

I Am The Sun And Cannot Be Gazed Upon Fixedly

**Art and the Spectral Power of
the Derivative**

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Declaration

The work presented in this thesis is the candidate's own.

Signed.....

Roman Vasseur

Date.....

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Synopsis

This PhD claims that art and cultural production, more broadly, are irrevocably changed now that the logic of the derivative is seeded in and transmitted by culture's objects. The thesis and the artworks that form this PhD submission employ examples of cinema from the early 1970s onwards to affectively map how the spectral, but impactful, reign of the derivative has taken hold, and how its violent rearranging of time and space is dramatically different from the commodity form's sedimenting of the same forces. I examine how the modern derivative's ability to bundle and unbundle the component qualities of a commodity, and then mine the information arising from those actions, performs a spectral, politically romantic, but absolute power. I consider how the function of probability for both derivatives and information engineering has amplified the ideological effects of the derivative and afforded it the qualities of a mythic law. Cinema is employed throughout as a form of divination that locates instances where the ideological info-power of the derivative clashes most visibly and productively with the chaotic and material properties of information. I suggest that it is in these shuddering bodies and markers of underlying dispositions of power that the refracted, immense power and mythic law of the derivative can be represented and annulled.

Contents

Declaration.....	2
Acknowledgements	3
Synopsis.....	4
Contents.....	5
Introduction.....	6
Chapter One: A Spectral Sovereign Power	22
1.1 <i>Performance (1970): Cinema as an Affective Mapping of the Coming Economy of Derivatives</i>	33
1.2 <i>No Finance without Romance (Figure as Romantic Ground)</i>	42
1.3 <i>Schmitt's Concept of Sovereignty</i>	48
1.4 <i>The Leviathan</i>	50
1.5 <i>Benjamin's Commodity Form after the Derivative</i>	52
1.6 <i>Pattern & Randomness / Presence & Absence</i>	56
Chapter Two: How Cinema Thinks the Derivative.....	62
2.1 <i>Cinema as Apparatus</i>	72
2.2 <i>Performance's Method – The Derivative as Baroque Frame</i>	77
2.3 <i>The Materialism of the Apparatus – Truffaut's Vase</i>	82
2.4 <i>Barry Lyndon (1975) – Bodies as Points of Convergence in a Schema of Debt</i>	88
2.5 <i>Cinema as the Marshalling of the Sedimented Forces of the Cosmos</i>	97
Chapter Three: Cinema Thinks Violence as Form and Force	101
3.1 <i>Violence as Form – The Conformist (1970)</i>	103
3.2 <i>The Imagined Relationship To Dematerialised Information</i>	107
3.3 <i>Plato's Cave – Cinema Threatens its Sovereign Actors</i>	110
3.4 <i>Mythical Violence</i>	114
Chapter Four: Accelerating to a Standstill – Probability's Reign	119
4.1 <i>Intensification – Exiting Life for the Sake of the Living</i>	120
4.2 <i>Art's Romantic Productivity</i>	128
4.3 <i>A Contract with all the Weight of the Law</i>	140
4.4 <i>Narratives of Mastery versus Chaotic Materials</i>	150
Conclusion	156
Bibliography	181
Illustrations.....	186
Notes	189

Introduction



Fig. 1 *The Taking of Power by Louis XIV* (Rossellini, 1966). Rossellini forensically describes the apparatus of the court of Versailles and the refracted power of the Sun King.

$$C = SN(d_1) - N(d_2)Ke^{-rt}$$
$$d_1 = \frac{\ln(S/K) + (r + s^2/2)t}{s \cdot \sqrt{t}}$$
$$d_2 = d_1 - s \cdot \sqrt{t}$$

C = Call premium
S = Current stock price
t = Time until option exercise
K = Option striking price
r = Risk-free interest rate
N = Cumulative standard normal distribution
e = Exponential term

s = St. Deviation
ln = Natural Log

Fig. 2 The Black-Scholes Merton pricing formula for call options (derivatives). Probability and the derivative assume a sovereign power.

“ '[Après moi, le deluge] After me, the deluge,' declared King Louis XV, at what was almost but not quite the high water mark of Absolutism. These days one might say, after capitalism, the *derivative*” (Wark, 2017).

This thesis stems from my time as Lead Artist and curator for a post-war British New Town. My brief was to advise on the revision of the master plan for a town that had been envisioned as both an artwork and with artworks in it that were an expression of post-war reconstruction and statecraft. These mainly sculptural, discrete objects anticipated discrete subjects as their intimate partners in the project. In addition, I curated and made a series of works for the town under the title appropriated from the 1948 prayer of dedication for the town: *Let Us Pray for Those Now Residing in the Designated Area*. Harlow was master planned by the architect Sir Frederick Gibberd in 1947 as an entirely new town designed to take the population overflow from a devastated post-war London. From the outset, works by Hepworth, Moore and Chadwick played a role in the design of the town's civic spaces, providing objects that performed an explicit and highly visible statecraft. In addition to acting as a material contract between the state and its citizens, the works made the power and ideology of the state represented, spatially determined and concrete.

A critical revisiting of the town's singular vision threw into relief these and emerging forms of embodiment, signification and power but also how informatics conducts power. The town was symptomatic of post-war acts of statecraft across Britain but, because of its focus on art and, in particular, sculpture, its statecraft was more tangible but also more visibly effected by the changes brought by that which has come after capitalism: the derivative. The ability of the derivative to limitlessly unbundle the component flows of a commodity and then abstract and sell the information concerning those flows, represents a radical shift from commodity form capitalism. This economic and informatic (Haraway) revolution has irretrievably undermined the unitary nature of these objects but also contemporary art and cultural production more broadly.¹ As a consequence, the nature of the contract between subject and state

has become diffuse but powerful, always renegotiable but seemingly final; ungraspable but material in its effects.

Since the early '70s, the commodity form has been transformed by the logic of derivatives that unbundles stores of value, violently altering notions of embodiment, time and space in the process. Paradoxically, this unbundling has simultaneously installed bodies and objects as 'stories' that obscure the ideological apparatus and extrastatecraft of finance capital. As a result of this polarising experience, the challenge arose as to how to recuperate a critical agency for these artworks and the town's master plan according to this changed paradigm. How was this possible when, in the age of the derivative, the component flows of the commodity and of the subject have been scattered and made diffuse? How could art and culture both represent the spectral power of derivatives and torsion its capacities for altering time and space in order to exit the temporal impasse and spectral sovereign power it installed in the present?

My role entailed being embedded in the planning and economics of regeneration, which were themselves embedded in the logic of finance capital. Value and agency no longer lay sedimented in the town's artworks. Instead, they were being mobilised by finance's ability to subdivide and trade all the attributes of an object or site. In the reign of the derivative, value is created in motion and the attributes of the commodity are unbundled as processes of affect and abstraction. Whilst this process of unbundling was experienced as an ungraspable ideology, it nevertheless impacted materially. Public space was annexed to private concerns; housing became an arbitrary concession to commercial interests; and so on.

