 'My' Wings of Desire: Locating the self amidst the complexities of bordered and borderless spaces

Here are we, one magical moment, such is the stuff,

From where dreams are woven,

Bending sound, dredging the ocean, lost in my circle (Bowie, *Station to Station*).

It has been 30-years since the release of *Wings of Desire* (1987). Wim Wenders' film is a love story set in post-war Berlin, where invisible angels observe the city's lonely inhabitants seeking out those in distress. Three-quarters of the film was shot in black and white, the other quarter in colour. To merge the two formats and create seamless transitions, the film was subjected to several processes of inter-positive and inter-negative to create the final negatives used for release, resulting in a loss of quality at every stage. As Wenders comments: "As beautiful as it might have looked in Cannes' 87, every print ever since is six generations removed" (2018). To mark its anniversary a recent and newly restored digital version of the film premiered in April 2018 in Germany. Every effect was digitally recreated with the black and white and colour sequences reassembled, frame-identical to the original film from 1987. With no generational loss, the film has been

reconstructed with a far superior image quality comparable if not better than the original.

Using *Wings of Desire* as a starting point, from a philosophical as well as psychoanalytical perspective, I would like to explore the repercussions of this shift from film to digital. Is this symptomatic of an individual and/or cultural desire to erase aspects of the past, and how does this affect the postwar inter-generational transmission of trauma? The music of *Wings of Desire* as a function to organise and disorganise the space that oscillates between the celestial, the weight of bodies and Berlin's crumbling facade. Andrew Murphie describes music as a constant form of becoming of time, space and everything that inhabits permanent or semi-permanent beings or cultures (1996, p.20), where Deleuze and Guattari's theory of the refrain relates to a specific and problematic attempt at territorial formation and deformation.

Series Note: Transtechnology Research Seminar Series 2019-20. *Analytical Practices: A Fictional Seminar Series Fiction, Image, Apparatus*

In the 2018-19 seminar series the Transtechnology Research group began to think about gravity, the ultimate symbol of predictable and Newtonian causality, and attempted to slip its bounds, leaving habitual thinking behind. This year we plan to turn our attention to questions raised by the concept of analysis in our research projects. Analysis is certainly associated with scientific, perhaps reductive approaches. But it is worth attending to the production of categories and vocabularies that allow us to intervene and create meaning around the problems that concern us. The triad of fiction, image, apparatus offer three contexts for this process.

Program and Dates

16th October 2019: Jane Hutchinson, Enchantment in the photographic studio: apparatus, images and imagination.

13th November 2019: Sarah Turton, Creative fabulation and transcendence.

11th December 2019: Hannah Drayson and Michael Punt, Fictions of fictions: Early cinema and the necessity of experience.

8th January 2020: Guy Edmonds, Jacqui Knight, Michael Punt, *Presentations on completing the thesis.*

5th February 2020: Becalelis Brodskis, *Matter and memory and mnemonic 2: My place in your space.*

4th March 2020: Lucinda Guy, Radio fictions and media form: Workers Playtime.

25th March 2020: Stephanie Moran, Nonhuman diegetic worlds: the visual perception of animals as described in Richard H. Horne's The Poor Artist, or Seven Eye-sights and One Object: Science in Fable (1850).
22nd April 2020: Laura Wellsman, AI as artist: Artificial artificial

intelligence. and Linan Zhang, Society as discourse: Stories of medical imaginaries.

20th May 2020: James Sweeting, Anachronism and fact in (historical) fiction.

Seminar Series 2019-20 Abstracts

Jane Hutchinson. Enchantment in the photographic studio: apparatus, images and imagination.

Photographic portrait studios were the places where most people in the 19th century had their first encounter with the apparatus and processes of photography. This seminar will consider how the enchanting experience of having one's photographic portrait made is 'transmitted' to the viewers of the photograph. To do this, the seminar will ask participants to set aside habitual thinking about the boundaries between what is real, fictional and imagined in order to analyse the fabricated elements of the studio mise-enscene: the painted backgrounds, paper-mache props and accessories that are visible in so many 19th century portrait photographs. This will allow us to consider how these items contribute to the meaning of the experience for the sitters and the viewers of the photographs and to begin to address the problem of locating the quality of enchantment.

Sarah Turton. Blue is Soul; soul technologies and transformation through fabulation; seeing the excess novelty of blue in psychology and spirituality.

This paper examines particular subjective and transcendental experiences of blue associated with practices of 'creative fabulation'. Deleuze and Guattari have argued that fabulation and fissure are features of novel written and artistic works; however, this paper draws attention to examples of how fabulation and fissure also appear in nonfictional works reporting spiritual and psychological practices, such as meditation, active imagination (Hillman on Jung), and Jungian automatic writing practices. As part of a project to understand the instrumental function of these practices this paper will outline and examine the theory of fabulation discussed by Henri Bergson in John Mullarkey's synthesis of his work. Bergson argues that we create fabulations in order to make sense of what we cannot comprehend, such as the end of the individual self, the result of which being the stories associated with religion. This paper will argue that for some scholars thinking about fabulation and spiritual practices, experiences of blue or disjuncture are signs that transformation has taken place, but for others it is the actual process and features of the act of fabulation that have the effects of soul transformation. It is within an excess of novelty that a disjuncture

or discontinuity is created, one that results in an experience that can be understood as transformative for the individual.

Within this framework the paper will review a number of examples of forms of excess within spiritual practices; saturation, listomanias, excess of novelty, sky symbolism and the overwhelming of the senses. In particular the discussion will focus on fabulation and its layering of metaphor through story structure and personification. This will create a framework for understanding how the practice of fabulation creates fissure, how this relates to soul transformation, and the wider questions of whether blue, as fabulation or metaphor, can stand in for soul. As indicated by the philosopher Joshua Ramey (2014), in considering the works of Deleuze and Guattari and as this concerns an analysis of fabulation in 'non' fiction blue literature, their commitment to 'how language works' and 'the effects it has'. The ongoing question for discussion raised by this analysis is; how does blue within transcendental experience stand in for soul?

Hannah Drayson and Michael Punt, *Fictions of fictions: early cinema and the necessity of experience.*

Following on from the presentation by Michael last week and our collective reading of Edgar Morin (and our reading of Martha Blassnigg's work on Bergson), this seminar will consider the case of early cinema history as a fiction of a fiction that was revised by the primary experience of historians. In 1978, at a now very famous conference of film archivists, the films that for 80 years had been discussed through secondary accounts in the literature were screened. It was a revelation that was, in no small way, shaped by radical revisions in the way that history was understood. The authoritarian voices of the historians were challenged by a new historicism that regarded history as a fiction that is provisional, partial and told form the present. Such a shift allowed many of the assumptions about the early film period to be stripped away to allow the material, the period, and the primary experiences of those who made, distributed, and viewed the products of early cinema to be understood in different ways. In the context of our work in Transtechnology Research the case study of early cinema historiography sets a keystone for the ways in which our research practice as artists and scholars is deployed to recover lost insight and revisit present assumptions by seeking other voices in the fictions that inform our discourses.

Dr Hannah Drayson and Prof. Michael Punt will lead this seminar with a detailed exposition of the fiction of the fiction of early cinema. We will follow with a discussion of primary experience as a problem that might have its current foothold in psychology but has its origins in crucial questions that occupy artists, historians and critics as they build continuities between action and thought.

Edward Reed, (1996) *The Necessity of Experience*, Newhaven and London : Yale University Press.

Becalelis Brodskis. *Matter and memory and mnemonic: My place in your space*

This presentation concerns the use of digital apparatus in participatory mapping to represent space, and users' perceptions of the virtual. It engages with questions associated with GIS (Geographical information systems) technology, including those raised by the academic field of critical GIS that challenge how the technology is described as an objective, quantitative tool for mapping relationships to landscape. GIS technologies integrate multiple layers of data into a visual interface. Within the database structures that store it, the data is usually categorised as quantitative or qualitative. Marianna Pavlovskaya, a leading critic of GIS, refutes it's description as a quantative tool 'While this narrative grants irrefutable scientific authority to GIS, it also silences its non-quantitative functionality' (Pavlovskaya, 2009, p.14). For example, it seeks to deny qualities implicated in the coding of the 'quantative ' data (pg21). She argues that these socialy constructed qualities are 'exposed' by research considering GIS as a qualitative tool. I used GIS applications to create a map, called My Space in Your Space (2018). It documents my wandering path and relationships between my memories and matter in Lisbon.

This paper responds to the analysis of 3 aspects of documentation. The representation of my wandering as a line tracing a path, and two items representing a relationship between matter and memory: a photograph of a letterbox, and an audio recording of my voice remembering. Matter and memory relate to Henri Bergson's theories on perception (Bergson, 2011), which I drew upon to inform my analysis of the qualities inherent in the documentation.

GIS provides a spatial representation of the interconnection of these documents, facilitated by the technology of GPS (Global Positioning System) that locates a subject's position in relation to space and time. The "objective and authoritative allure" (Shields, 2018, p.328) of GIS derives from the interface's incorporation of GPS data. GPS was developed in the 1970's by the USA defence department. It uses a system whose genealogy can be traced back to the philosopher René Descartes' development of Euclidean geometry. It's therefore not surprising that Critical GIS, a field of research influenced by feminist theory and ethnography, draws parallels between GIS and the problematic Cartesian separation of mind and body. Bergson, in the introduction to Matter and Memory (2011) acknowledges that his theories are 'frankly dualistic' (p.vii) and could be seen to maintain the Cartesian divide between mind and body. However, as Bergson suggests, I use his theories to 'overcome' (p.vii) Cartesian divisions, drawing parallels with how critiques of GIS discuss if and how the GIS interface can incorporate both qualitative and quantitative relationships to landscape.

This paper will demonstrate how the "objective" data of GPS are transformed by GIS into a line, and how this framing infers certain qualitative qualities. Conversely, my analysis questions whether the related documents— the photograph and audio recording— have any of the inherent qualities of matter and memory that I intended them to represent? Perhaps all three examples of quantitative and qualitative data are simply mnemonic devices for a fiction, or fact, of my virtual place mapped to a quantitative notion of space.

Lucinda Guy. Radio fictions and media form: Workers playtime.

This presentation discusses current examples of the use of automation in radio broadcast. The discussion will describe and compare two opposing ideas of automation; the first is repetitive and mechanical, the second unpredictable and meandering. By treating these as a pair of useful fictions, this seminar will explore how they can be used to analyse existing radio formats, both in terms of the systems that drive them and the effects of those systems. As an example of the first fiction, I will discuss 'Absolute Breakfast' a commercial format that uses an innovative approach to music scheduling. In 'Absolute Breakfast' we see the proposed automation of listeners (predominantly workers), and the automation of the presenter within the studio, both of which we could understand to be systems

designed to structure behaviour and activity as part of the world of automated work. The second example is Knut Aufermann's *Changing of the Guard*, an automated radio art intervention that uses a small number of simple rules to open up complex possibilities. Analysis of the two case studies proposes a diametric opposition between the number of rules in a system and the complexity of its outcomes and offers a way to explore the affordances of radio automation technologies and what defines them.

Stephanie Moran. Nonhuman diegetic worlds: the visual perception of animals as described in Richard H. Horne's The Poor Artist, or Seven Eye-sights and One Object: "Science in Fable" (1850)

This paper analyses the construction of coherent and vibrant nonhuman diegetic worlds in the early "science-fiction" novel The Poor Artist, or Seven Eye-sights and One Object: "Science in Fable" (1850), by Richard H. Horne. In this, it examines the credibility of self-contained narrative worlds. It attempts to understand the novel's context and the convergence of imaginary and material worlds of poetry, art and science it presents. The paper analyses ways in which disparate concepts and species 'characters' are presented to produce a credible diegetic reality. It does this through a close reading of this text, and some detective work around it that attempts to surface some of the assumptions underlying the discourse world of the novel – the world created on the basis of perceived common ground knowledge between the author and reader (Stockwell, 2012) - and to shed some further light on this through a contemporary nineteenth century text of poetic criticism that reviews it (A Little Earnest Book upon a Great Old Subject: With the Story of the Poet-Lover, by William Wilson, collected 1851). In doing so, this paper aims to develop a framework for a thesis about nonhuman diegetic worlds.

James Sweeting. The illusion of evolutionary change in videogame form

This seminar will posit that the presence of nostalgia in the videogame's medium can also act as a conjuring act to mask the extent to which the form of videogames has altered during the past few decades. The seminar will argue that nostalgia provides a fiction, which when uncovered, reveals that the videogame apparatus remains broadly similar today as it did in the past resulting in similar output. To do so, this seminar will build on Theodor Adorno's distinction of form and content — via Fredric Jameson's

understanding of the terms – to help distinguish the elements of the videogame form and the extent to which the medium has transitioned from one of revolution to evolution.

To demonstrate these elements and to provide anchor points for discussion, a case study approach will be utilised. Two videogames (and their predecessors) will be examined which highlight the extent to which Adorno's distinction between form and content can be used to identify the extent to which console-based videogames have evolved during the past three decades, rather than displaying a revolutionary change. The aim is to identify that videogames have subsequently adopted a path of evolution instead of revolution to aid their continued relevance and to maintain "producer" control across the industry. This will not be arguing that an individual dominant form exists – as the definition of form from Adorno would insinuate that there is a singular genre defining the medium – but rather a collective form that encapsulates the medium which still resembles many elements of the medium over the past few decades.

The introduction of "nostalgia style" will be used here to provide a possible explanation as to why elements from the past of videogames have resurfaced and how this has differed to the notion of "independent style" found in non-mainstream videogames, as identified by Jesper Juul. Nostalgia will be argued to be the adopted industry solution to alter the perception of the previously dominant depiction of the medium. One that revived itself as something toy-like, while simultaneously mimicking attributes of other consumer home electronics such as the VCR, before favouring a "high-technology" message during the 1990s. The seminar will not be arguing that videogames have failed to change at all during the past few decades, but that substantial change has become increasingly infrequent over the past decade within mainstream videogames, specifically the form.

Roberts, A. (2000) Fredric Jameson. London: Routledge.

Linan Zhang. The social value within medical knowledge of international face mask usage in COVID-19: a study via Michel Foucault

This seminar explores the connection between the subject, discourse, knowledge, and power. The seminar applies Foucault's arguments to current debates around medical knowledge of wearing face masks as an

effective means of containing COVID-19. To Foucault, human beings are made subjects by discourse, knowledge, and power. In comparison to the brutal, physical, and destructive punishments in the pre-modern era, modern disciplinary power is a 'gentler' means of total control, apparent in institutions beyond prisons, such as schools and hospitals.

This form of power operates on the body to create productive 'docile bodies'. However, the docility involves the body possessing a certain degree of agency that varies depending on the power, and which is capable of self-forming according to possessed knowledge. For Foucault, power and knowledge are two inseparable concepts; they are joined by discourse, and the execution of disciplinary power is apparent in the form of knowledge because the power gives rise to a corpus of knowledge, and knowledge reinforces power. Therefore, knowledge is not the scientific truth itself, nor the representation of sole truth; instead, it is a way to interpret the truth within the social values framework under the influence of the modern power relation.

Since this modern form of power operates primarily on the body, it involves clinical practices in relation to disease. For Foucault, the body is a subject of manipulation by discourse, knowledge, and disciplinary power in the modern society; conversely, it is also a carrier of social values that are embedded inside the knowledge. The seminar examines how this helps us understand 'wearing face masks' as a bodily response to medical knowledge, and argues that the differences between the knowledge that people hold about its effectiveness are caused by social values rather than scientific facts about face masks themselves, by distinguishing the scientific element and the social element of such knowledge.

Laura Welsman. Sublime onto-aesthetics: quantum qualities of art across media.

New digital media and emergent technologies are changing the landscape of contemporary arts practice. Contemporary art galleries, festivals and investment grade markets demonstrate an appetite for novelty above all else, favouring spectacle over artifice. Why then are certain paintings, such as those by Turner and Rothko, considered timeless masterpieces, while the contemporary "artscape" entails a high turnover of both artists and their works? This presentation will seek to both define and qualify what the

'timeless' characteristics of these established artworks might be, and how these qualities are materialised by artists whilst engaged in their processes.

Numerous attempts have been made to describe this quality of art. Methodologies ranging from investigations into the sublime, divine proportion, and physiological responses to colour have been implemented in an effort to understand what exactly it is that art "does". The fundamental difficulty in defining art is its inherent engagement with ineffability. Defying attempts to demystify its power - the poetics of art's function are only observable via their effects on other bodies; an esoteric condition hereby defined as, the quantum quality of art. The concept of the sublime has been utilised since the 1st century in order to analyse and ascribe a set of values to artworks. In this seminar I will explore the sublime's potential as a theoretical model for discussing contemporary art and how, if at all, such a model might translate to an understanding of new media. Whose interests are served by determining which artworks possess sublime qualities? Why is it that certain classical artists consistently resurface in a study of contemporary work and appear to withstand a noncanonical discourse?