My attempts to understand both the original vision of the town and the then pre-crash economics of the town's regeneration led me to believe that art's objects and practices were inadequate. Inadequate in terms of challenging, representing or even understanding the ontology of finance and power that produced the social relations, architecture and statecraft of our present. The subjectivities, notion of site and critical agency that were invoked by the public, artists, commissioning bodies, arms of government and the private sector were

inadequate but vital 'stories' that obscured the peculiar refracted materialities of contemporary finance capital. The commodity form and the unitary subject were no longer sufficient metaphors for describing the capitalism at play and art appeared redundant as a critical tool in the face of this dilemma.

During this period, ideas of referencing cinema to map the operation, effects and logic of derivatives emerged as a possible way forward. The bodies and objects of cinema appeared to chart more readily the derivatives' unspooling of commodities and the forms of embodiment that result from this transformation of the commodity. Cinema creates value and a sense of agency out of its capacity for motion. A capacity that mirrors, detects and transmits the derivative's logic of restless motion and endless liquidity. In addition, cinema's bodies point towards the liberal human subject as both ideological excess and as an ideological function of derivatives. That cinema could also show us how ideology did this thinking, was doubly important. Finally, and most fundamentally, cinema's conversion of bodies into visual information allegorises the sovereign power afforded to information in finance capital and the way that this info-power creates a permanent 'state of exception' (Schmitt). Because cinema possesses within its form a time consciousness, it appears best able to detect derivative's unbundling of the attributes of bodies and objects, violently rending open those bodies and objects as it alters space and time. According to this emerging method, objects and bodies could be understood not as unitary objects but as nodes or points of convergence within a matrix of technologies and power.

The thesis employs Anglo-American cinema from a cusp moment of the late '60s and early '70s as a means of understanding an ensuing crisis of embodiment. I test my claim that cinema best forecasts and transmits the advent and logic of derivatives as a development so seismic that, one could say, it is the deluge that comes after capital (Wark). In addition, cinema is the medium most able to affectively map the ideological materialism and polity of the derivative because it, of all the arts, is most embedded in the economics of its time. Whilst this thesis doesn't attempt to arrive at a solution for the project from which the question arose, it does attempt to chart the spectral sovereign power of finance capital

which was felt so forcefully but remained ungraspable at this time and ask what is at stake for art in the light of this ontology. The thesis explores the paradox of the derivative's capacity for deterritorialization alongside the bracketed nature of the agency that it proffers. In doing so, it seeks to locate the vein of alternative sovereign power that occurs within the vectors of information that derivatives mine. As I map this shift in the '70s from economies of real abstraction into economies of weightless and dynamic information, I explore how information technology amplifies the ideological capacities of those flows of information and of the derivative. The function of pattern and randomness in information is explored and how the application of probability to these functions amplifies derivative's false claims for agency and freedom.

The written aspect of this thesis explores the claim made in the overall research that the spectral power and logic of financial derivatives has been seeded in contemporary art. But also that certain cultural objects intuit and affectively map the sometimes opaque and complex forms of distributed cognition that derivatives perform. The writing seeks to do something of the same and aggregates materials that are now becoming audio-visual and sculptural evocations of the overall research. As a consequence the writing is not intended primarily for publication but as a process of disambiguation or making explicit that, which would normally remain implicit in the artworks, and as a means of becoming immersed in and dirtied by these materials and their affective qualities. This includes the examples of intense, affective cinema that I suggest divine the advent of a transition from the economic ontology of the commodity form to that of the derivative. But also, and *as* intensely the examples of theory that work on the reader in compellingly imagistic ways. By imagistic I mean language that is strongly driven by images and which also seeks to speculate with and project those images to the reader. The key exemplar of this in the text is Carl Schmitt's work, whose political philosophy and writing on legal and constitutional matters is considered by some academics as unusually imagistic and affective as opposed to aridly technical legal theory. This approach then extends to my citing Walter Benjamin and his use of imagistic language following his own attraction to Schmitt's work on sovereign power, decisionism and time.

The text is considered by myself to be a sub-temporal space where I can convey how technologies of power, images of power and conceptions of information act in feedback and feed-forward circuits to enhance the ideological effects of each. So what we encounter in the text is an object in which each of these disciplines, film-making (Roeg & Cammel), political philosophy (Schmitt), urbanism (Easterling), informatics (Hayles), derivatives and the market (Ayache) and cultural criticism (Benjamin) are understood as attempting to intuit complex forms of dispersed thinking and power via certain fleeting but historically persistent images. Put in blunt terms, the text 'thinks' the 'thinking' in each field by juxtaposing each and foregrounding the images and informatic realities that haunt the 'thinking' of each. The question of how culture and its objects 'think' is dealt with in detail in Chapter Two: *How Cinema Thinks the Derivative* and then again in the conclusion where I talk about a project being developed with Katherine Hayles that focuses on her recent book and work *Unthought: The Power of the Cognitive Nonconscious* (2017, Hayles).

The text goes on to engage with these images and seeks their antecedents, before asking how their logic haunts the present. The dispersed cognition and info-power of the derivative is, I suggest dogged by both questions of embodiment and decisionism that stem from these antecedents. In turn these questions are pursued by a concept of agency imagined *as* embodied, wilful and sometimes violent. Chapter One considers how these compelling and highly kinetic imagistic notions go on to become the romantic ground for finance, politics and cultural production that then paradoxically become activities stuck and contained by these images and imaginings of freedom and agency. However, regardless of the kinetic but bracketed nature of these imaginings they are ideologically confabulated by conceptions of information as portable and able to scythe through complexities. As a consequence these imaginings of agency obscure the material realities of informatics and the less embodied agency that they perform. It's these paradoxes and the feint narrative of this less embodied and less human-centric form of agency at work in the dynamics of information that the text attempts to amplify in implicit and explicit ways.

These sets of powerful contradictions that motion towards a current crisis for contemporary art's objects and their critical agency are affectively mapped by the writing. On the one hand examples of cinema from the early 70's which I argue discern, through their intensity the emergence of complex and seemingly murky forms of informatic and financialised extra-law are set alongside the affectively written political philosophy of Carl Schmitt and his work on sovereign power, decisionism and political romanticism. The examples of cinema I use and Schmitt's political philosophy deliberate over the question of embodiment that plague notions of agency in finance, informatics and then also cultural production but are affective in that they are productive of subjectivities and things. The text reaches further back in time for affective images that precede and inform Schmitt's conception of sovereign metaphysical power and finds an exemplar in Hobbes' Leviathan as an image, an embodiment, a social contract, a power and form of time that both haunts the present and helps to constitute it. These images of agency and will and the formal stranglehold they induce are further amplified by a perception of information that stands at odds with its material processes. And it's in the entanglement of a conception of information and its material processes that the writing seeks to immerse and dirty itself in order to understand and convey the power informatics does.

As I have stated earlier in this section the writing juxtaposes examples of affective cinema from a cusp moment in economics, alongside the affective writings of Schmitt in a sub temporal manner so that I can convey how technologies and images of power as well as conceptions of information act in feedback and feed-forward circuits to enhance the ideological effects of each. This form of sub-temporal space and model for thinking the extra-law of informatics first emerged for the research during my time as Lead Artist for Harlow New Town and signals the shift in the focus of my research from art and urbanism to informatics.

The discovery during my time as Lead Artist that the film *A Clockwork Orange* (1971) had been partly filmed in Harlow Town led to my securing the agreement

of the Kubrick Estate for us to screen *A Clockwork Orange* (1971) at Harlow's theatre, *The Playhouse*. This was accompanied by an event where I convened residents who had been involved in and had documentation of the filming that took place in Harlow. I had also secured beautiful location-scouting photographs of Harlow and its architecture from the Stanley Kubrick Archives in London. The film's collaging and play with affect and resident's immersion in the ways the film speculated with the town's architecture-as-ideology and as affective information signalled a number of important things that this text then goes onto unpack. Firstly the film provided an immersive means for residents and artists alike to feel and play with the centralised and embodied forms of power that the town's master planner Gibberd had collaged in order to make real his plan. The residents and I identified with the film's central protagonist (Alex) and his collaging of affective cultural signifiers seeing this process as having a subversively critical parallel with the collaging of affective architectures by the town's master planner. Secondly the residents and myself were able to sense in the film's thinking an ontological shift away from the embodied forms of power that Gibberd envisaged towards more diffuse economic and informational assemblages of power which persist into the present. The sometimes violent spatio-temporal torsioning of the film and its architectures, bodies and untethered use of cultural references suggested that each of these elements were becoming affective information that one had to feel and be dirtied by in order to map.

As a consequence it became clear to me through the film and the interactions with it by residents, who had seen their environment converted into cinematic information by Kubrick, that questions of art and urbanism could no longer be considered distinct from questions of finance and cultural production for example. Under the emerging informatic power and extrastatecraft of the derivative, bodies, architectures and culture had begun to exist more intensively as 'information' than they had done previously and become interchangeable in ways not previously experienced. It was apparent that residents experienced the film as an object that aided a means of sensually, critically and playfully thinking an emerging and affective info-power. But also a form of power through which

coursed pre-modern and theological technologies of power that installed notions of embodiment and will within that emerging and otherwise disembodied logic.

For the writing and research overall, this aspect of the Harlow project (*Let Us Pray for Those Now Residing in the Designated Area*) provided a critical model and method for immersing myself in these logics and their antecedents. The challenge this poses for the written aspect of this PhD submission is to strike a balance between this immersive method and moments of disambiguation which for example seek out a materialist understanding of the workings of information and means of circumventing the typologies of power that other more affective parts of the text map. Because of this certain parts of the text provide more immersed readings of cited material than others and mirror the forceful language at work in Schmitt's work on political theology for example as a means of fully conveying the sense and thinking of this work to the reader.

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In brief, the four chapters unfold in the following key ways. Chapter One sketches out the notions of embodiment, information and power that fuel the derivative's reign and has us think of art's objects as corporeal and as an expression of a distinctly human agency and consciousness. Whilst chapter two begins to reveal these imaginings of embodiment and will as a forceful ideology but suggests also that cinema's bodies are an expression of these figures as ideological excess. Chapter three then proffers that this ideological excess points towards these mythical body's shaky claims on authority and power. Lastly, Chapter Four builds on the fissure that appears within these narratives of embodiment and mastery that the logic of derivatives mines. It concludes by proffering that cinema and other cultural objects can 'think' this excess and its associated cinematic violence as an expression of the chaotic aspects of information engineering on which we depend and which then shatters the louder narratives of embodiment. The conclusion frames this break as an opportunity to embrace our collaborations with information's noisy emergent structures that extend our capacities and depart from the derivative's mythic, embodied reign. I then close by laying-out what ramifications this has for art's objects and proffer that it forces us to think of them as objects that can 'think' these ideological excesses

and as components of distributed less human-centric forms of cognition and agency.

The ways in which the chapters unfold and converse with developments in the parallel arts practice happen in a number of ways. Chapter one opens out the method of using cinema to divine the emerging logic of the derivative that arose in the Harlow project through the discovery that parts of the film *A Clockwork Orange* (1971) was filmed in the town. My use of another film of this period, *Performance* (1970) and my personal connection with the film allows me to unpack the political romanticism of the period of the films making and its parallels in economics and this process mirrors my use of the film as material for current and future artworks. Chapter Two (*How Cinema Thinks the Derivative*) allows me to further explore this methodology and how it can rethink bodies and objects as nodes of energy that point towards the ideological apparatus they are folded into and which forms them. This logic is mirrored in the work *DEAD STOCK* completed as part of this research that used vampire genre literature to make a work whose elements formed a mutable assemblage of affective information — some of it chaotic and other parts more embodied and patterned. Chapter Three (*Cinema Thinks Violence as Form and Force*) further leveres open this aspect of the art work showing, through further examples of cinema, how forceful or affective materials and information are understood as form. This chapter really confronts the challenge that arose in the artwork and in understanding the forceful statecraft of Harlow and how its artworks extended that forceful and mythical law making. The chapter carefully recalibrates this perceived force that is cinematically expressed at times as a violence that expresses an absolute, Hobbesian authoritarian power. But also at times a violence that motions towards the 'splice' (Hayles) that acknowledges our collaboration with the chaotic aspects of information and which extends our capacities. This notion of force and violence permeates through a work such as *DEAD STOCK* and the developing work that uses the affectively violent aspects of *Performance* (1970) to think of violence as an oscillating principle that both instates a narrative of human will and authority but also expresses a break from this conception of agency as embodied and authoritarian. Chapter Four

(Accelerating to a Standstill – Probabilities Reign) mirrors the method that the artworks are performing of intensifying the derivatives logic. The chapter suggests that one way of overcoming the bracketed (Shaviro) but highly kinetic production of contemporary art is to take its torsioning of space, time and bodies to a level where its ideological excesses break apart, become chaotic and our relation to information recalibrated. This methodology was beginning to emerge in works created for the Harlow project *Let Us Pray...* but has really taken hold in the work *DEAD STOCK* and the projects being developed that use the examples of cinema cited in this text as raw material for new works or assemblages. The text and artworks use many of the same approaches and materials to think the logic of the derivative but the artworks remain less explicit in their thinking. Each however has informed the other.