Foreword

Hannah Drayson

This collection of papers is the result of the annual seminar series of the Transtechnology Research group. The series has been running now since 2005, and the publication of the readers began in 2010 as an important institution and central part of the Transtechnology Research doctoral training program. They serve as a platform for the essentials of written and verbal academic presentation in a collegiate but public environment. Over the years they have attracted a dedicated group of faculty and alumni who contribute to the development of the research projects conducted within the group.

While both seminars and readers are there for key researcher skills, both have mutated in many ways over the years. In 2017/18, in an experiment with format, we ran the seminar series as a 'slow conference' which stretched out the main parts of a two-day conference over the entire year. In the first two sessions presenters prepared and read abstracts and then the group worked together as a committee to decide on how best to form the papers into panels in the coming months. The task of finding themes and running threads resulted in important discussions that synthesised the papers into topic areas. Those that that stuck were broadly; flight and spirit, alien encounters, invisible and immaterial arts, and memory and its borders. A timeless conference banquet in miniature also took place, at which an atomic sugar sculpture and candy floss was consumed. The conference excursion consisted of a visit to Torbay Hospital for a session on the theme of alternative causality which was presented by Transtechnology Researchers and the team at the Simulations lab there. This involved the entire seminar taking place within an immersive simulation, as part of the TAACT project. (You can read more about this in the resulting publication as https://www. trans-techresearch.net/publications/taact-report/).

In 2018/19 we decided to follow similar imaginative dimension with a 'weightless conference'. It is from this series; *Gravity, Epistemology, and Representation: A Weightless Exploration* that these papers here are collected. In contrast with the levity of the title "Weightless Exploration", it is worth noting the training effort that stands between the presentations that took place in 2018-19 and the papers that are collected. Like the seminar

series, the Reader editorial process is a collective effect that offers space for development of often excitingly fresh thinking that more often than not becomes crucial to more central projects. For my own part, the invitation to rethink gravity turned into the challenge of considering the 'weightless' atmospheres of a very different part of my life to my academic work. I am so very glad they did, as this excursion into new territory led me to identify a strand of key literature and has strongly influenced my thinking on affect, language and intersubjectivity since.

Dr. Hannah Drayson.

With thanks...

The seminar series is understood as a collaborative enterprise and we would like to thank everybody who has contributed to and continues to be a vital part of the seminar series and the discussions:

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Alien Perspective, a Speculative Weightless Sketch Stephanie Moran

Abstract

The starting point for this paper was a thought experiment in how to write from the viewpoint of a non-human being. This paper is about how a weightless environment could be fictionally represented using aesthetic perspective. Perspective is employed in painting to position the viewer in relation to the space depicted. The 'symbolic form' is the set of ideas the particular kind of perspective condenses in its mathematization of pictorial space. Rather than the three-dimensionality of a being gravitationally grounded to the Earth's surface, this paper explores the idea of an aesthetic perspective based on zero-dimensionality as an expression of a weightless or low-gravity environment. It uses games theorist Ian Bogost and philosophers Alain Badiou and Vilém Flusser's ideas about one- and zerodimensionality in relation to art historian Svetlana Alpers' ideas about perspective and representation in seventeenth century Dutch painting. It applies the findings to the seventeenth century Dutch painting Interior of the Grote Kerk at Haarlem by Pieter Saenredam. What this speculative fiction finally demonstrates is the alien perspective of human technology and the mathematical or technicised continuity from linear perspective painting to technologically produced contemporary images.

Introduction

What follows is a thought experiment based on the provocation of the Transtechnology Research seminar series, a weightless exploration of gravity, epistemology and representation. I have, in writing the presentation up, reshaped it in response to the suggestion that arose during the seminar that I focus on just one painting or image from the presentation. I ask, hypothetically, what kind of aesthetic perspective could be developed by a weightless alien, analogous to the way that linear perspective partially corresponds to a cultural symbolic representation of gravity?

The discussion that follows began as a thought experiment in how to write from the viewpoint of a non-human being, through the triangulation of science fiction, aesthetic perspective and weightlessness as a framework. These three fields constitute the speculative alien epistemology, ontology and phenomenology respectively. In imagining a possible alien aesthetic perspective, the epistemology is science-fictional; that is, it uses scientific, mathematical and philosophical ideas in trying to create a coherent and credible fictional world. For humans, gravity is implicit in linear perspective which represents objects as grounded and having weight in a three-dimensional space flattened onto two dimensions, receding or proceeding (Steyerl, 2012). The idea of an ontological weightlessness may afford a different kind of aesthetics. For a floating alien, the concepts of up and down may not be significant, so alien paintings may not, for example, possess a ground or horizon line.

A full speculative alien aesthetics is out of scope here, including any attempt to construct anything approaching meaningful content or (bio)semiotics, as for example human iconography does (Panofsky, 1955). I base my sketch of alien aesthetics on one aesthetic idea, that of perspective, and its corresponding symbolic form (Panofsky, 1997).

I propose this symbolic form to be the collapse of representation into a non-spatial arrangement, as seen through 'epi-' or extra-human weightless physics. I think this aesthetically by visualising the one- and zerodimensional propositions of games theorist Ian Bogost and philosopher Vilém Flusser (Bogost, 2016; Flusser, 2006). While bracketing out what the visual content means, I here attempt to reconstruct one linear perspective painting, Interior of the Grote Kerk at Haarlem by Pieter Saenredam (1636-7), through a speculative zero-dimensional aesthetics. I find, perhaps unsurprisingly, that in representing (or, for Flusser, mediating) space mathematically, a direct visual genealogy can be seen linking linear perspective painting's flattening of three-dimensional space and contemporary technologically generated images. By technologically generated images, I mean what Flusser calls the 'technical images' of photography and cinema, and their extension into the 3-D cinema, military surveillance and Google maps that artist Hito Steyerl describes as having a vertical perspective (Steyerl, 2012); as well as the augmented and virtual realities that aim to reproduce the world as we believe we see it. My proposal is in keeping with Bogost's object oriented ontology (OOO)¹

¹ OOO is a contemporary field of philosophy that attempts to de-anthopocentrise philosophical thought by defining all beings and things as objects and according them all equal existential status.

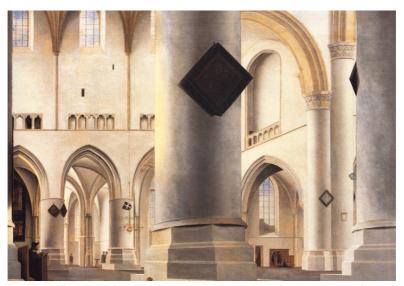
and Flusser's concept of the universe that is generated by technical images (Flusser, 2006).

I use Svetlana Alpers' hypothesis of seventeenth century Dutch realist painting as a 'seeing object', where the painting is an object that detaches and represents an idea of what the eye sees (Alpers, 1983, p35). I aim to sketch out the beginnings of a speculative alien picturing device to hypothesize what Pieter Saenredam's *Interior of the Grote Kerk at Haarlem* might look like as represented through an alien's seeing object. The choice of painting is slightly arbitrary, but it meets my basic criteria: a clear example of linear perspective representation from the seventeenth century Dutch realist tradition. The aim of this very speculative seeing object is to channel some hypotheses about nonhuman visual perception through the construct of perception in aesthetics. I chose Alpers' seeing object for my model because of its claim to nonanthropomorphism through the detachment of the eye from a body and the corresponding depiction of a world already there rather than one constructed by a human gaze (Alpers, 1983, p36).

I begin by describing how Alpers' seeing object operates and how its detachment of the eye from the rest of the body allows me to model a detached floating aesthetic. I then set out how the construction of linear perspective relates to gravity, through its groundedness and vanishing points that converge on a horizon line locating the viewer's orientation in respect to the space depicted. I next discuss how Bogost and Flusser's one- and zero-dimensional concepts could provide the mathematical perspectival model for a weightless aesthetics. I then apply these to the *Interior of the Grote Kerk at Haarlem*. I conclude with some thoughts about the technicising effects of mathematical perspective and science-fictional epistemologies, the alien intelligence of technology and the potential it has for gathering together and reconstituting human and nonhuman attributes.

Representation / Mediation / Perspective

Svetlana Alpers' notion of seventeenth century Dutch realist painting as seeing objects that detach and represent an idea of what the eye sees is a useful schema for modelling an imaginary alien's weightless perspective without having to model an alien psychology or nervous system. What makes Dutch paintings specifically seeing objects for Alpers is that the



Interior of the Grote Kerk at Haarlem, Pieter Jansz. Saenredam, 1636-7. Collection of the National Gallery, London.

position of the viewer's eye in the pictorial space coincides with the surface of the painting, unlike the contemporaneous and similar depiction of threedimensional space in Italian Renaissance painting where the image is seen as if through the picture plane. The construction and representation of a unified three-dimensional space in painting is known as linear perspective. Linear perspective in seventeenth century painting is largely geometrically constructed through the use of straight lines from the eye of the artist or viewer to the objects depicted, and to mark the horizon, towards which objects decrease in size (Panofsky, 1997, p27-36). Alpers describes how the almost imperceptible visual difference in representation between the linear perspectives of the North and South of Europe came from divergent epistemologies of perspective, which lead to different methods for mathematically constructing the pictorial space. Italian Leon Battista Alberti's fifteenth century aesthetic theory treats painting as a window, while the northern theory (Pelerin, aka Viator, 1505) assumes that painting should replicate the eye's vision. The seventeenth century Dutch painting is therefore constructed as if it takes the place of the viewer's eye (Alpers, 1983, p53). Here, the eye is not in the centre of the image so much as the image is centred on the range of the eye; that is, the painting takes the place of the eye and represents the range of its swivel from a static position.

Considering paintings as seeing objects is a useful means of circumventing the need to literally imagine an alien painting. Given that perspective is a cultural construct, thinking this through a seeing object enables the reductiveness of imagining an analogous cultural construct based solely on the attribute of weightlessness, focusing on how a weightless alien might visually represent a different relationship to their environment and different means of conceptualising visual perception. For Alpers, seeing objects are part of an expanded concept of picture-making including not just the picture itself but a range of picturing devices. Objects such as mirrors, maps, paintings and eyes are all 'seeing objects' for humans. Her notion of seeing objects corresponds to general understandings of the time about vision and representation, which she reads through contemporary seventeenth century astronomer Johannes Kepler's concept of the human eve as "a mechanical maker of pictures" (Alpers, 1983, p33). Astronomer Johannes Kepler came to the realisation that distortions in observations of lunar phenomena were produced by the apparatus, a pinhole camera, rather than the phenomena being observed. He then applied this understanding to vision, which he described as forming a picture on the retina. For Kepler, vision comes from a picture formed on the retina, as if painted with very small brushes by coloured rays coming from the objects being observed. Alpers uses Kepler's theorisation to read Dutch painting in relation to ideas about vision understood from the camera obscura and its predecessor the pinhole camera. Dutch paintings appear like natural vision to most Western audiences partly because the way they depict space corresponds with the way we are used to conceptualising vision. The painting is constructed geometrically to represent an idea of what the eye sees, which was conceptually understood through what a pinhole camera and camera obscura depict (Alpers, 1983, p35). Alpers proposes that Kepler's idea of vision, and by extension the Dutch realists representation of it, "deanthopomorphises vision" (Alpers, 1983, p36), in that it depicts a world already there as opposed to Renaissance pictures of the world that are constructed by a viewer actively looking at objects. The seeing object was detached from the rest of the body and mind, seemingly unconcerned with the psychological issues of perception, sensation and the mechanics of the brain.

Aesthetic perspective in this art historical schema represents what art historian Erwin Panofsky calls symbolic form. In Panofsky's concept of perspective as symbolic form, this way of representing space compresses together social, cognitive and psychological practices, expressed and ordered or translated through a technique. What I am here understanding as the representation of alien perspective is an alternative to linear perspective that is abstracted from the same complex of technical and psychological factors that make it possible. In order to bootstrap an alternative, humanly understandable perspective based on the available evidence, the alien perspective is inevitably taken from within a human (and culturally bounded) context. For Panofsky, linear perspective represents "a translation of psychophysiological space into mathematical space. In other words, an objectification of the subjective" (Alpers, 1983, p66). Similarly, Alpers sees the Dutch paintings as signifying concepts rather than phenomena, expressing cultural epistemological notions about the deceptive nature of images, and specifically as an expression of a mathematical concept: a "display of [the] notion of artifice [...] That border line between nature and artifice that Kepler defined mathematically, the Dutch made a matter of paint" (Alpers, 1983, p35). She suggests that the discovery of the world and the representation of it in seventeenth century Dutch culture were thought of as the same thing (Alpers, 1983, p27). What is of interest here is how a weightless visualisation of the world might be represented conceptually and aesthetically through an equivalent alien seeing object. How might a perspective be ordered that expresses a weightless conceptualisation of the relationship between visual perception, embodied experience and their representation in painting, mathematically? What might be a potential analogous symbolic form for weightless aliens?

In order to consider how space might be represented from a weightless perspective, I will first outline how perspective based on a gravitationally grounded viewpoint operates. Linear perspective is a way of representing space that depends on a number of assumptions and abstractions, based partly on ideas about vision and the grounded viewpoint from which we are thought to look out at the world. The way that space is represented establishes a viewpoint that is grounded and upright, comprising an idea of a flat, stable ground and a still viewer. Artist Hito Steyerl describes it in this way:

Linear perspective is based on several decisive negations. First, the curvature of the earth is typically disregarded. The horizon is conceived as an abstract flat line upon which the points on any horizontal plane converge. Additionally, as Erwin Panofsky argued, the construction of linear perspective declares the view of a one-eyed and

immobile spectator as a norm—and this view is itself assumed to be natural, scientific, and objective [...] for all these calculations to operate, we must necessarily assume an observer standing on a stable ground looking out toward a vanishing point on a flat, and actually quite artificial, horizon. (Steyerl, 2012, p18)

This representation undergoes a series of flattenings. It straightens out the curvature of the earth and the visual curvature of architectural lines as perceived in the viewer's convex lens onto the flat two-dimensional surface of a canvas. In the process of this transfer, the curvature caused by their distortion in converting a three-dimensional representation onto a two-dimensional plane is also straightened out. This is effected by a series of straight construction lines of linear perspective that are drawn between the artist/viewer, the objects depicted and the horizon.

Artist Hito Steyerl describes the way in which the viewer is positioned in relation to the pictorial world through the straight lines drawn between artist or viewer and the horizon of the image:

As the whole paradigm converges in one of the viewer's eyes, the viewer becomes central to the worldview established by it. The viewer is mirrored in the vanishing point, and thus constructed by it. The vanishing point gives the observer a body and a position. (Steyerl, 2012, p19)

It is these lines that map out and structure the flattened space. The vanishing points of the image and of the viewer construct the space depicted, at the same time constructing the human viewer's position in relation to the pictorial space. In Italian paintings, straight lines are projected from the position of the artist or viewer's eye and converge at a single imaginary vanishing point on a horizon beyond the painting and another single imaginary or floating point in front of the painting. These establish both the limit of the view depicted and the position and viewpoint of the observer in front of the image, as if looking through a window. The Dutch paintings however often depict aggregate views with multiple vanishing points, more like the view of a wide-angle lens, rather than one vanishing point on the horizon of the image. As in Pieter Saenredam's painting pictured here, there is a sense of being in a space and although in one spot being able to swivel the eye around to look up and down. The vanishing points that situate the viewer all converge on the surface of the image rather than in front of it, establishing the painting as a geometrically structured picturing device that takes the place of the viewer's eye.

If perspective is constructed from a convergence of human ideas about space and geometry derived from what their groundedness and environment affords, would a floating alien version of perspective be derived from nonlinear structures? Geometry originated in land measurements, which it is both etymologically and physically derived from (Seife, 2000, p11), so how might an aerometry, based on measuring a floating, unfixed, 360 degree space, differ from human earth-bound geometry? In the essay Mimicry and Legendary Psychasthenia, surrealist critic and sociologist Roger Caillois comments on the relationship between the human body and the straightlined Euclidian geometries of human representation. Caillois proposes that human perception and representation of space and right angles correspond to our upright bilateral posture, and the positioning of our eyes at right angles to our body, and the effect this has on the way we navigate our environment. He suggests humans carry around imaginary right-angled, or dihedral, planes, that determine how they perceive and represent space (Caillois and Shepley, 1984). This hypothesis is borne out in the straight lines of much architecture and Western linear perspective painting, as in Pieter Saenredan's Interior of the Grote Kerk. The same dihedral geometrical representation is illustrated in the model that linguist Arthur Holmer suggests. He argues that as humans are bodily surface-bound, with free movement on the horizontal plane but limited vertically, these are reflected in spatial semantics:

all human languages possess concepts [... that] distinguish upwards from downwards and possess corresponding verbs such as rise and fall. Meanwhile, they do not universally distinguish directions of horizontal motion: some languages do but the distinctions are entirely language-specific. Horizontal motion verbs focus on the manner of movement: eg., walking, running, crawling, or floating [...] our categorization of spatial semantics and motion verbs is determined by our lifeworld. (Holmer, 2013, p178)

By this logic, concepts of up and down may be much less relevant for a species whose lifeworld is characterized by weightlessness. Similarly, they would be unlikely to use straight lines for measurement. It may be possible to visualise models of alien perspective speculatively by applying theories from science and maths using a science-fictional epistemology to consider the relationship of gravity and geometry to representation. If linear perspective is based on flattening groundedness, a weightless perspective may be based on an idea of non-Euclidian flattened floatingness.