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The written aspect of this submission exists as four chapters. The first chapter, 'A Spectral Sovereign Power', employs the film *Performance* (Roeg, Cammell, 1970) to 'affectively map' (Shaviro) the transition from economies of real abstraction into affective information and forecast the logic of derivatives. It then asks how this affective information performs a political and financial romanticism (Schmitt) that is installed alongside the will of the people as a metaphysical principle. The chapter further considers Carl Schmitt's theory of sovereignty and the state of exception and the persistence of Schmitt's personalised notion of sovereignty. I also consider how Walter Benjamin adopted Schmitt's theory of sovereignty, altering its temporality and displacement of sovereignty and the 'state of exception' into the sedimented forces of the commodity. The last part of this chapter considers how information theory privileges pattern in information and amplifies the paradoxes and fault lines of Schmitt's theory of sovereignty. I explain how probability is deployed in information engineering and corroborates with information theory's privileging of pattern. Lastly, I consider how the 'noise' or random information in a given signal suggests an alternative and less human centred 'state of exception' to that instituted by the derivative.

The second chapter, 'How Cinema Thinks the Derivative', considers and demonstrates how cinema is used in the thesis. The chapter asks how this form

of cultural production is more embedded in the economics and ideology of its historical moment than other art forms. It then considers how cinema plays and speculates with ideology, how it detects the ideology of the derivative, and what the materiality of ideology might be. I also explore how cinema thinks of the human subject as ideological excess and as an ideological function of the derivative. I claim that further examples of cinema from the early '70s are able to detect the emergence of the derivative, its decolonising of sovereign currencies and its temporal and spatial violence. I consider how particular examples of objects and bodies in cinema point towards the apparatuses that form them and so perform an affective critical function.

The third chapter, 'Cinema Thinks Violence as Form and Formlessness', uses another example of cinema from 1970: *The Conformist* (Bertolucci), to consider how cinema speculates on the sovereign power of informatics. I explore how this unapologetically cinematic film and existential account of fascism's fantasy of embodying the 'decision' explores an imagined relationship to information. This exploration provides a lead into the following chapter that charts the ideological effect of probability in the way that it is employed in the markets and in information engineering. As part of this exploration, I scrutinize how *The Conformist* uses narratives of violence to think of dematerialised notions of information and how these segue into theories of law, justice and founding violence. I use Walter Benjamin's notion of a mythic violence and law, explored by him in *A Critique of Violence* (1921), to unpack this cinematic violence further. I argue that this conception of the law helps to explain how the derivative, as information, acquires the forceful qualities of law and how cinema expresses these qualities through narratives of violence. I then argue that examples of cinema that threaten the integrity of its bodies speculate with a violence that exposes the hubristic and shaky claims on authority that these bodies endlessly perform. These bodies, I suggest, threaten to annul what Benjamin calls a mythic law that aspires to have the qualities of God's founding laws. I claim that it is in these shaking and fraying informatic bodies that we can detect the informatically driven polity of the derivative but also the chaotic dynamics of information that threaten the narratives of mastery and will that this polity conducts.

The fourth and last chapter, 'Accelerating to A Standstill – Probabilities Reign', considers how the art market and video have absorbed the logic of derivatives to arrive at a bracketed sense of freedom and autonomy: one that creates a temporal impasse in the present moment but which is experienced as speed, power and freedom. I employ cinema critic David Bordwell's notion of post-continuity cinema and Steven Shaviro's *Post Cinematic Affect* (2010) to reflect on examples of bodies or notions of embodiment in cinema and music video most able to give representation to the bracketed acceleration of finance capital. I then examine how this dynamic is replicated in contemporary art as a form of romantic productivity and how art's analogue objects begin to act as the 'stories' that obscure an underlying polity. Architect, writer and urbanist Keller Easterling's book *Extrastatecraft* (2014) is used to understand how art might become a marker of the dispositions of information and power that are otherwise occluded by its stories. I then visit the work of writer and financial technologist Elie Ayache on the deployment of probability in derivatives trading and how it occludes the contingent and chaotic materiality of the market. This unpacking of a technical and philosophical exploration of derivatives leads into a description of derivatives as informatics and I finish the chapter by revisiting Claude Shannon's theory of information and ask how informatics might escape probability's grasp. In doing so, I refer back to examples of objects and bodies in cinema that proffer an alternative 'state of exception' to that of the derivative. I reconsider how examples of cinema and cinematic objects that think the violent temporal and spatial effects of the derivative can help us to rethink art's objects, spatial and temporal practices. In doing so, I anticipate an art practice that overcomes the bodies and objects that obscure the polity of the derivative. But also, one that exits the kinetic but temporal impasse that derivatives install in our present. I claim that these examples of cinema speculate on compelling narratives of mastery that persist in information theory as well as more chaotic information that has yet to be categorised. It is within these last, as yet unpatterned, materials that emergent structures of information exist. And it is these emergent structures of information that I suggest offer a real state of exception, which might witness the liberal human subject working productively

with distributed cognitive environments released from narratives of mastery and control.

The cinematic works cited in the written aspect of this PhD submission are also used as the material for the exhibited works that form the practice part of this PhD submission. To this end, both aspects of the submission enjoy and exploit some of the same affective materials. The artworks, like the text, have attempted to reach out for the elusive materiality and violently distributed nature of the derivative. The film *Performance* (1970) features heavily in the first chapter of the text and was cited in my 2013 installation for Cubitt Gallery, London, originally entitled *Designs Towards a Meeting Place for Future Events of Universal Truth*. The installation attempts to spatially mirror the post-continuous nature of the film's editing and reproduce the same sense of affective disorientation in the viewer that the film explores. Using glass screens and recreated aspects of the film's set design, the installation seeks to deny any mechanism for centring the viewer and, instead, thinks of viewers as a constituent flow within the apparatus of the exhibition. Completed during the earlier stages of this research, the install included a large photographic recreation of a drawing of the Laffer Curve, a mathematical theorem employed in the argument against taxation during Ronald Reagan's ascent to power. The image was laid on the flat as part of a table structure so that, once again, no element of the exhibition privileged the viewer over the exhibition's elements.

A subsequent publication and installation, *DEAD STOCK*, revisited a past project that transported a crate of Earth from Transylvania to Los Angeles via London. That past work's concern with a cinematic object, born out of the shape-shifting myth of vampirism, was reiterated in the work *DEAD STOCK* at the Stanley Picker Gallery, London. A library of vampire-genre books was collected and scanned before being converted to text via a copy-proofing agency in Bangladesh. The books were then compiled in alphabetical title order to make a single novel from all the sampled novels. This novel was then produced as a one-off publication with an additional artist's proof deposited in the British Library. The publication was presented at one end of a specially built, twelve foot long reading table. At

one end of which was a monolith made from fired Transylvanian earth that oversaw the reader of the publication. *DEAD STOCK* engages with the derivative's capacity to ceaselessly unbundle and bundle the attributes of an object: in this case, the vampire novel, by subdividing its parts, distributing them and then recollating them into informatic bodies that both orientate and disorientate. Subsequent works consider the cinematic bodies and objects that appear in the film *A Clockwork Orange* (Kubrick, 1972), for example, in an attempt to locate what I suggest are objects that sit between epochs. These objects that polarise the pre- and post-derivative moment for culture, help us to affectively explore and gain purchase on its elusive power and materiality. Harlow functioned as precisely this type of object: a town, as an object situated on a cusp, having been born in the post-war period of classic liberalism but maturing in the reign of the derivative and informatics.

The title of this thesis, *I am the Sun and Cannot be Gazed upon Fixedly*, is taken from the last frames of the film *The Taking of Power by Louis XIV* (1966) by Roberto Rossellini. The made-for-television film dramatizes the rise to power of King Louis XIV of France and the transition of the French Royal Court from the habits of the Middle Ages to the spectacular rituals of Versailles and the absolutism of the new Monarch. Rossellini's film charts how the King tames the feudal system of France through the building of an ideological apparatus that has the aristocracy produce their relations to production according to the court's affective rituals.

In Versailles, the King's power is refracted through the rituals and dress of the court, which is paid for by the aristocracy using loans from the King. The King and court occupy a realm of affect where the subjects of the court come to feel that the emotions of the King (and of France) are interchangeable with their own. Risk and debt are devolved down into the individual. Through a forensic cinematic description of the apparatus of the court of Louis XIV, the film allegorises the spectral but absolute power of the derivative as it unbundles and decolonises the attributes of its subjects.

The title is an appropriation and adaptation of the last line of the film where we see Louis XIV seated alone in his chamber and stripped of his finery. Here, he reads out loud La Rochefoucauld's maxim "Neither the sun nor death can be gazed upon fixedly."² The scene underscores how the king has rendered himself one part of the apparatus that he has constructed and, as a consequence, aligned himself with death. Whilst he remains at the centre of the constellation of power, the attributes and mechanisms of his power lie distributed throughout the apparatuses of Versailles. His function is both to orientate and obscure the workings of the apparatus as it proliferates through the habits and rituals of his subjects. In turn, the court's subjects explore and mistake their own disorientation in the labyrinth of Versailles' architecture and rituals as autonomy. Rossellini's account of the construction of Versailles allegorises the refracted power and materiality of derivatives. I resume this theme once more in chapter two of the thesis using a number of examples of cinema, including Stanley Kubrick's *Barry Lyndon* (Kubrick, 1975): a film that points to the 18th century as the century of debt and contracts and which, I claim, acts as an analogy for the coming reign of the derivative. Louis XIV is a figure that becomes both ground and figure in order to do power and his power can be felt by his court at all times, refracted as it is through its apparatus. In this example of cinema there lies an allegory of the derivative's spectral, distributed, but singular, power.

Chapter One: A Spectral Sovereign Power

How the sovereign spectral power of the derivative was detected by cinema and how cinema transmitted the derivative's 'state of exception'. How derivatives induce a financial and political romanticism. Carl Schmitt's theory of sovereign power and the incomprehensible power of the Leviathan. The logic of derivatives supersedes the commodity form as a means of art addressing capital. How informatics work and serve to amplify the ideological effects of derivatives. What role probability plays in this amplification and how it produces a 'bracketed' freedom and power.





Fig 3. *Performance*, (Cammell, Roeg, 1970). Chas' execution of Turner. Bodies pierced, shattered and converted into component flows. Cinema as an 'affective mapping' of capital's transformation from the commodity to the derivative.

Chapter One sketches out the notions of embodiment, information and power that fuel the derivative's reign. It begins by providing a demonstration of the key methodology of the text and developing work, that of divining the emerging info-power and logic of the derivative and the challenge this poses for art through an example of cinema (*Performance* (Cammel & Roeg 1970)) that I believe to be intuiting and 'thinking' this emerging regime. As I've described in the introduction, this methodology arose from my discovery that the film *A Clockwork Orange* (1971) had been partly filmed in Harlow and how the conversion of the town's architecture into affective cinematic information meant that the film could be used by residents to intuit and think the emerging info

power of the derivative and its effects on the towns sense of space and time. The chapter's immersion in and unpacking of the film's 'thinking' exposes the dichotomy at play in *Performance's* (1970) mapping of the shift from the commodity form, centralised economics and centralised statecraft towards these same things as flows of dynamic information. The chapter is on the one hand an exploration of how cinema divines the shift in the early 70's in Anglo-American economies towards commodities and money as dynamic and disembodied information whilst on the other hand installing narratives of embodied, decisive sometimes-violent bodies into those imaginings of an informational regime. The chapter reaches back (via its exploration of cinema) for pre-modern images of agency that haunt these informatic imaginings of weightless but forceful power and finds them in Hobbes' Leviathan. A figure that also haunted the statecraft of the pre-derivative Harlow but which persists as intensified informatics in the post derivative era.

The decision to use *Performance* (1970) and other mainstream films of this period and not *A Clockwork Orange* (Kubrick, 1971) is intended to communicate the ontological shift in economics that took place at this time that is being felt and thought by a number of examples of cinema other than *A Clockwork Orange* (1971). But also that the questions raised in the Harlow project are not specific to Harlow or to questions of urbanism and art because of the increased, intense reign of informatics that makes urban space, artworks and commodities for example all affective, mutable, interchangeable and tradable information. For this reason Harlow's syndrome is also a UK wide and global syndrome. Conversely the text and developing artworks recognise a terra incognita for critical art's practices wishing to address power and be seen to be conducting a good politics; that of the quotidian, absolute power that informatics conducts but which exists as concentrations and mobile assemblages of power and not bodies or persons that we can address directly. *Performance* (1970) is also a film that holds a personal resonance in that its interiors were filmed near to where I lived as a child — amongst figures from the counter culture of the time. The film therefore converted parts of my own lived experience into cinematic information I can then speculate and play with and acts as a parallel to the primary research

of Harlow project. This intensely politically romantic period and the concern with the affective, occasionalist event amongst its counter cultures is evident in *Performance* (1970) but in a form that is acutely, material and informatic.

The film *Performance* (Cammell, Roeg, 1970) is presented here as an 'affective map' (Shaviro, 2010, 5) that plots a shift in Anglo-American economies of the late '60s and early '70s. A period in which economics transitioned from the stable ground of real abstraction towards the ungraspable but forceful ground of information and affect. The cult film's tale of violent London gangsterism colliding with a psychedelic counter culture, told through the disorientating camera work of Nic Roeg, detects and transmits the dissolution of an economy of goods and the emergence of economies of affective information. I suggest this shift transformed finance capital into an industry whose medium and product is money reiterated as data. Meanwhile, the rapid exchange of financial instruments, including derivatives, has become an affective and forceful determinant of value and of power. The velocity and fluidity of derivatives trading has created a seemingly permanent 'state of exception' that cultural production, including cinema, contemporary art and architecture, for example, has 'detected and transmitted' (Avanessian, 2015). My use of the term *sovereignty* is not intended to relate specifically to notions of sovereign territory but of sovereign power and the typology of bodies and 'informatics' (Haraway) that perform that power. It does, however, relate to the ways in which the power of the state and the power of the individual are imagined as interchangeable. Later in this chapter, I explore the term and its use by political philosopher Carl Schmitt and its subsequent appropriation by Walter Benjamin.