Picturing Zero-Dimensionality and Non-Euclidian Geometries

In this section I will develop an epi-physics based on weightlessness, as causal for my alien symbolic perspective based on flattened floatingness. In thinking about how to represent an alien epi-physics, I first look to Ian Bogost's *Alien Phenomenology* (where the alien is defined as "anything – and everything – to everything else" (Bogost, 2012, p34)), although Bogost is primarily interested in objects rather than other organisms. Bogost proposes a speculative realist philosophical practice that aims "to amplify the black noise of objects [...] to write the speculative fictions of their processes, of their unit operations." (Bogost, 2012, p34). Bogost's four strategies for this span the production of text, technical images, apparatuses and wonder. The schema demonstrates Bogost's approach to representing the alien-ness of objects and their worlds, by not attempting to access their inner lives. I attempt to write alien processes or 'unit operations' through an idea of alien aesthetics as a flattened, floating perspective developed from the attribute of weightlessness.

I intend to use Bogost's tiny ontology as a model for the flattened and floating perspective of an 'epi-' or extra-human weightless physics. Bogost's concept of tiny ontology represents not only a flattened but also a condensed and one-dimensionally collapsed hierarchy, constituted on a spaceless point rather than a plane. For Bogost this represents an equivalency of ontological status for all human and nonhuman beings:

If any one being exists no less than any other, then instead of scattering such beings all across the two-dimensional surface of flat ontology, we might also collapse them into the infinite density of a dot. (Bogost, 2012, p21)

This 'point' of tiny ontology for Bogost represents the simple 'is' of being, a "dense mass of everything contained entirely – even as it's spread around haphazardly like a mess or organized logically like a network." (Bogost, 2012, p22) Bogost's tiny ontology constitutes an attempt to avoid taking an outside perspective on things; to accept that they are not humanly understandable, but that they exist in and for themselves. This could provide my alien symbolic meaning to be expressed through a floating perspective.

Bogost's one-dimensionally collapsed hierarchy of tiny ontology,

constituted on a spaceless point, seems to confuse zero-dimensionality for one-dimensionality. For Bogost, the dot is one-dimensional, but a one-dimensional representation would be a line. According to mathematician Charles Seife, "A point is a zero-dimensional object" (Seife, 2000, p86). If Bogost's tiny ontology is one-dimensional, it must be linear; if it is zero-dimensional, it must be much more complex than a simple 'is' of being. A zero-dimensional object constitutes a proper collapsing of dimensions. Zero is complicated, it has a weird relationship to infinity which can be demonstrated in the vanishing point of linear perspective painting. The vanishing point is a zero-dimensional point, which contains both zero and infinity – it is the point of disappearance but also contains the infinity of what is beyond the painting / outside the painter's view in a linear perspective painting.

Insofar as the human attribute of groundedness affords a human geometry based on measurements of the ground and a human perception of gravity, an alien attribute of weightlessness might afford some kind of aerometry based on aerial measurements and a floating epi-physics represented symbolically as zero-dimensional. If zero-dimensional, we could think of Bogost's tiny ontology represented as the vanishing points of a linear perspective painting, except there are many more vanishing points, each containing infinities. This may be represented in a collapse of spatial arrangement and any linear structuring.

When applied to Pieter Saenredan's *Interior of the Grote Kerk*, what might it look like? I here sketchily test this by turning the image upside down and applying Photoshop's perspectival transformation, warping and layer masking tools to multiple image layers to create multiple vanishing points, curve straight lines and change the viewpoint to a floating one. Outcrops of pale curving columns hang like branches reflected in a pool; clusters of inverted pointed arches radiating architraves open claustrophobically onto yet more arches, windows and nave-spaces. An endless proliferation of nested interiors.

The work of French Philosopher Alain Badiou may provide a useful means of analysing this image as he applies a mathematical model of zero's simultaneous nothingness and infinity to a problem about being that is expressed through discourse. This thought experiment considers what might

result from the simultaneously void and multiple ontology of the zero as represented by the vanishing point of perspective in painting, which is



Sketch of the Weightless Interior of the Groote Kerk

itself a problem for writing. Badiou uses Cantor's set theory as a theoretical device in conjunction with philosophical rules rather than mathematical ones (Badiou, 2016, p14). Cantor's set is recursively constructed; it proved that between zero and one there are a more-than-infinite number of points: "every 'object' is reducible to a pure multiplicity, itself built on the unpresentation of the void" (Badiou, 2016, p8). This one-multiple binary is constructed over a third term, the zero, or void. If Being, hypothetically, is constructed over the zero, or void, everything must also be infinite as zero goes into one an infinite number of times. For Badiou, using set theory, Being is always multiple. That is, the individual, or the one, does not exist in itself. Like Neo in the Wachowski brothers' film *The Matrix* (1999), it emerges or, in Badiou's terminology, results. Neo was never the One – he doesn't feel it, and the Oracle does not recognise him; but he becomes the One at the necessary time for the necessary tasks (this is not an ontological status but a result of a process). In Badiou's theory, the subject does not

already exist but is co-constituted as part of a process of subjectivation: "the subject, not as support or origin, but as fragment of the process of a truth" (Badiou, 2016, p16). Similarly, in Dutch realist painting, the object as subject does not precede representation but is produced in the reciprocal triadic relationship produced in picturing between maker-image-imaged or viewer-image-imaged. Badiou suggests that the current post-mechanistic, post-psychoanalytic ("post-Cartesian, post-Lacanian") subjecthood is based on mathematical ontology as we inhabit mathematically-constructed worlds, and that therefore mathematical theory is an appropriate tool for addressing the question of being.

While Badiou's use of zero attempts to uncover the nature of existence for a mathematical subject, Vilém Flusser's zero-dimensional theory describes the technical images that represent or mediate mathematical worlds but also ultimately only refer to narrated worlds. Flusser's technical images are those produced by apparatuses, which themselves constitute abstractions from scientific texts and are means of mediating the world rather than representing its reality. His definition of technical images begins with photography proper in the nineteenth century and extends to cinema. They only signify texts, not the real world: "when we observe them, we see concepts – encoded in a new way – of the world out there" (Flusser, 2006, p15). They present the world as perceived through their apparatuses. Rather than picturing devices, technical images are orientation devices in Flusser's theory. That is, they should be used as tools for orientating oneself in the world not for seeing it, otherwise humans risk becoming "a function of the images they create" (Flusser, 2006, p10).

Due to the epistemological and aesthetic connections Alpers makes between Dutch realist linear perspective painting to the pinhole camera and the camera obscura, for the purposes of this thought experiment I consider them as belonging between Flusser's category of technical images rather than the one of traditional images that painting is usually assigned to. Alpers' reading of Dutch painting in many ways produces a better conceptual fit with Flusser's definition of technical images than traditional images. Firstly, in the way she sees them as signifying concepts rather than phenomena, in cultural epistemological notions about the deceptive nature of images, and specifically as an expression of a mathematical concept:

a display of [the] notion of artifice [...] That border line between nature and artifice

that Kepler defined mathematically, the Dutch made a matter of paint." (Alpers, 1983, p35) The discovery of the world and the representation of it in C17 Dutch culture were, as with contemporary technical images, thought of as the same thing (Alpers, 1983, p27).

Second, in the way their invisibility or the difficulty of decoding them as abstractions prefigures photography. The paintings' abstraction from reality is invisible to most Western humans, so successfully does it mimic the Western idea of realism. They are viewed as representing natural vision and three-dimensional space in a way that appears realistic to contemporary Western human vision, replicating the way we conceptually perceive the world. The work of encoding the images may have been informed by the black box of the camera obscura apparatus, or performed with reference to the aesthetics of the camera obscura and pinhole camera. The artist in this case could be seen as the programme that runs the apparatus.

For Flusser, technical images generate their own universe, as do his other onto-epistemological categories of texts, scientific texts and traditional images. None of these categories should be mistaken for representations but as mediations that organise and communicate ideas about the world in particular ways. Flusser's zero-dimensional model of calculated and computed technical images comprises a world of discreet numbers, dots, bits and pixels that he indexes to the fingertips, as opposed to the fingers' relation to a one-dimensional linear universe of texts, or the eyes' association with the two-dimensionality of pictures. For him, numbers and digital code are the least abstraction of reality, from which we then build up a new reality that is calculated and not "represented". This zero-dimensional pixellation breaks down linearity in a new kind of atomism, building up different pictures of the world. This is described in Hito Steyerl's understanding of the new, computational paradigm:

[linear perspective's] stable and single point of view is being supplemented (and often replaced) by multiple perspectives, overlapping windows, distorted flight lines, and divergent vanishing points [...]

meaning that the virtual spaces we inhabit are themselves zero-dimensional worlds. These worlds are kinds of diegetic (narrative) worlds, constituted as they are from abstractions of scientific texts as enacted through apparatuses. In this way, modelling nonhuman seeing objects may be useful in thinking

how to write the perspective of a nonhuman being science-fictionally.

Conclusion

This thought experiment has produced a method for developing an alien symbolic form based on the conceptualisation and mathematization of pictorial space derived solely from the attribute of weightlessness. In abstracting a framework from Western cultural representational systems, it has reproduced and reflected back the alien perspective of human technology and the mathematical or technicised continuity from linear perspective painting to technicised images. While seeing objects may deanthropomorphise visual representation in that they represent an eye detached from a human body and depict a world already there rather than one constructed by a human gaze, the representation here remains dihedrally flattened, like paper, windows or screens. However, it offers a human way into fictionally describing a coherent alien perspective.

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An examination of gravity beginning with Wings of Desire

¹Anna Walker

Where are we now, where are we now? (Bowie, 2013)

Abstract

It has been 32 years since the release of Wim Wenders' film, *Wings of Desire* (1987), a love story set in post-war Berlin, where invisible angels observe the city's lonely inhabitants and seek out those in distress to comfort them. The film is a meandering ode to humanity through its exploration of what it means to be human and its depiction of the burden of life and history on an individual and collective level. Using *Wings of Desire* as a starting point, I will investigate the repercussions of the individual and collective weight of the post-war intergenerational transmission of trauma that facilitates the enclosing of the self, the defiance of the other and the 'postponing' of the experiencing of the past.

The research was initially presented in the format of a digital audiovisual essay (DAVE), a multimedia approach to address the connections and contradictions across disciplines. A method utilised as a means to link the material and immaterial body, engage technology as part of the investigation, and address the space in-between—the liminal space of potentiality, discovery, transition and change, inhabited, in this instance, by angels. It was an endeavour to explore what emerged from this meeting place, and what new, varied or other information could be accessed through the process of making and watching. It is an entangled tale of interference, woven through and enfolded in the other; methodological abundance embracing Michel Serres' notion of desmology, which is "not so much the state of things but the relations between them" (2002).

Introduction

This essay follows on from the digital audio-visual essay (or the DAVE)—An examination of gravity beginning with Wings of Desire (2019), a critical

¹ In memory of Bruno Ganz (1941-2019) and David Bowie (1947 - 2016).

multimedia approach to examine the links between gravity and trauma in Wim Wenders' love story *Wings of Desire* (1987). Through the making of the DAVE, my intention was to create an essential feedback loop of knowledge, about touching and being touched to explore trauma from another perspective. Accessing Laura Mark's notion of the skin of the film—an exploration of the haptic, I was interested in how we touch and are touched by what we see (2015). I was also endeavouring to create a visual and auditory space to describe and contain the paradoxical weightlessness of a dissociated overwhelm and the gravity, or weight of historical and collective traumas.

Moving beyond the framework of a purely written response to *Gravity*, Epistemology, and Representation: A Weightless Exploration (2018/2019), layering sound and imagery, I wanted to question the tension between sound and vision. As Juhani Pallasmaa writes in The Eyes of the Skin (2005), the dominance of vision over the other senses and as Serge Daney had earlier criticised, "the taste and need a society has to put itself in spectacle" (1970). I wanted to challenge, in Haraway's words, the "persistence of vision", and her insistence on the embodied nature of all vision to "reclaim the sensory system that has been used to signify a leap out of the marked body and into a conquering gaze from nowhere" (2016). Simon O'Sullivan refers to the process of creating a DAVE as the cut-up—an experimentation with images and narrative—that both does violence to and creates a new fiction for consideration (2017). In doing so, I was also exploring Deleuze and Guattari's concept of the refrain to contextualise the use of David Bowie's song Where Are We Now (2013), as both a questioning plea and a reminder of the past. In both this essay and the DAVE, I am interested in unravelling the complex relationship between spectatorship and trauma from an arts practice perspective, while asking how we can resolve traumatic memories if they are continually viewed from a distance? I was curious what new spaces could be created when we think beyond the boundaries of our skin, a concept that the feminist scholar, Donna Haraway (2016) has eloquently tackled in her writings, which I briefly mention.

In an attempt to organise and articulate my thoughts across *Wings of Desire* and the DAVE—*An examination of gravity beginning with Wings of Desire*, this paper is divided into two sections. Section one, navigates *Wings of Desire* and Jacques Derrida's concept of hauntology, and section two, describes and addresses the DAVE.

I: Wings of Desire:

Wings of Desire (1987), directed by Wim Wenders and scripted by Peter Handke, is an exploration of traumatic remembering seen through the eyes of angels, an ageing storyteller and the poetry of Rainer Maria Rilke. Wenders uses post war Berlin for the staging of his love story, in which black and white becomes colour, angels become human and the angelic gaze transforms to bodily contact and feeling. He depicts a city divided in two in a country encumbered by the weight of its past. Throughout the film, we view Berlin from above, looking down upon its crumbling buildings and across desolate wastelands of wide-angled ground level shots. Its traumatic history is seen through the deteriorating architecture, the empty voids where buildings once stood and the Berlin Wall that dissects and ruptures the urban scape. It is a fragmented city, a no-man's land of regret and shame bound by the confines of the wall's perimeters, caught between the past and the future.

The angels, Damiel and Cassiel, are two of the main characters. Each holds a different perspective of time. Damiel desires to embody the moment, to live in real time: "For every step and every breath of wind I want to be able to say 'now' and 'now' and 'now', and not just 'always' and 'forever'". He rejects the infinity of eternal space, choosing instead the embodied physicality of mortality. While Cassiel prefers to occupy infinite time and the liminal spaces over and beyond Berlin. Constantly in motion, he moves across time, speaking and listening to the ghosts of the past, watching omnipotently from above. This in-between space, neither here, nor there, could be described as symptomatic of an inability to resolve a traumatic past. Such a proposition builds on Derrida's concept of the traumatic event being one of continuous motion, an event cut out of time that is neither past nor present but is still to come (2002: 97), and one which connects to Cathy Caruth's belief that:

Indeed events, insofar as they are traumatic, may be defined, in part, by the very ways in which they are not immediately assimilated: by the manner in which their experience is delayed, split off, or subjected to social and political denial. (2014: xiii)

For Caruth, to be traumatised means to be possessed by the image or the event (1995: 5) in which the notion of the flashback functions as a foothold or trace back into the event, "a form of recall that survives at the cost of willed memory or of the very continuity of conscious thought" (1995: 152). Wenders uses a sequence of flashbacks of actual news footage of the Second World War to point to the trauma that seems unresolvable. Caruth describes the traumatised as containing an impossible history, where: "they themselves become a symptom of the history that they cannot entirely possess" (1995: 5). It is Cassiel that assumes the role of holding the traumatic past at a distance, standing outside the framework of becoming, a witness to all that has happened and is happening before him. He is there when Homer thinks back to the beginning of a troubled time. He watches as Homer reads a book about Berlin just after the war. He comforts him as traumatic images of Berlin burning, and footage of children killed by the bombings fill the screen. In a discussion with Damiel about what it means to be human, Cassiel states:

To be alone! To let things happen! To remain serious! We can only be as savage as we are absolutely serious. To do more than observe, collect, testify, preserve! To remain a spirit! Keep your distance! Keep your word! (1987)

He is lamenting his role of observer, of not fully inhabiting the past, unable to ground himself in the present, or indeed dream about the future. At one stage he sits, melancholic, on the wings of the Berlin Victory Column overlooking the city. Here, the implication of selectively remembering the past while choosing not to restore the memory to its "rightful place" creates an unresolved relationship with the traumatic event. Caruth describes a bridge between disparate historical experiences that when ignored create irreparable repercussions. As she writes:

In a catastrophic age, that is, trauma itself may provide the very link between cultures: not as a simple understanding of the pasts of others but rather, within the traumas of contemporary history, as our ability to listen through the departures we have all taken from ourselves. (1995: 11)

It would seem the narrative in *Wings of Desire* is only capable of incorporating the violence of the past in fragments, fleeting thoughts and the briefest of laments. I suggest this failure, to directly confront the past, is partly the film's success for it captures the fragility of dealing with a traumatic past with all of its frailty and open-endedness. In the implication that the past remains incomplete, acknowledges on some level that there will be a price to pay at some stage in the future. For example, a line of text

early in the film, "Walter Benjamin bought Paul Klee's watercolour in 1921 [...]", references "Angelus Novus" and Benjamin's *Theses on the Philosophy of History* (1968). Benjamin begins his short *Ninth Thesis*, with a stanza from a poem by his friend Gershom Scholem.