There are a number of basic developmental stages in this process of financialisation that I need to layout briefly before we can proceed. The financialisation of the markets from the early '70s to the present began with the United States' departure from the Gold Standard on August 15, 1971. President Nixon's decision to end the international convertibility of the dollar for gold was intended as a temporary measure that stemmed from France's reduction of its

dollar holdings and the continuing and exhausting costs of the Vietnam War. What followed was a series of attempts by the US government to revalue an increasingly deflated dollar against gold: a process that terminated in October 1976 with the official definition of the dollar no longer referring to gold. This effectively reduced the dollar to a fiat currency or a currency that cannot be converted to a good but which is guaranteed by the government of the day.³

The second significant stage in this process of financialisation is the exponential growth of the derivatives market following their legitimisation by the Chicago Mercantile Exchange and the Chicago Board Options Exchange in 1972-73. These instruments, which had originally been employed to ensure a price for a commodity such as corn in advance of a harvest, became something that in themselves could be traded as the option to buy a commodity at a future date. The buying and selling of options or derivatives before 1972-73 was a minority activity that was viewed as being more akin to gambling than investment. Therefore, the process of institutionalisation that occurred in 1972-73 delivered a means of assuring the Illinois regulatory bodies and, in turn, Wall Street that derivatives trading no longer held connotations of the casino. Derivatives claims now represent the majority activity in the global financial markets. Writer Suhail Malik, quoting from the Bank of International Settlements, suggests that the value of the derivatives market at the end of 2012 amounted to \$694.4 trillion compared to the 71.7 trillion global market value of the 'real economy' of goods and services (Malik, 2013, 269). These staggering figures are made more staggering by the asymmetry of the value of trades in relation to the goods and commodities (otherwise known as the underlying) against which the derivatives are traded. This asymmetry is weighted towards the trade in options to such a degree that any notion that the derivative draws on a fixed value of the underlying assets is evacuated.

The growth of derivatives trading was further exacerbated by the introduction and then digital automation of the Black Scholes Merton formula, as part of the pricing mechanism for derivatives. This predictive mathematical equation, originally intended as an aid to pricing but which then became the sole means of

pricing, provided further legitimisation by converting the pricing of derivatives into a quasi-scientific process. I detail the phenomenon of the Black Scholes Merton Formula in the last chapter of this thesis but, at this point, it is enough to say that its initial introduction further evacuated the notion of derivatives as gambling. What we have witnessed in the case of the development of derivatives is an exponential expansion of the markets, no longer grounded in their underlying assets and commodities but instead grounded in the emotive and immersive nature of trading itself. It could be said that the ground and matter of trading has become both the emotional experience and information that are bound together in the high-speed transactions that constitute contemporary finance capital. The reasons for this development are covered in more detail in the last chapter of this thesis, where I consider in more detail how the Black Scholes Merton formula helped to install what I term a 'romantic' economics, and how this ontology of finance maps onto cultural production. *Performance* detects and attempts to embody these emerging ontologies of finance as it speculates with affective forms of consumption. As I explain a little later in this chapter, new forms of consumption simultaneously signal new forms of embodiment and of signification. What we see and experience in *Performance* is a meeting and polarising of both old and new forms of embodiment that provides us with a way in, a means of representing otherwise difficult to represent contemporary materialities.

The transformation in capital that I outline above has produced a paradoxical ground for both a financialised political legal order and cultural production, alike. Capital has become seemingly groundless, unbounded, rooted in affect and experience but is simultaneously material and impactful. This affective ground has come to be populated by figures of sovereignty, types of embodiment and signification that are, no longer, figures of real abstraction. These figures are never fully present but are forceful and exceed both organic and inorganic referents. Instead, and because capital becomes after 1971 more fundamentally experienced as both ideological *and* material *and*, most importantly, as information, agency is increasingly understood in terms of instances of pattern in the flows of affective information that circulate (Hayles, 1999, 28). Pattern and

affective pattern in information is afforded agency in such a way that supersedes human presence as the prerequisite for agency. As money increasingly becomes information that is no longer pegged to goods but for which goods act as a warranty, so the body becomes a warranty for information that assumes sovereignty. It follows, then, that, as questions of absence and presence are rapidly giving way to questions of pattern in information networks, agency is no longer seen as contained in the body but warrantied by it: a development that N. Katherine Hayles underscores in her book *How We Became Post Human* (Hayles, 1999, 27), suggesting that in information networked societies money is:

“[...] experienced as informational patterns stored in computer banks rather than as the presence of cash; surrogacy and in vitro fertilization court cases offer examples of informational genetic patterns competing with physical presence for the right to determine the ‘legitimate’ parent [...] criminals are tied to crime scenes through DNA patterns rather than through eyewitness accounts verifying their presence; access to computer networks rather than physical possession of data determines nine-tenths of computer law. [...] The effect of these transformations is to create a highly heterogeneous and fissured space in which discursive formations based on pattern and randomness jostle and compete with formations based on presence and absence” (Hayles, 1999, 27/28).

In societies imbued with information networks, sovereignty, instead of being expressed through a living corporeal form, becomes expressed through pattern in information. Random information, the noise in any message, is discounted as an absence, void of agency. In this new, affective regime, finance, politics, information and culture-as-information take on all the delimited qualities of founding and decisive law. I explore how information acquires the forceful qualities of law in the third chapter, *Cinema Thinks Violence as Form and Force*. However, those qualities remain bounded by a romantic spirit that, ultimately, becomes the constraining conservative ground for capital and for cultural production. I elaborate on this paradox a little later in this chapter using the work of political philosopher Carl Schmitt to consider, in the first instance, political and economic romanticism and, in the second instance, the form and temporality of sovereignty.

The quick-fire edits and camerawork of *Performance* announce the acceleration of cinema (Bordwell, 2002) from the late ‘60s onwards and, more widely, the

speeding up of cultural production and its dispersion on ever new proliferating platforms. The seeming ungroundedness of this acceleration, however, obscures the bracketed nature of this ground. So that, even in the spaces of information, sovereignty is attributed to information in which we can recognise form and pattern and which takes on the qualities and narratives of being human, of possessing will and consciousness. Old notions of embodiment and agency become installed into new platforms as: “[...] the present is viewed through a rear view mirror that conceals the extent of contemporary change” (Plant, 1998, 182).

The testing of new models of signification in *Performance* probes the corporeality of sovereignty and agency, oscillating between noise and pattern as it does so. As Hayles highlights, new forms of text or, in this case, image production suggest different models of signification and these changes are linked to shifts in modes of consumption, which, in turn, initiate new experiences of embodiment. What follows is a case of embodied experience interacting with codes of representation to form new textual and image worlds (Hayles, 1999, 28). These categories are, as Hayles explains, in constant feedback and feedforward loops with each other. This last important point polarises my concern with how an analogue film such as *Performance* feeds forward and rehearses some of the future traits of digital production and of financialisation. As a consequence, the film communicates an embryonic frictionless economy, grounded in human sovereignty but where the human in that economy is ideological and informatic.

The use of the term *informatics* (Haraway) is intended to include not just the networks of frictionless information but also the technical and material infrastructure of those networks;⁴ in other words, the substrates of the information that is inscribed and re-inscribed across those networks. This last point is of particular significance to the question of embodiment when the efficacy of pattern and randomness threatens to supersede questions of presence and absence. In turn, the increasing dominance of questions of pattern and randomness and the efficacy of these forms of embodiment risk obscuring the material infrastructures that manufacture them. At the same time, it is because of

this ability to obscure material infrastructures that informational pattern attains an aggressive agency. The last chapter of this thesis considers writer Steven Shaviro's claim that certain examples of digital cinema and music video are able to give full representation to the materialities that manufacture them. Because of this, suggests Shaviro, we are able, through these examples, to witness contemporary capital's otherwise hard-to-represent quotidian and omnipresent processes. This, Shaviro says, provides us with a critical agency that was previously not afforded to us. I test this claim and its limitations.

Performance does some of what Shaviro describes but in a cusp moment between old and new forms of consumption, production and embodiment. Previous forms of embodiment exist alongside emerging forms of embodiment, throwing each into stark relief. The film's play on pattern and randomness is demonstrated in its often violent and disorientating shooting style, accelerated average shot lengths (ASLs), quick-fire editing and torsioning of temporalities. Cinematic bodies fray, morph and collapse into one another as the film foregrounds its own function as a body and corpus of visual information.

The film's highly stylized and affective method makes it at odds with its cinematic contemporaries and their tendencies for realism and depth of field (Bazin), explicit programmatic politic messages (Godard) or structuralist film's concern with foregrounding film's apparatus (Snow, Conrad). Instead, *Performance* appears more concerned with cinema's potential for artificiality and affect. The film, along with other cinematic oddities released in this and adjacent years, challenges a politics and cinema of representation and the notion that a cinema that more accurately and broadly represents the demos is one enacting a genuine politics. These cinematic oddities that include, for example, Bernardo Bertolucci's *The Conformist* (1970) press audiences faces up against a spectacle of illusion, as if to challenge the strain of Socratic thinking that privileges sight and light and equates these with truth. This Socratic ascent out of Plato's cave and spaces of illusion and chimera simultaneously sets a course towards the "[...] heart of the sun, a planet without a dark side" (Plant, 1998, 179), whilst taking flight from the materiality, substrate and canvas of the

illusions that caused that flight. Whilst some of these films are attempting to foreground ideology and its workings and, in doing so, undermine ideology, *Performance* appears, instead, to immerse itself in and 'affectively map' (Shaviro, 2010, 5) ideology's effects, whilst reaching out for ideology's illusive and less corporal materiality. I discuss ideology's materialism in the second chapter of this thesis, *How Does Cinema Think?*, and consider what implications this materiality has for culture, once it becomes implicated in the derivative's logic.

The middle section of this chapter deals with the question of sovereignty and its temporality and form using the early work of political philosopher Carl Schmitt and its subsequent appropriation by Walter Benjamin. In laying the ground for this exploration of the constitution of sovereignty, I use another of Schmitt's books *Political Romanticism* (Schmitt, 1991 (1921)), a critique of liberalism that forecasted the coming together of all political tendencies, economics and statecraft under an absolutising regime of 'political romanticism', so that a left and right politics became a false distinction as the substrate of both tendencies was ultimately political romanticism. Schmitt's political romanticism identifies the liberal human subject as the solar centre of a constellation of affective politics and information. Political romanticism's parallels with the Socratic ascent from Plato's cave places the liberal subject as the burning light at the opening of the cave. The ascent to which signals a departure from the materialism of ideology. How political romanticism came to be is forecast by Schmitt but embodied by *Performance*.

According to Schmitt, under the regime of political romanticism that began in Europe in the mid nineteenth-century, every citizen becomes the sovereign of their own privatised realm and every event becomes an occasion for subjects to indulge their romantic spirit and democratised sovereignty. For Schmitt, sovereignty and the capacity for agency fall away when the ground for all politics, economics and statecraft becomes a privatised aesthetic experience, where each man and woman is the sovereign of their private realm. Schmitt's subsequent work on sovereignty seeks to address this paradox of a highly kinetic but ineffectual and contained sovereignty by attempting to reengineer both the

temporality and composition of sovereignty. The direct and indirect dialogue between Schmitt and Benjamin over the consistency of sovereignty exposes not only the fault lines in Schmitt's work but also the speculative play with these concepts that the film *Performance* narrates as it detects and transmits a developing romantic economy of affect.

Schmitt makes the caveat that a politically romantic statecraft is not incapable of effects and that, in fact, the "subjective occasionalism" (Schmitt, 1991, 18) of political romanticism seeks to possess all the forceful qualities of sovereign law and can descend into authoritarianism and literal violence precisely because it seeks aesthetic and technically beautiful solutions to political, economic and ethical challenges. According to Schmitt, the romantic compulsion to create an aesthetically balanced and compelling argument overrides a fundamental ethical or political decision or action. Schmitt's solidly catholic, conservative solution to the technical and aesthetic reign of political romanticism is a sovereignty that is personalised, romantic and corporeal; a conclusion that delivers his proposed remedy to political romanticism back into the very same formal stranglehold of his diagnoses. The figure he invokes to break the oscillating but paralysed politics of liberalism is thoroughly romantic.

Performance affectively maps this question of the form and temporality of sovereignty but, here, the corporeality of sovereignty is delivered as cinematic information and, instead of the 'wetware' (Plant, 1997, 248) of human agency, visual cohesion and pattern supersede human presence as a prerequisite for agency. Benjamin adopted Schmitt's concept of sovereignty but reworked its temporality. For Benjamin's sovereignty or the revolutionary time that Schmitt's Prince could invoke was sedimented in the commodity form. It was in the commodity form that Benjamin believed forces and previous struggles lay dormant. A person needed only to crack open and collaborate with these previously sedimented forces in order invoke a revolutionary time that would halt capital's acceleration towards fascism. For Benjamin, sovereignty lies in the compacted forces otherwise dormant in the ephemera of history and in the

action of halting the temporality that personalised sovereignty risked awarding to an authoritarian figure.