My wing is ready for flight, I would like to turn back. If I stayed timeless time, I would have little luck. (Scholem, 1921, 1968: 249)

He continues, thereafter, to address the difficulties inherent in not dealing with the past. His angel of history is blown backward into the future, his gaze fixed on the past as a tragedy rather than a series of events. As he writes:

A Klee painting named "Angelus Novus" shows an angel looking as though he is about to move away from something he is fixedly contemplating. His eyes are staring, his mouth is open, his wings are spread. This is how one pictures the angel of history. His face is turned toward the past. Where we perceive a chain of events, he sees one single catastrophe which keeps piling wreckage upon wreckage and hurls it in front of his feet. The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing from Paradise; it has got caught in his wings with such violence that the angel can no longer close them. This storm irresistibly propels him into the future to which his back is turned, while the pile of debris before him grows skyward. This storm is what we call progress. (Benjamin, 1968: 249)

Benjamin calls for a pause to the acceleration of progress to reflect on past traumas and in this reflection, he does not sing hymns or praises; he is impotent. Similarly, Damiel and Cassiel are both haunted by the past. They are ineffectual to change it, partly due to their weightlessness, but also, because they lack the narrative to frame the past, for it evades understanding. Derrida's notion of hauntology, the term he uses in *Spectres of Marx* (1994), describes a spectre that defies an ontological framework. 'Hauntology'—a pun on 'ontology'— links being and presence. The spectral not only arises from the past, but also from the concept of a future absence.

To haunt does not mean to be present, and it is necessary to introduce haunting into the very construction of a concept. Of every concept, beginning with the concepts of being and time (1994: 202).

Derrida's notion of cinema as the appropriate medium for spectrality is clearly evident in *Wings of Desire* through the negotiation of an in-between space of absence and presence, inside and outside. Hauntology is an invaluable method of understanding the traumatic spectres of Wenders' film. Derrida suggests the difficulty in defining the spectre is because it is so embedded in our material presence, in our here and now. It is impossible for us to view the present without getting caught up in the invisible and intangible webs of the past, of thinking about a future without thinking about death. Through the figure of the ghost, the past and present are indistinguishable. "Repetition and first time: this is perhaps the question of the event as question of the ghost" (Derrida, 1994:10).

The viewer, while watching *Wings of Desire*, is in constant communication with some work of the unconscious that, by definition, can be compared with the work of haunting, and the Freudian concept of the "uncanny" (unheimlich) (2015: 26). Derrida argues that the true logic of uncanniness is a phantom-logic, a necessity of learning to live with ghosts, phantoms, and spirits, because "there is no Dasein without the uncanniness, without the strange familiarity [Unheimlichkeit] of some spectre" (1994: 125). It is a state of being that is to be always and everywhere haunted by ghosts, phantoms or spirits: the "visibility of the invisible" (125). Spectral logic is the presence related to the otherness of the self, or the self that is found within the other (whether person, place or time). As he writes at the beginning of Spectres of Marx:

If I am getting ready to speak at length about ghosts, inheritance, and generations, generations of ghosts, which is to say about certain others who are not present, nor presently living, either to us, in us, or outside us, it is in the name of justice [...] It is necessary to speak of the ghost, indeed to the ghost and with it. (1994: xix)

In *Wings of Desire*, the spectral is embedded, not just in the characters, their words, flashbacks or the sounds of the movie but also in the spaces the camera, and us as audience, pan through. The ghost of the past weaves a pathway through every scene. In *Typewriter Ribbon* (1998), Derrida writes of the trace as not only that which is left behind but also that which happens before the event. The body is a body that bears an uncertain future, and the event is a singular experience that marks a body.

It is difficult, however, to conceive of a living being to whom or through whom

something happens without an affection getting inscribed in a sensible, aesthetic manner right on some body or some organic matter. (Derrida, 1998: 72)

The body operates both organically and as an inorganic archive, an archival mechanism capable of reproducing or recalling the event in its unique singularity, where the incident and the body are inseparably linked. "Why organic? Because there is no thinking of the event, it seems, without some sensitivity, without an aesthetic affect and some presumption of living organicity" (1998:72). The event is also a thing to come, something beyond our reach, a concept that builds on Freud's framing of desire in which anxiety is an unacceptable desire, or a repressed desire, known but unexpressed, an un-locatable non-desire that inhabits the psyche, the unconscious or the field. Conflict exists between the desire and non-desire, a space where trauma interjects, shatters the notion of presence and lucidity. It is an arbitrary threat one which endangers the body's intention or as Derrida writes: "nondesire haunts every desire and there is between desire and nondesire an abyssal attraction rather than a simple exteriority of opposition or exclusion" (1998: 159).

Catherine Malabou, in her essay Post-Trauma, Towards a New Definition? (2012: 227-239), deconstructs Žižek's critique of Freudian and Lacanian ontologies of trauma. Through the concept of plasticity as an active embodiment she bridges neuroscience and psychoanalysis to reframe an understanding of trauma. For Malabou, 'becoming' is a radical metamorphosis, the fabrication of a new form, person or a way of being in the world. She reformulates the Freudian notion of plasticity as "a new kind of exposure of the nervous system to danger and, consequently, a new definition of what 'event,' 'suffering,' and 'wound' mean" (2013: 28). As she writes: "With plasticity, we are not facing a pre-given difference, but a process of metamorphosis" (2008). Wenders' partly tackles this idea of becoming human through transitioning in and out of colour, in a predominantly black and white film. Colour signifies the gravitational pull of all that it means to be human, it describes what it is to have hope, to desire connection and a world of sensation, feelings and emotions. In this way, Damiel attempts to break the ephemerality, fragmentation, and discontinuity of an eternal past plagued by unresolved trauma and launches himself into the chaotic embrace of mortality. He yearns to "conquer a history" on his terms:

It is great to live spiritually only and describing spiritual phenomenon for people. But sometimes it becomes too much. I do not want to float forever. I want to feel my own weight. It will make me earthbound. (Wings of Desire, 1987)

Wenders' version of history in *Wings of Desire* is comprised of fragmented memories, sensory moments, physical feelings and passions. His depiction of the shattered identity of Germany is fleeting and unanchored. Through the words of the character of Marion, Wenders emphasises the need to reconstruct a new story, a new narrative, far from the portrayal of a city stuck in a traumatic loop. Damiel's transition from angel to human heralds a new beginning and creates the possibility for the future to destroy the past through the power of love. In a similar vein, Marion drops to earth from her trapeze, moving through black and white to colour to the space she longs to inhabit, (and eventually does), full of passion, human contact and love. Her desire to occupy the ground beneath their feet;x is an endeavour to master it, to feel her "aliveness" and be free of the past, to walk the earth with a different story, a new narrative of love and hope. A descent, I would suggest, is a desire to take charge of the traumatic past.

There is no greater story than ours. That of man and woman. It will be a story of giants... invisible... transposable... a story of new ancestors. Look. My eyes. They are the picture of necessity, of the future of everyone in the place. Last night I dreamt of a stranger... of my man. Only with him could I be alone, open up to him, wholly open, wholly for him. (1987)

The use of the transitions from black and white to colour and back also link the interior world of memories, dreams and fantasy, to an external space beyond the skin. It is a world Haraway (1994) argues that functions beyond the boundaries, one where we recognise our space and place in the world—our situated/ness. For Haraway "situation is never self-evident, never simply concrete [but] always critical" and always in the making. In *Wings of Desire*, bodies in the making are never separate from their apparatuses of bodily production. It is this production from angel to human that allows for another reality to exist, one that questions the past while perhaps instilling the possibility for a different future.

This is in contrast to the frail Homer, the ageing storyteller, who wanders around the city remembering. His trajectory echoes the tired, crumbling façade that is in need of relief from its history. He asks: "What is it about peace that its inspiration is not enduring? Why is its story so hard to tell?"

He laments that he is too tired, too old, too weighted down by the past to imagine a new beginning, one free from history's crumbling psychological architecture.

Peter Falk enters the film early and remains present throughout. He plays himself, Peter Falk, acting Peter Falk, once an angel, who plays an American detective actor in a film about Germany's Nazi past. Despite Falk's attempts to simplify the transformation from immortality to mortality by explaining the simple joys of the human experience, the multiple roles he occupies within the film, hint at the complex layers involved in understanding and making sense of such a past. His appearance is also complicated by the familiar character he plays on American TV, Detective Colombo, further pointing to Germany's identity crisis and the quandary of a future formed out of the post-war cultural colonisation of the US. "You want to hear the story, 1945, war, I'm an American detective [...] German American guy hires me [...] his brother's dead, the family is lost." It is a refrain repeated by Marion: "Decide! We are now the times. Not only the whole town - the whole world is taking part in our decision." And "I have to get used to having a guilty conscience. As if the pain has no past. It always stops when it starts. To be too good to be true."

We, as audience, follow Marion and Homer's paths as they walk the same tired landscapes, the deserted vistas of post-war Berlin. We move downward with the camera, alongside the angels, invited into the minds of the German citizens to witness their most intimate lives, hear their whispered thoughts and private communications. We experience the unhampered movement through time and space that Damial and Cassiel experience; crossing borders of land and walls, memories and dreams, the present and the past.

Damiel's eventual rejection of this voyeuristic position gains him entry into the sensory realm of listening, feeling and touching. Now human he feels the cold, hunger and pain, as he touches the wound on his head, and tastes his blood, bright red on his fingers, he says "It's got a taste. Now I begin to understand". Damiel is seized by the gravitational pull of love. Through his transformation he is activating the physical body as materiality and weight in the immanency of movement but in his naïve and limited acceptance of what it means to be human, he is also failing to fully occupy the historical weight of the past. In the final scenes of *Wings of Desire*, Damiel, fully embodied in his physicality, describes home as the joining with another,

Marion. "She came to take me home and I found home," followed by, "I know now, what no angel knows." But the film doesn't finish there, Wenders returns to the black and white footage of the melancholic Cassiel, and the figure of Homer walking towards the Berlin Wall, and his words:

Name the men, women, and children who will look for me - me, their storyteller, their cantor, their choirmaster - because they need me more than anything in the world. (1987)

Homer, the witness to the trauma, acknowledges the necessity of coming to terms with the past. As Benjamin cites Nietzsche, "We need history, but not the way a spoiled loafer in the garden of knowledge needs it" (1968: 251). Set against a backdrop of traumatic remembering, Berlin's crumbling facade assumes a world without place, of "any-spaces-whatever. [...] And in these any-spaces-whatever a new race of characters was stirring, a kind of mutant: they saw rather than acted, they were seers." (Deleuze, 1989: xi). Thus the film finishes with two phrases: "We have embarked." And "To be continued."

II: Audio Visual Essay: An examination of gravity beginning with Wings of Desire, (Walker, 2019).

An examination of gravity beginning with Wings of Desire is 21.53 minutes long and is a layered digital moving imagery and sound work that incorporates footage from Wings of Desire and A Foreign Affair (1948) directed by Billy Wilder, (screenplay by Wilder and Charles Brackett). Also referenced are: The Man Who Fell to Earth (1978), footage from space from the NASA Website, news reel footage of Berlin during WWII, and snippets of the video made by Bowie and Oursler for Where Are We Now (2013), (footage originally shot in 1970, before the fall of the Berlin Wall). The text is both subtitled from Wings of Desire and snippets of sound and voice. The sounds are fragments from three Bowie songs: Space Oddity, Heroes (1977) and Where Are We Now (2013), Wings of Desire, an interview with Iranian astronaut Anousheh Ansari by Dr Deepak Chopra (2015), soundbites from NASA website, the voice of Wim Wenders at 30th, EFA (2018) and my recorded voice.

My intention through the creation of this DAVE, was to explore O'Sullivan's understanding of fictioning, as an experimental approach to arts practice that in this instance straddles "mythotechnesis" and "mythscience" (2019). O'Sullivan describes a speculative "future-fictioning" of the real to create the potential for a different kind of future. Through an application of digital technology, and the layering of fictional characters sound and footage with real life the aim was to further interrupt the loosely meandering narrative of *Wings of Desire* while playing with the notion of weight and weightlessness. This approach also embraces an ongoing interest in the application of Derrida's concept of hauntology to enter the world of traumatic remembering and recall and reclaim the past.

Seen from a hauntological perspective, the DAVE functions on a number of levels. The fragmented layering of imagery and sounds, which are constantly interrupted, is an active refusal to pin down a single viewpoint, thereby mimicking the persistent interference of the traumatic past. This method also creates a tension between what is real and fictional, what is past and present by presenting a multiplicity of readings attuned to Karen Barad's overarching spacetimemattering, where the past, present and the potential future are dispersed and threaded through and within one another.

[...] cities populated with the living dead; a ghostly/ghastly scene; hauntings] / . . . / war time / science time /spacetime / imaginary time / mythic time / story time / inherited time /a time to be born / a time to die / out of time / short on time /experimental time / now / before / tocome / . . . threaded through one another, knotted, spliced, fractured, each moment a hologram, but never whole [...] Time is out of joint, off its hinges, spooked (Barad, 2010: 243)

The artwork begins with Serres' claim in subtitles that it is not an ontology that is needed but a desmology, (2002). Thereafter, a wing moves across a black and white screen before shifting into a view of the earth from space, the sounds of breathing and a fragment of the song *Space Oddity* (1969) by David Bowie. It continues to a scene from *Wings of Desire* of the angel, Damiel, writing about the innocence of childhood before transitioning to the lament of Homer, and then to striking aerial views of Berlin and its destruction from 1948 and 1987.

6.40 minutes into the DAVE, Homer thinks to himself: The world seems to be sinking into dust, but I recount... as in the beginning...in my sing song voice, which sustains me...

This is immediately followed by Bowie's refrain recounting his experience of living in Berlin in the 1970s. Throughout the DAVE, the past—as seen in the imagery from WWII and the Berlin Wall before it came down, is contrasted with a future filled with progress; space travel, visions of the earth from above and stories of what it means to be weightless. It interlaces a fictional past of Wings of Desire and The Man Who Fell to Earth, and the real past depicted through the black and white imagery, of crumbling buildings and war footage, so much so that at times it is not certain whether what we are watching is real or not. The future is present, from the beginning, it is moving in and out of colour footage looking both forwards to a Utopia where there are no boundaries and peace resides and backwards with longing at the earth below—"You miss Earth, even though it's always in front of you" (2016), is the lament of Russian astronaut, Mikhail Korniyenko, which intentionally connects back to Benjamin's reference, "Angelus Novus," in his *Theses on the Philosophy of History* (1968: 249). Bowie's refrain finally assumes its full lyrical form at 18.41 minutes. In the background the layered voices increase, black and white quickly transforms into colour to Marion spinning on a rope. The voices fade and Anousheh Ansari describes her descent back to earth and the beauty of arriving; of returning to gravity. The imagery fades to Cassiel, the eternal angel staring melancholily into the camera.

Berlin, for David Bowie was a second home. In Nicolas Roeg's film, *The Man Who Fell to Earth* (1976) he played a fallen Angel. Wrestling with a deep addiction and strikingly thin with bright orange hair, Bowie provided a unique vision of an alien on earth. The song, *Where Are We Now* (2013) embedded into the many layers of sound in the DAVE was from his album *The Next Day* (2013), produced by Bowie and Tony Visconti. It was released on 8 January 2013, Bowie's 66th birthday. The lyrics are simple and repetitive, an older person reminiscing about the past and time wasted. In just a few clipped elegantly sung phrases, the song encapsulates the spectral and a yearning for another time in contrast to Homer's lament in *Wings of Desire*.

The sounds, as they unfold in *Wings of Desire* and the DAVE, are continually on the verge of becoming something else. They constitute space, mediate presence, and articulate time. Furthermore, they prompt emotions, generate awareness, and organise patterns of behaviour or trigger a sense of belonging. In addition I will ask: does the music of *Wings of Desire* function

to organise and disorganise the space that oscillates between the celestial, the weight of bodies and Berlin's crumbling facade? Andrew Murphie describes music as a constant form of becoming of time, space and everything that inhabits permanent or semi-permanent beings or cultures (1996). He references Deleuze and Guattari's theory of the refrain to describe a specific and problematic attempt at territorial formation and deformation. Sound, music and language, builds and dissolves walls. As Deleuze and Guattari write:

The refrain is rather a means of preventing music, warding it off, or forgoing it. But music exists because the refrain exists also, because music takes up the refrain, lays hold of it as a content in a form of expression, because it forms a block with it in order to take it somewhere else (1987: 331).

In this instance, the somewhere else, in both *Wings of Desire* and the DAVE, is towards remembering and the repetition of a traumatic past. The complex layering of sounds, music, popular culture, and language—German, French and English—in both, the film and the digital video, is emblematic of constantly crossing cultural borders. This was intended as way to mark the infiltration of the approaching globalisation despite the effort to maintain borders.

Two thirds into the film, Wings of Desire, Simon Bonney shows up with his deep gravelly tones and begins to give voice to another aspect of the life of Berlin. Through the heaviness of his vocals, his punk appearance, and the dark quality of his music we hear the undertow of violence. We have moved through streets, open spaces, buildings, library and a film set to arrive now in a crowded underground club, where bodies interact, moving, touching, pushing against one another. Marion appears out of the shadows, moves her body to the rhythms of Six Bells Chime performed by Crime and The City Solution. Damiel watches her, watches Bonney, as both of their bodies twist and turn like snakes rising upwards from the earth. He approaches with his hand on his heart then takes her hand in his. She can't see him, he is the invisible angel, but she senses him, feels something: "There it is again, this feeling of well-being [...] as if inside my body, a hand was softly tightening." Her words are a contradiction and allude to something impossible, holding on while letting go. Is this possible? Surrealist writer, Pierre Klossowski writes of a deep repetitive wound, a masochism of life repeating itself in order to "recover itself in its fall as if holding its breath

in an instantaneous apprehension of its origin" (Klossowski (1933), cited by Deleuze, 1989). He was referring to the tension between sadism and masochism in reference to Sade. Klossowski, (at that time, Catholic), interpreted Sade's writing as the tragic tale of man doomed to fail in his challenge of God, resulting in nothing but a profound longing for something that doesn't exist. He argued that the natural state of the universe is always in the process of dissolution as well as creation and that creation is therefore ephemeral (1933: 268); in addition, this state of perpetual movement, leads not to happiness but to "the conscious and willing acceptance of tragedy." This tension permeates throughout *Wings of Desire*, and was something I wanted to replicate in the DAVE.

In Wenders' film, the sounds of the ephemeral reverberate across the haunted landscapes as the angels, hover on the edge, ever watchful. Moving from these open spaces into the dark shadows of the club, perhaps references the darkness that lies beneath. Here, the music vibrates with a deeper-pitch, perhaps to bring the film to the grittiness of the issue, to the ground of holding, to its bass level, as in the song's lyrics by Bonney:

You've been treading some unsafe ground And baby looks tired tonight Out amongst the pikes and narrow street You go around I hear the six bells they're ringing Yeah, the six bells they chime (1986)

We (the audience) are just about to enter the transition from angel to human, from black and white to colour. Damiel takes Peter Falk's hand in friendship, and the deal has been sealed, the same hand that is offered to Cassiel but refused.

Back in the nightclub, Nick Cave sings:

And a murder of crows did circle round
First one, then the others flapping blackly down
And the carny's van still sat upon the edge
Tilting slowly as the firm ground turned to sludge
And the rain it hammered down
And the rain it hammered down
And the rain it hammered down
And no-one saw the carny go,

And no-one saw the carny go, And no-one saw the carny go, I say it's funny how things go (1986)

Cave's next song, From Her to Eternity, (1984), finishes with the words:

Oh tell me why? Why? Why? Why the ceiling still shakes? Why the fixtures turn to serpent's snakes? This desire to possess her is a wound And it's naggin' at me like a shrew But I know, that to possess her Is, therefore, not to desire her. (1984)

The lyrics seem to point to the choice that has to be made, to the challenge of letting go, while holding on. Similarly, in the DAVE, Bowie asks over and over, "Where are we now?" It is a refrain that functions as a constant questioning of what is being seen or witnessed by the viewer, and a echoing reminder that despite the passage of time since WWII we are still dealing with racism, anti-Semitism and the scapegoating and dehumanising of the foreign other. To return to Benjamin, "The true picture of the past flits by. The past can be seized only as an image which flashes up at the instant when it can be recognized and is never seen again." (1968: 247). All of which reinforces Wenders words in a speech he gave at the National Film Festival in 2017.

We have to fight a fire that can devour all of us, a fire that (German Word), what's the English word? [...] Laden by an old monster that we thought we had buried called nationalism how could it possibly creep back into our present tense. How can these populace pied pipers with their lies, and their cynicism actually threaten to kill our proudest dreams? Why are so many people turned off by Europe? Why the heck do they look for its future in its rotten past? (Emphasis mine) (Wenders, 2017)

Bowie's question is both the traumatic repetition, and the annoying distraction to the real horrors that are taking place and mimics the feeling of airy lightness that we as audience experience while watching *Wings of Desire*. Despite much of the imagery of our gaze being of despair, of a population isolated and lost, a people without community, we are, as the characters in the film, outside of what is really taking place, on the edge of everything that is about to happen.

This is the refrain that Deleuze and Guattari describe when they write:

A child in the dark, gripped with fear, comforts himself by singing under his breath. He walks and halts to his song. Lost, he takes shelter, or orients himself with his little song as best he can. The song is like a rough sketch of a calming and stabilizing, calm and stable, centre in the heart of chaos. Perhaps the child skips as he sings, hastens or slows his pace. But the song itself is already a skip: it jumps from chaos to the beginnings of order in chaos and is in danger of breaking apart at any moment (1987: 343).

Sounds, music, and words proliferate in both *Wings of Desire* and DAVE. The flow of poetic language is spoken, sung, whispered and written across the screen. Words and music intertwine, and function as both the creation and destruction of space that pulls the audience away from the meandering narrative while propelling them down into the imagery before returning again to the words. This is the dance the past plays on us, so much so, that verbal flashbacks and the language of remembering requires a different kind of watching, one where one's senses must attune to its multiple layers, a type of listening with the eye, to balance the material, spiritual and vertical divides created by sound.

Wings of Desire encapsulated Wenders' desire for a new narrative free from history's crumbling psychological architecture. He postpones the full gravity of the past, glimpsed in fragments through the hard and barren architectural spaces, the violence of Nick Cave's music, and the brief interactions with Homer. As Homer indeed laments:

Name me, muse, the immortal singer who abandoned by his mortal listeners lost his voice, how from being the angel of story-telling he became an organ grinder, ignored or mocked outside on the threshold of no-man's-land. (1987)

Homer recognizes, unlike Damiel and Cassiel, that the witnessed must become witnesses to his narrative, for he was there. Indeed, his parting words plead with mankind to acknowledge the crucial importance of his role – the narrator's role – and the necessity of an audience to witness the testimony to Berlin's past.

Coming to this essay through *Wings of Desire*, and the creation of the DAVE in response to *Wings of Desire*, presented its own set of problems. Least of all revisiting the work to write about it a year after its completion.

However, this approach did reveal new, varied or other knowledge that could only have been accessed through the process of making and thereafter listening and watching. Through the experience of viewing the DAVE together in a group I was attempting to anchor the body in a room of other bodies, focusing on what was being heard and seen on the screen to expand upon Haraway's "situated knowledge" (2016). To embrace a knowledge beyond knowing, a unified experiencing to enhance what it means to be in the throes of the gravitational pull of humanity and all it encompasses. This activation of senses in this way, of seeing, listening, of being in touch with others in a room while experiencing is a way to navigate the trauma of the past. It is a means to negotiate the individual and collective weight of past while simultaneously creating something new, perhaps a method of holding on, while letting go.

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Can you Make Money from Nostalgia in a Galaxy Far Far Away? The difficulty of effectively utilising nostalgia to bring Star Wars to both a new and existing audience

James Sweeting

Introduction

Star Wars is one of the longest-running science fiction film franchises with eleven films released so far. This is further expanded by a range of other media pieces, such as companion television shows (animated and live action), tie-in novels, videogames, and comics. Not to mention the vast array of merchandise that helped generate considerable additional profits for Lucasfilm (the original owner of the franchise).

George Lucas has facilitated the creation of an entire fictional universe that has taken a life of its own. One that includes the presence of recognisable character archetypes and story tropes to attempt to simultaneously create something new yet still familiar. The original trilogy (1977-1983) successfully achieved this, culminating in a trilogy of films that remixed narrative, visual, and audio— in a way that seemed new on the surface to many viewers— even though numerous elements that were present could trace their origins elsewhere. This trend has continued into the post-Lucas era of *Star Wars*. Whilst there continues to be elements that have been lifted from other past pieces of media, increasingly the films have become self-referential, depicting the past of Star Wars that the audience is (likely) familiar with but updated in a way that is also seemingly new or at least different.

This paper will examine the way in which nostalgia has influenced the direction of the *Star Wars* franchise, specifically, the years since George Lucas sold his company, Lucasfilm Ltd, and with-it ownership of *Star Wars* to the Walt Disney company. Disney created a sizable task for itself, but one it felt necessary to recoup its multi-billion-dollar purchase, seeking to bring *Star Wars* back into the public consciousness. Thereby not only appealing to a new younger audience but also re-engaging those that had been put off by Lucas' prequel trilogy, which brought a very different look and feel to the

fictional universe that they had experienced during their own childhood. In addition, Disney also wanted to make serious inroads in making the franchise appeal on a broader international basis, whilst still having to balance the inclusion of elements that are specific in defining Star Wars.

How then, did Disney go about trying to achieve all this, when its first film – *The Force Awakens* – was simultaneously hailed and decried as a nostalgic film?

Sale to Disney

The shadow of George Lucas still reigns across the *Star Wars* galaxy, despite having sold off his studio (Lucasfilm) and with-it ownership of the decades-spanning space opera to the media giant Disney for over \$4.8billion in 2012 (Whitten, 2018). During the decades in which Lucas controlled his company, the extent to which his influence over the end result that was shown on screen could be debated either way; be it siding with some form of visionary auteur approach or that it was one individual acting as a figurehead for the eponymous studio.

By 2012, as far as audiences were concerned *Star Wars* was for the most part dormant, aside from an anticipated videogame (*Star Wars 1313*) that was cancelled after years of delays and the mildly successful Clone Wars animated television series. What was not widely known outside of Lucasfilm was that Lucas was already working on ideas for new *Star Wars* films that would take place after Episode VI (Return of the Jedi). Yet, realising the amount of work that would be required to take on another trilogy of films, and the sting of negative feedback received from so-called fans after the prequel trilogy, Lucas eventually took up Bob Iger (then CEO of Disney) on his offer to sell the studio to Disney.

The initial assumption, at least as far as Lucas was concerned, was that the new *Star Wars* films made under Disney's ownership would take Lucas' script treatments as the basis for the overarching narrative of the new trilogy. However, whilst Bob Iger and Disney would be 'open to George Lucas' ideas', they 'would be under no obligation' to follow through with them (McCreesh, 2019). The result of this development has been a mix of films that took a form that Lucas would unlikely have made himself, whilst also at times resembling something he once had made.

The subsequent *Star Wars* films made, at first, a more deliberate attempt to appeal to both a new younger audience. The created a new experience that did not require the necessity of knowing the events of the previous six films in the saga (and animated series), whilst simultaneously appeasing the older generations who did— or at least had some awareness of the overarching narratives. Therefore, a balancing act of nostalgic references must be navigated, deviating too far away from the older entries can result in a negative reaction from older generations. This was often the response from Generation X viewers of George Lucas' prequel trilogy (1999-2005, criticised for deviating too far from the original trilogy (1977 -1983). Conversely, the first Star Wars film released under the new ownership of Disney (part of the sequel trilogy (2015-1019)), *The Force Awakens (Abrams*, 2015), was criticised for being too nostalgic due to the similarities of its narrative with the first *Star Wars*¹ (Lucas, 1977) film.

Rebooting Star Wars?

Ryan Lizardi's book *Nostalgic Generations and Media* (2017), as the title suggests, focuses on generations. More specifically, generations in the context of demographics of humans (in particular those in the global north). Defining generations can be a helpful means for businesses and researchers to separate populations into more digestible groups making them easier to analyse and potentially easier to predict. For businesses, it is particularly favourable as it provides a framework for them to target, be it when creating a specific product, or marketing one product to different demographics. The latter is important in the context of nostalgia (although so too is the former) given the increasing focus for a (media) product to have transgenerational appeal.

It is here that the term "requel", a portmanteau of remake/reboot and sequel, becomes relevant. There are increasing examples of this, in part due to the growth of expanded cinematic universes², but the previously mentioned *Star Wars: Episode VII – The Force Awakens* (TFA) is a good example of this phenomenon. The film was potentially a sizable risk for Disney, having paid \$4.8bn for Lucasfilm to own Star Wars, the first new film needed to be a hit. To do so though, meant that, in Disney's view, the

¹ Later renamed Star Wars: Episode IV - A New Hope when it was rereleased in 1981.

² A shared fictional universe which contains multiple different stand-alone stories that also fits into an overarching narrative which shares characters and locations and can impact other media pieces to different levels.

film needed to have broader transgenerational appeal. What was deemed the most effective approach to appeal across generations, in a way previously mentioned, was to create something along the lines of a requel. This serves the dual purpose of providing a viable entry point for young and/or new viewers who are not clued in with the rest of the fictional universe, whilst also not alienating older viewers by wiping away what has come before or betraying the sacredness of the pre-existing material.³ Lizardi is aware of the economic rationale behind this approach but also recognises that a media product like this can connect with some viewers nostalgically, but also in terms of identity (Lizardi, 2017, p. 29).

In addition, there is also a desire on the part of Disney to exploit the cultural memory that exists in the economic north around *Star Wars*. Despite the joke that exists when people say they "haven't watched Star Wars" indicating that it is (wrongly) assumed that most people have seen a *Star Wars* film, the signs and iconography that were created from the franchise have seeped into the wider cultural consciousness. The droids and spaceships are often recognisable as coming from *Star Wars*, and it is this basic familiarity (a cultural memory) that Disney is literally banking on when utilising this same imagery in its new films, and crucially in the trailers and marketing for them.

Tapping into cultural memory beyond marketing and arguably making it central to the experience of TFA was quickly critiqued by Lucas after the film's release, stating: 'They wanted to do a retro movie. I don't like that. Every movie I work very hard to make them completely different, with different planets, with different spaceships, make it new' (Jagernauth, 2015). However, one can easily criticise Lucas of making the very actions he called TFA out for, such as the planet Tatooine appearing in five out of six of his *Star Wars* films, as well as the narrative structures of some of his films bearing a number of similarities to the works of Akira Kurosawa. Lucas might have successfully remixed the old to create something seemingly new, but to state that *Star Wars* is truly new is a gross overstatement, given Lucas' own desire to essentially create his own version of Flash Gordon after failing to get the rights to franchise (Jones, 2016, pp. 130–131). Therefore, the spirit of Lucas' remediation lives on in the Disney era of *Star Wars* films,

³ However, Disney effectively did wipe away everything else in terms of Star Wars canonical narrative. All previously published novels were now categorised under the "Legends" banner and considered separate to the events that occur in past and future films, as well as future novels which are deemed as canon.

something perhaps Lucas is unwilling to properly address. Yet the rationale behind these decisions likely differs, with Lucas apparently using a strategy of 'aesthetic borrowing', whereas Disney is trying to resell the version of Star Wars the audience used to like (Golding, 2015).

Making Money Back from Star Wars

Despite the criticism from Lucas, TFA was a financial success for Disney making over \$2 billion (Pallotta, 2016). Indicating that this transgenerational approach of appealing to both a new audience and a nostalgic one had merit. Lucasfilm has since made a further four films, three of which cumulatively have made more than \$4.8 billion, and has resulted in Disney recouping the costs of purchasing Lucasfilm six years ago (Whitten, 2018). However, this does not take into consideration the amount spent on producing and marketing each film. It also fails to account for revenue from the films accrued via the subsequent home releases (DVD, BluRay, digital, streaming, television broadcasting) which has a significant long tail⁴ (Anderson, 2007), especially with a franchise like *Star Wars*; then there is the extensive range of merchandise that is also available (Whitten, 2018). Disney, even more so than its rivals, benefits from the crosspollination that emanates from the continual relevancy of Star Wars, more so even than when it was solely owned by Lucasfilm Ltd.

Disney owns multiple distribution platforms such as the ABC television network and more recently the streaming service Disney+ (amongst others) and with the former is able to use box office figures as a guide for the price that its films will be sold to television stations. This, in turn, is used to determine the price advertisers will pay for an advertising slot alongside the television release of one of its films (Punt, 2002). Disney+ goes in a different direction to the former, as there are no advertisers involved, but it does represent a move back towards to a return of something resembling vertical integration of cinema via the Studio System from the first half of the 20th century. Whilst for the time being Disney+ is not the only place from which audiences can watch its films, it is, however, the only (legal) place that is exhibiting its range of new televisions shows, including those set in the *Star Wars* universe; Disney is also using 4K HDR remasters of

⁴ The "Long Tail" in this instance refers to the continued sales of the films long past its initial release. Meaning that even though, for example, Star Wars: Episode V – The Empire Strikes Back is not leading Blu-Ray sales charts but continues to sell a significant number of copies each year despite being released originally almost four decades ago and available across different formats and platforms.

the original trilogy as another incentive to drive existing Star Wars fans to subscribe to the service. With Disney+, the media conglomerate owns both the means of producing and the location of exhibiting its content. The only thing missing is the ownership of the distribution of the digital content through the copper/fibre-optic cables that are used to bring media into audience's homes.⁵

The films released after TFA have not been as financially successful, although only *Solo: A Star Wars Story* (Howard, 2018) was considered a failure making (just) around \$400 million in cinemas (Whitten, 2018), but both *Rogue One: A Star Wars Story* (Edwards, 2016) and *Star Wars: Episode VIII – The Last Jedi* (Johnson, 2017) made over \$1 billion worldwide in cinemas (Whitten, 2018). The other four Disney produced *Star Wars* films are noteworthy of comparison as the extent to which a transgenerational appeal was utilised was less extensive than that employed for TFA.

Rogue One tells the story of how the rebellion obtained the plans for the death star as first mentioned in the opening crawl from Episode IV – A New Hope (ANH) and therefore the outcome of Rogue One will be known to anyone who has already seen ANH. Despite the film depicting a pivotal event in the Star Wars timeline, it largely focused on a group of new characters as well as visiting new planets. Subsequently showing that Star Wars was still capable of doing something new within the confines of the fictional universe. That does not, however, mean that the film was devoid of references to other Star Wars films. Characters from across the first six episodic films appeared throughout, which helped to place the film further within the wider narrative, but also provided nostalgic references for older viewers to latch on to; something that the trailers made abundantly clear via the inclusion of shots of the death star, star destroyers, dtormtroopers, X-wings, and Darth Vader; all scored to a remix of the Imperial March and the Farce Theme.

Nostalgia for Star Wars

Nostalgia can be seen to permeate a considerable amount of the discussion when dealing with *Star Wars* since the start of the Disney era and is seemingly core to the much of the approach in creating and marketing

⁵ Warner Media is the closest to truly achieving a return to vertical integration, as it is owned by AT&T who do provide home internet services.

these newer films. The negative response to Lucas' prequel trilogy notably eschewed the "used future" aesthetic of the original trilogy and instead employed a Renaissance-inspired design to set the new trilogy apart. This in part contributed to a desire from fans – typically older fans – for a return of something that more closely resembled the original trilogy. The absence of the aesthetic found in those three films creating a sense of loss for those older fans. This desire was keenly noticed by Disney who largely ignored Lucas' ideas for his sequel trilogy and created and marketed its new Star Wars in a way that 'carefully pitched nostalgia' to 'give the sensation of returning to where we have never been' whilst also facilitating a sense of homecoming (Golding, 2019, p. 49). This approach is something which Dan Golding keenly points out that is present with very deliberate use in one of the early trailers for TFA, in which Han Solo and Chewbacca are seen for the first time back in the Millennium Falcon where Solo proclaims 'Chewie, we're home'. A not so subtle indication to older fans that this new film will provide them with a return to the very nostalgic experience of the version of Star Wars they grew up with (Golding, 2019, p. 15).



'Chewie, we're home.' A key line from the second teaser trailer for TFA to appeal to fanbase and a scene that stayed in the film itself in which the characters themselves go through a nostalgic experience (Star Wars, 2015).

Golding carefully examines the extent to which nostalgia seemingly provides the backbone to this new post-Lucas *Star Wars*. Golding focuses his attention predominantly on *TFA* and *Rogue One*, two films that both rely heavily on nostalgia for their very existence, however, the way in which this is performed differs both in execution and how they were received. In short, *TFA* was criticised for being too nostalgic due to the similarity in its narrative structure, seemingly staying too close to that of ANH and its

general aesthetic also being too much like the original trilogy as a whole. The latter criticism being ironic as this is exactly what "fans" said they wanted, which Disney happily provided for them. The difference here is that unlike the Lucas films in which he 'looked everywhere for ideas for Star Wars' resulting in what Fredric Jameson (1991) referred to as the 'nostalgia film' — due to reclaiming cultural experiences of the past into the present — TFA took its inspiration from past *Star Wars* films as reference points. Although it would be reductive to claim that it solely did so, the result was a very different kind of nostalgia film to the one Jameson described, one that is self-reflective (Golding, 2019, pp. 12–13).

This action of bringing back the past and improving on it is not just isolated to *Star Wars* but also present in what has been referred to as the 'legacy film'. Golding notes that this helps provide authority to films – not just *Star Wars*— that have transferred from one era to another. This offers multiple perceived benefits in that it avoids the 'sharp break of a traditional reboot' and gives older audiences a chance to remember whilst also enabling newer audiences to claim some cultural capital of this version for themselves (Golding, 2019, p. 71). These benefits of the legacy film are similar in practice to those that Ryan Lizardi (2017, p. 7) attribute to the approach used by companies – such as Disney – of focusing on transgenerational appeal; the aim of which is to 'create a predictable dual audience of nostalgics and youths'.

Transgenerational and International Appeal

Despite the prominent attention given to nostalgic elements from past *Star Wars* films appearing in both *TFA* and *Rogue One*, this was less frequent in *The Last Jedi* (*TLJ*). There are of course still overt references to past Star Wars films, but this can also be argued to serve a narrative that is aware of its own past, rather than instances in the other Disney produced films which could be seen as an attempt to appeal to specific sections of the audience. This helped facilitate a return in the interest of the franchise, restoring confidence that was lost by those wanting to indulge in the nostalgia from the original trilogy, who possibly brought their own children along to watch these new films. Yet because of the wider transgenerational appeal that was utilised, this helped to lay out the groundwork which enabled a new generation to get involved with the franchise, as well as putting a claim to a trilogy seemingly being their own. As a result, *TLJ* can

both rely on the fact that most of the audience would have seen *TFA*– and even if they have not, the onus is on the viewer as this is a direct sequel, taking place immediately after *TFA* (which is unusual for a *Star Wars* film). This, however, gives freedom to the creative team to not have to depend on nostalgia from previous trilogies to drive both interest in and the narrative of *TLJ*.

An early scene from The *TLJ* which also chronologically follows on immediately after the final scene of *TFA* (*Star Wars*, 2017b). This also gives the audience their first opportunity to learn what Luke Skywalker has been up to over the past decades.



An early scene from The TLJ which also chronologically follows on immediately after the final scene of TFA (Star Wars, 2017b). This also gives the audience their first opportunity to learn what Luke Skywalker has been up to over the past decades.

Whilst this is good for the long run of the franchise, it does highlight the crisis of confidence at Disney that they still felt the need to lean on nostalgia to help support a film franchise of this scale and renown. Furthermore, given the success of *TFA* in international markets poses additional questions as to why there is the need to focus on a past that this audience is less familiar with, irrespective of the transgenerational approach. This transgenerational approach, therefore, could seemingly extend to a transnational approach as well. Whereby younger audiences in the established economic north, as well as audiences in newly established markets such as Russia and more importantly China, are catered for similarly in terms of narrative familiarity. Building on this is the ability for *TFA* to act as a form of marketing for the prior films. Characters such as Han Solo and Chewbacca (and their ship the Millennium Falcon) feature

heavily in both the film and its marketing, and now the audience can follow up their viewing experience with further films (and televisions shows) set in the same shared cinematic universe. Thus, enabling the audience to engage with the extended diegesis of the franchise after having been provided with a clear entry point, and, more importantly for Disney, increases revenue from this new audience

The plural audience is deemed to be crucial for Star Wars in the post-Lucas era, but there is indeed a limit to nostalgia in terms of engaging an audience, even if it does help to provide a narrative (and as with TFA a structure) to build from, and there is a sizable audience that has not grown up with Star Wars and is unfamiliar with it. This is not just a consideration for the audience in the economic north, as the Chinese film market continues to grow and will likely soon rival that of the United States. Except the difference is, China does not have nostalgia for the franchise. The Chinese audience is coming to the galaxy 'far far away' as new visitors meaning that the films still need to stand on their own, or as was the case of Rogue One, be given a bit of additional support from high profile Chinese stars such as Donnie Yen and Jian Wen. Because of this unfamiliarity for Star Wars in such a lucrative market, having The Force Awakens adopt a "requel" approach helps to ease Chinese audiences into the franchise in readiness for later entries; as well as potentially encouraging them to watch previous entries as well. However, despite these approaches, Star Wars- whilst successful - has not been the cultural juggernaut in China as it continues to be in the West, much to Disney's disappointment (Yuhas, 2020).

Whilst the presence of Han Solo, Chewbacca, and the Millennium Falcon in *TFA* makes narrative sense, it does pose the question to an uninformed audience member as to why these characters are so important? Given that *TFA* made more than half of its box office revenue from international markets (Whitten, 2018) suggests that nostalgia need not be the solution that Disney thought it had to be, questioning whether they subsequently needlessly hemmed the film into the constraints of a nostalgic requel? Further supporting this critique is that *TLJ* also took in just over half of its global box office revenue from international sales, which as stated was an actual sequel rather than a requel. Although, conversely, the "Anthology"

⁶ The Anthology films are ones that take place within the same wider diegesis as the Skywalker Saga films, but are individual stories that act independently of the Saga.

films *Rogue One* and *Solo* both performed slightly better in the domestic US market and whilst not requels, certainly utilised nostalgic elements for their narratives. This could suggest that the nostalgic approach used in both *Rogue One* and *Solo* might have contributed to the lower international sales because there was the – not entirely incorrect assumption – that the audience is expected to have seen other *Star Wars* films in order to better understand these Anthology⁷ films . Whereas, with the requel, there can be the interpretation that less is expected from the audience to understand the core narrative that is taking place in the film and that smaller aspects that are not explicitly clear are explained elsewhere for those who do want to know more.⁸

This is not to definitively claim that nostalgia sells better in the United States of America compared to the rest of the world – especially as international sales are comprised of every other market and not broken down by region – but it does help give some credence to Disney's actions of utilising nostalgia to support its *Star Wars* films within its domestic market which is currently essential for the overall success of the films.

Revenge of the Nostalgia Film and the Collapse of Diegesis

With the release of *The Rise of Skywalker* (Abrams, 2019) at the end of 2019, Disney released its conclusion to the sequel trilogy and with it brought an end to the *Skywalker Saga* (after Lucas' previous two attempts).⁹ It also saw the return of J.J. Abrams to the director's role to help close off the trilogy he helped to launch.¹⁰ *TFA* acted as a requel to bring in a new audience and placate existing audiences and TLJ acted for the most part as a traditional sequel. It adeptly used nostalgic references from past *Star Wars* films to support the overarching diegesis of the *Star Wars* universe but without detracting from the core narrative of the individual film or the trilogy that it exists within. *The Rise of Skywalker (TROS)* was tasked with the unenviable job of not only bringing the sequel trilogy to a close but also the whole saga. However, in doing so it breaks apart the strategy employed by Disney with *TFA* as well as the inherent logic of the sequel trilogy.

⁷ The naming strategy which was designed to separate them from the "Saga" films might not have helped either.

⁸ Typically, in a Visual Dictionary or a separate novel that expands on specific events or characters. 9 This is not the end of Star Wars films, merely a break, there are also numerous television series' currently in production to help bolster Disney's recently launched streaming service Disney+.

¹⁰ Colin Trevorrow was originally hired to direct and write the script for Episode IX before leaving the project due to "creative differences". (StarWars.com, 2017; White, 2017)

The sequels exist as part of the wider Star Wars diegesis and in practice act much like that of a soap opera, in that not only does the narrative need to engage existing viewers, it also needs to provide opportunities for new viewers to be able to connect with the diegesis despite not having knowledge of what came before. In terms of the Star Wars diegesis, there exist eight films (nine including the Anthology films) and currently four television series' (as well as the novels) worth of narrative preceding the events of the sequels. These were not necessary in order to understand the core plot of TFA or TLI, but their existence was still reflected in the newer films. Like how the prequels were at times a reflection of the original trilogy that was created previously. George Lucas reflected on this whilst developing Episode I- The Phantom Menace (Lucas, 1999) stating that 'It's like poetry, they rhyme' (Shenk, 2001, 03:22) in relation to the events that were to take place in Episode I mirroring that of Episode IV. Lucas explaining how The Phantom Menace is an 'echo' of the previous three films to the leading members of the LucasFIlm team (Shenk, 2001). Thereby the intention is complementing the original films rather than remaking elements of them.



Lucas explaining how The Phantom Menace is an 'echo' of the previous three films to the leading members of the LucasFIlm team (Shenk, 2001). Thereby the intention is complementing the original films rather than remaking elements of them.

The soap analogy has also been acknowledged by Lucas himself, although more in regards to the content itself, claiming that: 'People don't actually realise it's actually a soap opera and it's all about family problems – it's not about spaceships' (Bradshaw, 2017). Accompanying the quote from Lucas,

Peter Bradshaw also highlights the structural similarities to soap operas, with the appropriation of the word 'episode' to distinguish between the different films and to identify them as something more than the typical film sequel. This also brought aspects of the wider narrative diegesis of radio and television shows to the cinema.

If indeed we are to think of *Star Wars* as a very expensive soap opera for the cinema, then the *in media res*¹¹ narrative strategy can also be considered. Whilst this narrative device in film is often accompanied by flashbacks, *Star Wars* traditionally has avoided this aspect of it. Instead, the original trilogy was repurposed as the second part of the *Skywalker Saga*, and therefore the whole trilogy tells a narrative in media res within the context of the saga. The prequels later served akin to that of a flashback for audience members who had previously watched the original trilogy, with these new films explaining what led to the events previously depicted. Yet, both trilogies could still be understood on their own— and to a lesser extent, each film also had a clear beginning, middle, and end—¹² with the viewer able to enter the narrative at any point and at least be able to follow the core plot of that particular film and proceed from there.

Despite the nostalgic aspirations that Disney have for its *Star Wars* property, the soap opera comparisons have not been reinforced by Disney, be that implicitly or explicitly. The sequels ultimately abandon the logic of the soap opera and this becomes clear with the development of *TROS*. The film begins by quickly reintroducing Palpatine as the villain once more in the *Skywalker Saga*, but for the first time in the sequels. It is this particular character reintroduction and the elements that surround it that breaks down the ability of the viewer to engage with this film *in media res* but also hinders the sequel trilogy as a whole in this regard too. Palpatine is certainly not the first legacy character to make a return in the sequels, but unlike the approach taken by *TFA* and *TLJ* which contextualise them as if they are living legends as a way to introduce them to a new audience, *TROS*, on the other hand, brings Palpatine (and some other characters) back with little to no information. Instead, *TROS* is depending on the audience to have seen both previous trilogies in order to understand the magnitude of this

¹¹ In which the narrative begins in the middle (or at the end) of the plot with information about the past delivered later within the interaction with the media.

¹² Despite the second and third films of both the Prequel Trilogy and the Original Trilogy being sequels the plot did not require the viewer to have seen the previous film(s) to follow the narrative, although it would still help with understanding the film(s) as a whole.

character's importance to the plot, without doing the heavy lifting in the narrative. With one of the main characters, Poe Dameron, visibly puzzled as its actor Oscar Isaac asks – as if speaking on behalf of the audience – 'Somehow, Palpatine has returned' (Abrams, 2019).

This is significant, not because it could be argued as weak storytelling, but because it highlights the mistaken use of nostalgia as a means of bringing the whole saga to a close, at the expense of concluding the sequel trilogy. J.J. Abrams and co-writer Chris Terrio looked to the franchises past for an answer, but by doing so ignored the journey taken by not only the characters in the previous two films but also that the audience experienced along the way. Now members of the audience who entered the narrative at the start of the sequels are suddenly presented with an all-powerful evil of whom they have no knowledge of, nor are they provided with an explanation. Even for those who are familiar with Palpatine's character, they too are left with very few answers as to how he has returned. Palpatine is set up as being a recognisable foe for the protagonists in the *Star Wars* franchise, but without any substance behind his resurrection after his supposed death in *Episode VI – Return of the Jedi* (Marquand, 1983).

Palpatine's inclusion is not the only transgression at the behest of misguided nostalgia insertion, as the ending of TROS sees Rey make the journey to the home planet of Anakin and Luke Skywalker - Tatooine - as a further symbolic nod to the previous two trilogies. This is set up as a return to the very beginning, except it misunderstands the very history of Star Wars it is seemingly trying to pay overt homage to. The location in question - the Lars homestead – was not the home of Anakin Skywalker, nor was it a place that Leia Organa (Luke Skywalker's twin sister but separated at birth) ever visited. Tatooine was also a location of great pain and tragedy for the Skywalkers. Anakin grew up there as a slave and managed to leave after being freed with the help of Jedi Qui-Gon Jin. Only to be separated from his mother who remained trapped as a slave, before being sold again and eventually captured by Tusken raiders and died as a result; the trauma of which emotionally scarring Anakin for life. Luke, too, wanted to leave the planet, and forcibly had to with the assistance of Jedi Obi-Wan Kenobi after his aunt and uncle (who raised him from a baby) were burnt alive by the Empire. As for Leia, the time she did visit the planet whilst attempting to rescue Han Solo was also taken into slavery briefly. In other words, Tatooine is the last place to go when trying to pay respect to the Skywalkers as

Abrams and Terrio are trying to do through Rey.

Furthermore is the problem – as with Palpatine – *TROS* assumes the audience recognises all of this. As not once is Tatooine mentioned in the sequels, the significance (albeit questionable in the given context) of this location is based upon knowledge of previous films. Without this knowledge, Rey has seemingly travelled to an unknown desert planet and buried a couple of lightsabers next to an abandoned building. This might generate sentimental and nostalgic feelings for audience members who grew up with the original trilogy, and to a lesser extent the prequels, but within the narrative of the *Skywalker Saga* it makes little sense.

The final scene from TROS is a direct call back to previous Star Wars films but detracts from the identity of not only this film but also the Sequel Trilogy as a whole. It is also necessary to note that the way in which nostalgia is misused in TROS does not make it a nostalgia film in the sense of how Fredric Jameson (1991) defines the term. TROS is not recreating a past, rather, instead, it is remediating past elements from previous Star Wars films and reusing them as familiar recognisable points in the film for some audience members to latch on to. It is also an exercise in reusing previously created ideas, themes, and actors rather than creating something new and potentially financially risky. The sequels narratively could be argued to be an unnecessary third trilogy, with the previous two providing a clear beginning and end (a redemptive arc) to Anakin Skywalker (aka Darth Vader). Whereas TFA via the requel approach acts as a "soft-reboot" of Star Wars. One initially designed to reignite interest in the franchise but without the baggage of decades of an increasingly confusing narrative. The problem Disney has encountered though is that it has tried to use nostalgia to generate interest but has struggled to determine to what extent it informs or rather determines the content of the sequel films. This balance has broken down in TROS instead relying on "squeezing out the last dollar" of the franchise.

Diegesis in a Cinematic Universe can exist without Nostalgia

The result of *TROS* is a film that does not work on its own, not even within its own trilogy. It is therefore not surprising that the film both critically and commercially has failed to even match the previous two saga films, and struggled internationally, particularly in China where the film

has struggled against domestic films (Brzeski, 2019). Part of this has been attributed to poor word of mouth in the country, but as alluded to earlier in this paper, a focus on Western nostalgia does not positively contribute to the international prospects for these films. With *TROS* it is likely that in addition to the use of nostalgia damaging the diegesis of the Sequels within the final film, it has also added an additional barrier for international audiences. One that, as mentioned, does not have a cultural memory for the previous trilogies, nor might that same audience be inclined to watch films from earlier decades in order to understand what is going in the latest film.

The Marvel Cinematic Universe (MCU) and the wider underlying diegesis that exists connecting these films, somewhat surprisingly, does not suffer from this problem. These films have been immensely popular in the Chinese market (Chaguan, 2019) despite the need to have seen multiple films (although not necessarily all of them) to understand the individual plots. There are different possible reasons for why the sheer number of Marvel films (currently twenty with more in development) and the weight of its diegesis has not deterred millions of audience members from engaging with the franchise. One is that the weight of nostalgia does not exist in the same way as with Star Wars. That is not to say that there is no nostalgia present regarding Marvel - quite the opposite as Marvel Comics has been going since 1939 – but the series of films within the MCU which began in 2008 had a self-imposed new epoch which prevented too much narrative baggage from the comics to weigh down too heavily on the new diegesis present across the films. Therefore, nostalgia for the Marvel characters in the West could contribute towards marketing but did not heavily inform the diegesis. As a result, it can be argued that the *in media res* aspect of soap operas has been truly realised with the MCU films in a way that Star Wars has failed to do so. Although, in part, the sizable time gap between the different releases of the Star Wars trilogies and with it different audience generations have contributed to the difficulty of following the films in a way that has not currently impacted upon the MCU films, especially in the Chinese market.

Conclusion

This paper has explored the role of nostalgia in relation to the *Star Wars* franchise and how it has been utilised in recent years with mixed results since the transference of ownership from an individual (who had a significant impact, but not sole creative authority) to under the umbrella of

the behemoth that is the Walt Disney Company. Previously, it was beholden mostly to Lucas, as he was the owner of Lucasfilm, which was a private company, to now also needing to appease shareholders who want a return on the expensive purchase to gain control over *Star Wars*; with nostalgia initially seen as a tool to help generate interest in the franchise once more and to help provide it with a base to spread word of mouth with a new generation.

With the first two films in the sequel trilogy there appeared to be an awareness of the limitations of nostalgia, which resulted in the utilisation of a transgenerational approach to help mitigate the extent to overuse of nostalgia. Despite Lucas' criticism that *TFA* was a 'retro movie' it still managed to provide a suitable entry point for a new generation of viewers and set up the scene for *TLJ* which took the franchise in a different direction, once again, to the ire of a vocal section of the fanbase.

However, by the third film in the trilogy, this approach had been abandoned, and the benefits of starting off the new trilogy via a requel began to diminish. Whilst this was still successful in providing an entry point for a new generation, as the narrative approach was not followed through, the diegesis of the trilogy was weakened and created difficulties for a wider audience to follow through with this trilogy. Instead, nostalgia for the previous trilogies was favoured at the cost of narrative cohesion which also saw a misunderstanding of context from the signs of past films that were remediated in the final film.

Until this point, there had been a cautious strategy in which nostalgia was carefully utilised along with a transgenerational approach, which also at times employed the creation of a requel as a strategy. This was a deliberate commercial decision that outweighed creative ones. Yet this decision also exposed a difference between the West and East (specifically the large Chinese market) in which nostalgia should be carefully balanced with the aim of simultaneously attracting members of a Western audience with desires of re-experiencing elements from past *Star Wars* films yet still appealing to a new audience (both international and new Western audience members) who do not have any nostalgic feelings for the franchise and could quite likely be confused by a narrative that leans too heavily on the past.

Collective memory is a consideration, as there are those who despite not having seen a Star Wars film before might still be familiar with some elements (such as characters, spaceships, weapons) from the franchise. This can be exploited by marketing to try and engage a wider audience into seeing these films. Ultimately, since the purchase of Lucasfilm (and with it the Star Wars franchise), Disney was determined to not only recoup its costs but also to profit from this investment. Nostalgia has been deemed as an effective tool to help to achieve these aims. However, this strategy has become unwieldy across three saga films and two anthology films, with inconsistent results worldwide, as well as seeing discrepancies in audience numbers between the domestic (United States) and international markets. Unlike the Marvel Cinematic Universe films which have seen universal success despite the large number of films released during a decade. Yet these did not rely as heavily on nostalgia, quite likely not acting as a weight upon them. Therefore, nostalgia should be viewed with caution if used as a core component of a commercial strategy when engaging with a film franchise.

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Transcript of Conversation with Knut Aufermann Lucinda Guy

This is an edited transcript of a conversation with Knut Aufermann, which took place in Tivoli Park, Ljubljana, 2019, just after looking around Steklenik Gallery. Knut works as the organisation *Mobile Radio* with Sarah Washington, and uses feedback extensively in radio and performance.

- L What were we saying about systems? Plants? You just mentioned somebody?
- K He's called Michael Prime. He lived in London and he used to do bio-feedback stuff live on stage so he always had a pot plant, and it had stuff on it. This is talking late nineties, early 2000s, I think. He just used to drive some kind of analogue synth with it, the signal comes from the plant. I think in the text he described one moment where all the plants synchronised during a performance, something he'd never experienced before.
- L So he enabled them to communicate, because they are communicating anyway, but they sussed out what the system was
- K Yes, maybe they just decided at some point.

And he's been doing lots of recordings, also with mushrooms, he's really into mushrooms, but now he's kind of disappeared from face of the earth. Somebody told me he's moved to a small island off the coast of Ireland, I'm not sure, maybe he's contactable by email. But there's quite a few artists who hook up plants in various ways.

Later:

- L You were saying, the other thing about feedback is...
- K The other thing about feedback is that if you have it in electric circuits it leads to oscillation. That's why I think sound is the perfect medium to study feedback.
- L We can hear it, the subtle differences, straight away.
- K Everything, and our ears can tell, you can immediately tell, that's not a sine wave that's feedback, because of the quality of it. And you have this simple system of sticking a mic into a speaker, the howlround, that's a very

simple feedback system, it oscillates, and it oscillates at the lowest resistance, it tries to find the lowest state of energy, that's why it's the simplest form of system to oscillate. If you move the mic somewhere else then it goes to a different pitch, because that is the simplest, the lowest energy system for it to oscillate. And the thing is, a radio transmitter is nothing else, you have an oscillating system, you have your carrier wave, and in FM you modulate it with your signal you want to send, but these continuous oscillations, electric circuit that runs a feedback loop.

The sine curve that produces these oscillations, is exactly the same if you plot the population of rabbits against foxes, so the rabbits multiply, it goes up, then the foxes realise there is a lot of food and they eat all the rabbits, and the rabbit population goes down, and eventually the foxes die because they won't get enough food anymore, and then it goes up. You plot it, you get a sine wave, it's exactly the same thing.

And this point where you come towards this oscillation, when you push this system, you give it this feedback, return channel, and you probe it and say, where do you want to go? And that point where it comes to it, is technically described as resonance. It goes through a point where it is self-sustaining, at the point of resonance. I think in sound and in radio these are very important words: oscillation, resonance.

- L I'm wondering what your story was. What were the first kind of feedback pieces you made? What did you find out through those, and where did it take you?
- K The first feedback that I got fascinated with was chemical, it's very strange, but you find it everywhere. I was maybe 16 or something and I was in work experience in my home town at the *Institute of Chemical Analysis*, sort of state-run thing that tests if the bread is...
- L That's what I did for my work experience! I was in a lab at a bread company.
- K This wasn't in a lab, this was run by the city, and they would decide what they were testing this week, could be bread, could be anything, and they'd go out in every bakery and buy bread and kind of check if they're doing proper jobs. Anyway, so I was there, and the guy who ran it was a bit bored and he had a book of chemical show-experiments. He just spent two weeks with me, doing one after another of these show-experiments. And one was called the chemical heart, or chemical clock, it's a very simple thing, you pour three different things together and stir it, and the solution

starts changing colour. Really snappy: it's clear, and then it goes like this, and then it's dark blue, and then clear again, then dark blue again. It goes on for like an hour! And we were sitting there and we were like - this shouldn't work!

L - It's like the perpetual motion machine, an impossible idea.

K - Exactly. In this case, OK, it would run out after some time, but it was running for a long time. Even in chemical terms it shouldn't exist, because the laws of thermodynamics say once something is mixed, it doesn't unmix. Like you don't pour milk in your coffee and expect the milk to suddenly turn up in one corner. But this did, it was oscillating, and it didn't go into equilibrium. It wasn't extreme but it was off equilibrium enough to change colour. And there are a few chemical reactions like this. They're very simple, you really think it's something living going on, but it's literally three or four ingredients, we're not talking about anything biological going on, it's really only chemical.

So that stuck in my head. It's only much later when I get so fascinated with feedback and sound, that I started to think back on this and think, this is like the same thing.

L - A formative experience!

K - You'll find this everywhere. It doesn't matter where you look, you'll find it.

And then Heinz von Förster was one of these very, very early cybernetics people

L - In Germany?

K - He was Austrian but he moved to the US in the late forties, early fifties, and then had a career, ran the biological computer lab in Illinois I think, throughout the 60s and 70s, and died aged 96 or something like that, maybe 10 years ago, 15 years ago . And I met him once after a talk he did. I'd seen him once at University, he blew my mind, and he basically made me stop studying chemistry. Because there were too many questions that were just not covered in the education that I got, and were far too interesting to miss out on.

His friends and colleagues, when he died, made a big book, a sort of journal of cybernetics in honour of his life's work, and I contributed a text on sound and feedback. It's so long ago I can't remember what I wrote.

I think it's just the curiosity really, the joy of it, the non-linearity, you come to this point where everything gets really unstable and you don't

know which direction it's going. Very tiny. Even with electronics that you know, especially when you have stuff going on that extends stuff in the air. You do something like this (hand gesture) and all hell breaks loose. I don't understand it completely. Sometimes when I play, my mixer becomes part of the circuit. I mean the chassis (of the mixer). I can't completely explain. I can't make it do that, I can't demonstrate it, but every now and then you come to that point. You want to turn the EQ or something and as soon as you go like this (demonstrates) it goes like wheeeeeeeeeeeee something changes...

- L It becomes sensitive. It's a bit like, saying about the plants starting to join in the performance... If the performance is powerful enough, the objects around it want to start want to be part of it, or contribute to the experience.
- K They are part of the circuitry.
- L You are listening to them so they are able to respond.
- K And then I stopped that at a certain point, researching or talking about it, and just carried on playing with it. I still like it when I see people doing stuff, I get really curious and I ask them things. Probably just because I finished my degree and there was no need really anymore.
- L Most of our research is through making things, that's how we learn how things work. Through listening to each other's work and making things ourselves. We just don't write it up usually.
- K We're quite lucky that the system in the UK allows students to do that.
- L Is it not the case in Germany or elsewhere? You did your MA in the UK where was that?
- K Middlesex when they still had their sonic arts course. They had some really good students actually, because Middlesex was very open to basically let anybody study. If you were slightly over 20 you were considered a mature student, it didn't matter if you didn't have any kind of qualifications, they would let you in. There was a whole generation of already quite established artists, who thought, I might be able to grab a degree here. And the early intakes were a lot of people in their 20s, sometimes early 30s. Together that was a force. Sarah [Washington] was part of this, she was also a mature student.
- L Then you get a bit of a culture, and you start influencing stuff...
- K And you do your own stuff. And they let us do our own stuff, they were super happy.

The conversation moves to Knut's installation, *The Changing of the Guard* at *Radio Revolten* festival, Halle, 2016

- L Didn't you do an earlier, similar thing, before?
- K Yes, it's like version number 6 or 7 or so.
- L And are you going to make more?
- K If there's use for it. They all sound fairly the same, overall.
- L I'm wondering how you got to the point where you can build a system that doesn't just spiral off, that's sort of stable, that keeps coming back, but is also changing all the time and has unpredictable qualities.
- K It's not so difficult actually, sometimes it's just simple tools. One of the driving things of these installations is a piece of audio equipment that is a feedback destroyer. So that when fast fourier analysis became easily done in pieces of audio equipment, what the industry, Behringer and some other companies, started to make is machines that look at the incoming signal, and try and figure out: is there a waveform in it that is really loud, and that would be the frequency of feedback?
- L So it's doing what our ears do when we recognise feedback?
- K Exactly, mathematically, yes, and then it has a set of filters, like very narrow frequency filters, and when it sees, oh there is a really dominant sine wave in this thing, it sets a filter and filters out that frequency.
- L So this is like your fox and rabbits .
- K Exactly.
- L So sometimes you are pushing the feedback in, and something else is taking it out, and then you push it in in a new way, and it takes that out?
- K Exactly. So, these little machines, they have 12 filters, so it would set a filter, and if another sine wave pops out that's too strong it sets another one, until it would have 12 filters across the whole frequency spectrum. And the great thing about this machine is it never gives up. So, if it sees another feedback frequency turning up, it would let go of the first one.
- L So you exploited that aspect of it.
- K Exactly, so that thing is in a Sisyphus state of hunting the feedback.
- L I love that they wouldn't have imagined when they built it that someone would use it, to enable feedback rather than to clean it out.
- K I don't use it in the way how it's supposed to be, it's supposed to be

between the microphone and the speaker. But I basically just plug it into itself, so it doesn't ever have a chance to finish with its job, and so it just keeps on doing it forever.

- L- It's really funny!
- K I use two or three of them, and then I put other things into the system.
- L What other things?
- K Effects like reverb, delays.
- L But it's all machine noise, there is no external noise?
- K No external noise. I often also put little transmitters in, and then a receiver, in and detune it a little, so you get more crunchy stuff, to get away from this very clean, electronic sound. You get a little bit of grit.
- L All the equipment is yearning. It's trying to complete a process, but it can't, it's not allowed to do that.
- K I would think it's more like a river that has to find its way to the sea on unknown terrain, so constantly finds little valleys, then suddenly there's a mountain, I will have to go around. It's a flow, and sometimes it also ends in a stable form, I can't predict.
- L It just makes a tone?
- K Or two tones or something.
- L And carries on indefinitely.
- K Yeah. When I set it up and set parameters and stuff, sometimes that happens after five minutes, and I think: OK I'll have to do something else. Sometimes it happily does all this stuff for two days, then finds a stable state. There's lots of parameters I don't have access to, including things like temperature, humidity, and then at some point I have to be available to kind of poke it.
- L I really like that you linked it up to the silence detection system, I thought that was a great way of dealing with that, but also a great metaphor. You're making an automated system that clicks in, but also kind of uses nothing, it doesn't use voice, it doesn't use instruments, it's revealing a silence, the sound of the equipment when the link goes down. Did you always make it that way, to use in silence detection?
- K- The early versions were because we were doing projects where we had to kill 24 hours. The first time was in Switzerland. LoRa, the local radio station, would give us two weeks of their airtime, and there were three of us: Sarah (Washington), Marold (Langer-Phillipsen) and me, and we had

to come up with how to fill this. We were thinking, we will have to go to sleep sometime, we didn't want to make a playlist., and so that's why I made this. So there was no silence detection system built in, but basically once we wanted to go to bed, we would bring that fader up.

L - And it's still live radio, you are still broadcasting live, something new and different all the time.

K - Then I would tweak it every day, that's the same that I did in Halle ... the equipment defines the priorities. You said 'spiralling out of control' but it doesn't really happen, because the architecture constrains you. It doesn't go into infrasound or ultrasound because the actual circuitry is not meant to function there. The energy state would be too high, it likes to play in where it's made to be and that's the audible range. And the same with volume, there is a headroom, there is a top. Of course, I use compressors to smooth it. As soon as you have a compressor in the chain you can very clearly limit the top volume. And you don't run into trouble with distortion, it's very simple, very easy. And of course, a compressor is a cybernetic system. Looks at the input, compares it, and then changes the volume depending on what's going on, exactly the same thing as the industrial steam machine that didn't blow up. So, the technology's all there, I love that. I'm still really excited by compressors and gates, with very simple stuff you can make so much, have so much fun with it.

L - What else have you done with things like that?

K - Compressors? I did a piece when we did the launch of the book in Halle. I didn't really know what to do and I felt like it was also the end of a long and arduous process, and I felt like I should tidy up after myself, finally it's finished, the Radio Revolten thing is finished! So, we came up with this thing that we were all going to tidy up live on air. We asked Dinah Bird and Anna Friz to join us live on air. Dinah was washing up on her microphone. Anna was going through her old stuff at her mums, going through the boxes. I had a mop and a bucket and a microphone pointing down onto the mop, and I was just mopping the venue. I put a compressor in between so it would really, really ramp up the water sounds and the mopping sounds, but also as I would come closer to the speakers it would start feeding back, but on a really low level. It wasn't like this ear-piercing thing, but it was at a level where it was underneath the other tidying up sounds, you could hear this beeeeeewooowooo, all this different stuff - it would kind of sing along. So, we did just fifteen minutes of mopping and tidying, that was our contribution to the launch.

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"I love a party with a happy atmosphere"; notes on the ontology of interpersonal atmosphere Hannah Drayson

The common English term 'party' is often used to refer to a gathering of people (often assembled for the purposes of celebration). This short article considers the ontology of parties and gathers some ways to describe the party as a social atmosphere produced by certain kinds of aesthetic work. It suggests that a party as a 'thing', an assembly or gathering of objects and people (Latour, 2004), is characterised and perhaps catalysed by affective exchange achieved and maintained through an assemblage of material and interpersonal ingredients and actions. Parties are relational events characterised by and comprised of what goes on in the 'in-between' space between individuals, groups, and environment. This porous interface is what we might refer to as 'atmosphere'. It draws on the work of scholars who have thought carefully about atmosphere and it's implications for understanding the subjectivity, bodily presence and meaning in aesthetics as constitutive of the things that they apprehend, for example Gernot Böhme's "ecological aesethetics" (Chandler, 2011, p.553). The commonplace English phrase 'party atmosphere' is used here to describe the party as an assembly of individuals as a relational ontology.

Party atmospheres manifest affective exchange between participants that is often highly palpable and strongly felt, yet they can seem fugitive and ephemeral. As Böhme (2017) suggests, "embeddedness in the atmosphere makes the situation appear overly complex [...] participants in an interpersonal atmosphere cannot really see themselves as fixed elements, because this atmosphere constantly co-determines them in their being." (p.98) A felt or 'palpable atmosphere' can often serve as shorthand for an unspecified affect. Teresa Brennan (2004) describes affect as "social and psychological in origin" (p.1) and yet transmitted through physiological and biological means which are felt and often appear involuntary. As she

¹ As comedian Russ Abbott's 1985 hit single *I love a party with a happy atmosphere* seems to indicate that, if a party can have a happy atmosphere, it can also have other atmospheres, perhaps not always benign. Abbott's single seems a wonderful example of a piece of atmospheric media. No doubt it has very different effects in different settings.

² Teresa Brennan introduces her book, *The Transmission of Affect*, by describing the atmosphere in a room.

explains, an atmosphere is not the result, but the means or medium for the transmission of affect. It is "how one feels the others' affects [which,] if only for an instant, alters the biochemistry and neurology of the subject. The 'atmosphere' or the environment literally gets into the individual" (ibid).

Let's make a party

The 'party' can refer to many forms of gathering in contemporary Western culture. The word offers a catch-all for a number of sub-types of event; birthday party, house party, office party etc. Why talk about parties rather than club nights, discos, happenings, rituals, festivals, mixers, rallies or gigs; events with comparable interpersonal and atmospheric characteristics? As I would like to show in the account briefly developed here, the word 'party' indicates a certain kind of interpersonal and aesthetic experience that, strictly speaking, has a different ontological inflection to those that indicate more specific types of events. Parties can be staged or spontaneous; something like a ritual or a club night could 'turn into' a party, or 'turn out' to have been a good party. 'Party' then offers a sense of something more, something collective in nature and constituted by the shared experience of its participants.

This aspect is detectable in the original meaning of the word, where a 'party' was not an event, but more often used to indicate an individual or group of persons i.e. 'those who were party to the confession'. Around 1920 it began to be used by the New York press and American literature of the period to indicate groups of revelers who would go 'on' a party, as if on an expedition: "a traveling group of acquaintances seeking entertainment together" (Seed 2015, p.165).³ These early parties did not neccessarily have a positive affective valence. In the modernist literature of the interwar period, writers like F. Scott Fitzgerald and Evelyn Waugh tended to depict parties—particularly those that were an expedition—as destructive, chaotic, wasteful. Characterised by excessive consumption (particularly alcoholic), moral and personal dissolution, and boredom, they were "like going on a voyage, an indefinite trip in search of eternal pleasure that tended to end on the rocks" (Churchwell, 2014, p.183) (also see Seed, 2015, p.164; Milthorpe, 2015; Milthorpe and Murphy, 2016).⁴ In this inflection, a party is less

³ In colloquial English this usage is retained when people are said to "go out" with a group of friends or on a date.

⁴ John Steinbeck's *Cannery Row* (1945) cautions us regarding the unruly nature of the party. In a narrative driven by the throwing of two parties, Steinbeck describes the party as a "pathological"

an event and more a group of people assembled for a particular, collective purpose, who gather for a certain goal, and may 'go forth' together. This sense of collective venture is reflected in other uses such as 'political party', which again stresses 'the party' in which the goals of the individual are broadened to include those of their fellows. The resonance of this inflection is particularly useful for thinking about affect and atmosphere as it raises the question of a particular ontology of the party, and how that collective sense of being is achieved.

Atmosphere and party ontology

Böhme's (2017) philosophical exploration of atmosphere offers an analysis useful in thinking about party ontology. He describes the creation of atmosphere as a spacial practice central to contemporary capitalist production where it is made and managed through careful aesthetic work. As Böhme describes them, atmospheres are "subjective facts" that issue neither completely from the "objects or environments from which they proceed" or the "subjects who experience them" (Böhme 1993, p.114, in Bille et al 2015). Instead, they "seem to fill the space with a certain tone of feeling like a haze" (ibid). The sensory qualities of atmospheres tend towards the multi-modal even synaesthetic; they are arrived at in perception as wholes. Despite this, they can be produced through the arrangement of specific details and elements. He gives the examples of décor and lighting; white lighting and blue tiles can give a sense of a space being 'cold'. As Böhme tells us, while they will not always result from particular sets of circumstances and may not be felt the same by every individual that encounters them, atmospheres still have recognisable qualities that reoccur at different times and places. Also while they are perceived subjectively, atmospheres are still 'out there'. The parameters that bring them into existence are literally and figuratively 'in the air'. (p.95)

When making a party—engaging in the aesthetic labour that promotes the production of a party atmosphere—we might consider various elements or 'atmospheric media' as ingredients that create certain qualities and moods.

being; "a kind of individual and [...] likely to be a very perverse individual [...] a party hardly ever goes the way it is planned or intended" (p.167). The second party in *Cannery Row* is an apology for the first. Happy atmosphere or not, either to 'party' or to throw a party invokes a process, and if we take Steinbeck's suggestion at face value, we may even think about being a party or a party as itself a 'being'. 5 It is worth noting that Gernot Böhme observes that it is in politics that interpersonal atmosphere seems to have more value and consideration given to it than other spaces of exchange. (2017, p.108)

Barbara Ehrenreich's (2006) cultural history of ecstatic rituals cites the achievement of 'collective joy'— experiences of collectivity and enlargement beyond the self; "communal pleasure, even ecstasy or bliss" as the common goal of many forms of secular and spiritual gatherings. Surveying Dionysian rites, 12th century Christian carnival, rock-and-roll gigs and 'Beatlemania', and crowd participation at sporting events such as cricket and football⁶, she offers a 'constellation' of elements that often appear; "music, dancing, eating, drinking or indulging in other mind-altering drugs, costuming and/ or various forms of self-decoration, such as face and body painting" (p.43). It may be useful to consider elements used in the production of 'collective joy' from the perspective of the party atmosphere.



Near Mint party at Images night club Plymouth, 2016. Low hanging decoration diffuses lighting to create a sense of intimacy in a large and open room. *Photograph courtesy of Dom Moore.*

Going forth

Following these insights, we can describe a party as an event in which atmospheres are 'staged' to encourage certain behaviours and actions—many of which may interplay and be connected. We could say then

⁶ In her work on the 'cultural history of collective joy', Ehrenreich argues that there has been a long failure of scholarly work to account for positive forms of collective experience, one that was reflected in, and related to, a wider cultural dismissal.

that to engage in the aesthetic labour of producing a party with a happy atmosphere is akin to sourcing and placing together elements that have happy or 'festive' connotations, with the intention that the participants will form a 'party'. Further to this, we might suggest that it is the atmosphere itself that creates the party, that is in essence the glue that binds together the group 'going forth' together described above. Ehrenreich's constellation would, it seems, benefit from some further consideration regarding how its elements produce differing atmospheric effects. While there is not space to do this in it's entirety here, we might start by considering these elements as affective modalities that carry affect between individuals and to use Brennan's word, 'permeate' them.

The permeability of the biological individual is brought even more to the fore when we consider an overlooked modality that resonates from the proximity of bodies in space- that of smell. In Brennan's (2004) exploration of the 'concrete mechanisms' (p.68) of affect's transmission she argues that the sociological literature on group formation neglects the physiological evidence for entrainment between individuals that is founded in smell. She suggests that while the mechanisms of entrainment include those that influence the nervous system through the visual mode, through mimesis, and the auditory and rhythmic dimensions are recognized, the more neglected olfactory dimensions offer even more profound effects. In the olfactory dimension, it is pheromonal communication, a form of external hormonal signaling of "pollenlike" chemicals that creatures emit in order to communicate with or influence those of its own, or even other species that might constitute an overlooked dimension of affective transmission. (p.69) In addition, images and gestures can produce hormonal responses in individuals, such as raised testosterone measured in individuals exposed to aggressive images or imagined descriptions of financially threatening situations (pp.70-71). Böhme likewise cites the work of psychiatrist Hubert Tellenbach whose exploration of atmosphere as a manifestation of 'interpersonal reality' focused in its inception on 'atmosphere and taste'. For Tellenback, smell was the atmosphere that "literally and metaphorically" emanates from a person as a basic aspect of communication, as "a person's radiance, or his or her personal aura" (Böhme, p.103).7

⁷ Curiously, some atmospheric techniques literaly evoke these connections through the use of haze or mist, whereby the physical atmosphere becomes visible. Hazers and smoke machines are atmospheric staging technologies commonly found in theatres and nightclubs. They are used to produce airbourne particles that catch the light and produce a dense 'atmosphere'. Depending on the quantity of liquid that they release, hazers produce the visual effect of making objects in the distance less visually distinct, they

On the topic of human presence, and the presence through which humans appear to one another, Böhme (2017) reflects on the arguments made by Jakob Böhme that smell and reverberation are both:

modes whereby a being penetrates its entire surrounding space (classically termed *sphaera activitatis*), and in which the smell or voice endow the atmosphere of this space with a character. What is felt is not only the presence of some general thing but the presence of this particular one. In this context, it is worth remembering that individual knowing and recognition are vitally mediated by smell and voice, both in the animal and the human world. (p.139)

Sonic qualities of reverbration and voice, like smell, have their own atmospheric effects. Böhme maintains that music's qualities make it the atmospheric medium par excellence.⁸ It is spacial, and hence its resonant effects, fill an environment, touching and linking both subjects and objects⁹ to connect individuals. Reverbration does this not only through transmitting meaning through singing, chanting and movement, but more fundamentally through entrainment achived by rhythm and melody as well as visual means and mirroring. Forms of synchronised action then offer a group the further possibility of 'becoming a party' through collective

pick up colour and light, creating a visible mist within the space and giving the empty space a kind of substantial quality. When used on a dance floor they can create a feeling that is intimate and enclosed, bringing curtains down around small groups of dancers, even separating individuals into their own packets of absorption.

8 The problematically a-subjective nature of musical meaning actually means that the concept of atmosphere can offer to liberate researchers aiming to describe the complexities of shared meaning available through music. It does this by refusing to become involved in a nature-culture/subject-object dichotomy, in which the meaning and feeling of a percept must be reduced to specific causes. Vadén and Torvinen (2014) argue that thinking about music as an atmospheric medium offers to resolve problems for the interpretation of musical meaning. They argue that the difficulty in perfecting, or even pinning down, a language that can be used to talk about music is caused by the fact that it is phenomenologically a-subjective, not experienced as a property of oneself, but outside of oneself. Questions about the meanings of music tend to end in a sort of paradox, in which cultural music inflections are so easily recognized that they seem to self-evidently contain the feelings we associate with them; "a strong 'feel' of meaningfulness in music does not necessarily come hand-in-hand with any specific messages or symbolic forms. Modes of musical signification are elusive and shifting, and their linguistic description is unavoidably metaphorical and vague." (p.210) Semiotically, music is rich with symbolic meaning but these meanings can become very quickly unstuck. While some musical features lend themselves to particular embodied interpretations, these apparently immediate and innate feelings are often contingent on long cultural histories rather than physiological universals. They rarely survive cultural and temporal shifts with their meanings intact enough to consider those meanings to be in any way universal. However in certain circumstances they are remarkably robust.

9 The potential for listener's sensitivity to the feel of sonic space is made apparent by the fact that is is so common for recorded or synthesised music to makes use of 'atmosphere' as a special effect to offer cues and supports to the mood of a recording. Recording techniques and audio processing that produce spacialisation and environmental cues, for example echoes or reverb, or aspects of field recording, such as crowd sounds – are literally referred to as 'atmospheres'.

movement or sound, moving in time or moving reciprocally. As Evan Thompson (2001) argues, some accounts of child development argue that motor movement develops in the first case as a result of the ability to respond to others, not to self-purposive explorations of the environment (p.7). The ability to move with meaning issues in the first case from interpersonal responses. Neuroscientific work also shows that when a person observes another's movements they respond with what seems to be similar neural activity. From a very early stage in human development, the actions of other individuals are essentially 'felt'. Even when they are not understood or outwardly responded to, they are embodied (pp.34-35). In these models our sense of self relies on reciprocity with the bodies and intentions of others; affect permeates the individual and is co-created.

An ontology of the party

Parties are contexts in which elements like sound and music, decorations, lighting and atmospheric effects, costuming, food and feasting are staged in order to produce a particular mood or feeling. But a party is not an event that is attended in order to experience these elements in themselves. While a focus on venue, eating, or music might be common, it is the individuals who attend that make 'a party'. From this perspective we could say that a successful party is where these elements encourage the manifestation of an interpersonal atmosphere where entrainment is maintained and arrived at through various means (movement and singing, pheromones etc.) allowing the participants to travel together through different moods and embark on collective actions. A 'party atmosphere', taken colloquially to refer to a space of joy or cheer, is also an amosphere that makes 'a party' of the participants. Exploring the sensory qualities of some 'ingredients' of parties as atmospheric media can help to flesh out an account of the party as an emergent entity and theories of atmophere allow us to locate the affect of the party atmosphere in phenomenological experience. To talk of atmosphere in this context collapses subject-object ontological categories, stressing the intersubjective ontology of the party. It offers an account that is far more satisfying in how it incorporates perception and experience and treats meaning as a property experienced through direct engagement with the world and with others.

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