Performance speculates with these two notions of sovereignty but is able to affectively speculate upon how that authoritarian figure might be information; in this case, cinematic information that we receive as the embodiment of sovereignty that is separate from the 'wetware' of humans but no less forceful. The cinematic bodies of *Performance* are both violent and have a violence done to them that breaks those bodies open and randomises their corporality and that of the cinematic information from which they are constructed. The film speculates with an informational sovereignty that exceeds organic/inorganic designations and asks which of these patterned and unpatterned categories of forceful information constitutes an agency that overcomes an authoritarian sovereignty. Schmitt remains an antagonistic but productive voice throughout this analysis of the film and throughout the thesis.

1.1 *Performance* (1970): Cinema as an Affective Mapping of the Coming Economy of Derivatives

Performance, starring Mick Jagger and set between the two worlds of London's crime and counter cultures of the late 1960s, was financed by a division of Warner Bros. Studios who sought to mine the value of Jagger's value as a rock star, sensing that audiences for cinema were now fracturing into niche groups that demanded different things of cinema. Author, journalist and chronicler of late '60s America, Joan Didion, speaks of the period as being more "[...] electrical than ethical" (Didion, 1979, 13). A statement that underscores the advent of a proliferating media and information age that installed an expectation that events and experiences would be quickly replayed and amplified by their representation in the media and to degrees that overwhelmed the political or ethical objectives of those events. For example, the romantic spirit of student rebellion in the '60s that echoed that of mid nineteenth-century European

student revolt was joined by and had walking amongst it the media echo of that spirit. I will broach in more detail the relevance of nineteenth-century romanticism to Schmitt's critique of modernity later in this chapter. Schmitt's assertion that modernity was an age more concerned with aestheticizing experience and debate reverberates in Didion's observation of the late '60s. In Didion's observation and overarching commentary are the charges that here was a generation that mistook the mediated experience of political revolt as impactful, ethical and political change. *Performance* both speculates upon and puts into effect this affective and technological regime.

In the rush in this period to capitalise on new but as yet unmapped markets, major studios were willing to speculate capital on mainly untested production talent and with little supervision of the production itself. Partly because of this executive distance and a lack of understanding of newly emerging post-Fordist economies, *Performance* is a serendipitous collision of individuals experimenting in lightly grasped philosophies being appropriated by pop culture, underground politics and media at this time. The film and the process of its making pulls disparate materials into the event of its making. The writer and artist Paul Buck's account of the film, *Performance: A Biography of the Classic '60s Film* (Buck, 2012) acts as an extensive catalogue and testimony to the volume of ideas and people the film drew into its circle and congealed into the mixture of conventional cinema and chaotic materials that resulted. References to Nietzsche, de Sade, Borges and Magritte become the source materials of a cinematic experience that associate of the film, Marianne Faithfull, described as a groundless moment that signalled the end of the '60s (Buck, 2012, 281). In a portent of what was to come for cultural production, the vertical management structures of the studio cinema system in the making of *Performance* were threatened with dissolution. In its place would come flattened structures of production, characterised by proliferating sub genres and narratives.

Co-director Cammell's insistence that the film was a collective enterprise reinforces the notion that, whilst he and Roeg were its directors, the production maintains a peristalsis of opening and closing to both its internal workings and

to external economic forces in such a way that it destabilises the director's authorship of the film. Buck's biography of the film describes a production process more akin to Warhol's Factory or online prosumerism than the singular vision of a sole director or, in the case of *Performance*, two directors, Nicolas Roeg and Donald Cammell. The film's many casual collaborators and associates appear to add to and adjust Cammell's original conceptual assemblage to the point at which it reaches a critical mass and becomes a self-perpetuating entity. Situated at a cusp moment, the production is, on the one hand, embedded in the economy and ideology of mainstream studio cinema and, on the other, it is collaborating with as yet unfinancialised forms of cultural production. It manifests both an economics that is about to atrophy and another emergent economy of affect. Regardless of this paradox, the film is capable of affectively mapping each of these economic models as it departs from one model and effects another. The film's peristaltic opening and closing to both its internal workings and to external economic forces causes it to exceed any notion of having a discrete internal or external life. The film is able to map a near-future subjectivity that is neither public nor private but where the private is mobilised and put to work.

Performance concocts the worlds of the London gangster with that of the King's Road dandy in an involuted cinematic space. In brief, the plot features Chas (James Fox), a violent and psychotic East London gangster who needs a place to lie low after carrying out an unsanctioned killing. He finds refuge in the form of a rented room in the house of Mr Turner (Mick Jagger), an eccentric, reclusive former rock star, who is looking to reclaim his 'lost demon'. The household includes two women; Pherber (Anita Pallenberg) and Lucy (Michele Breton) engaged in a ménage à trois with Turner. Chas assumes the name of Johnny Dean and demonstrates contempt for his effeminate and dandyish host who, in turn, becomes fascinated by what motivates and equips his guest to operate in a violent world of crime. Turner claims that Chas is 'stuck' and so he and Pallenberg proceed to accelerate the process of 'opening out' their guest by feeding him hallucinogens stating:

PHERBER:
 We've got to go much further...out.

 TURNER:
 No. We've got to go further back – and faster.

(Cammell, Roeg, 1970)

Flashbacks and dialogue such as the above populate the film as it experiments with cinema's temporality and fully indulges the frictionless quality of its images and bodies as images. As a result of the couple's 'deprogramming' of their guest, Fox's character begins a relationship with Lucy that suggests he has escaped the performance of his heteronormative self-image and the cast dress him and experiment with his identity, as his image becomes less stable and more fluid. His criminal associates locate him and arrive at the house to take him away for execution but allow him to return to Turner's room before departing. Ceremoniously and in the manner of an anointment, Chas shoots Turner in the crown of his head and the camera makes its way down the wormhole forged by the bullet and out into an exterior shot of the house, where we see Chas being led away by members of the gang to a waiting white Rolls Royce. Jagger and Fox's courtship climaxes in their mutual suicide. Or, what co-director Cammell spoke of as "[a] murder that is also a suicide" (Buck, 2012, 49). As the car moves off, Chas glances out of the car window and we see Turner's bewigged face. Through their joint suicide the two protagonists, their images and their performances become laminated into one cinematic body.⁵

The scene reinforces the peculiar nature of *Performance's* bodies in that they are not loyal or tethered to the subjects they represent. Whilst *Performance* was produced as an analogue film, it rehearses and predicts many of the qualities of digital cinema in the way that its cinematic bodies morph and become multiple iterations. We are no longer, as viewers of the film, assured of receiving signifiers that can be traced one step back to that which is being signified. There is an absence of an indexical relationship between that which we are viewing and the bodies and objects captured on film. We are conscious of signifiers becoming that which is signified, as the film assails us with multiple iterations of its cinematic

bodies. Because of this, the film predicts digital video's ability to produce spaces and bodies internal to its workings; in the process, acting as a proto-digital cinema and, at another level, producing what writer on cinema Steven Shaviro calls the relational spaces of capital. Shaviro explains that these are spaces of the sort theorized by Leibniz and Whitehead, and more recently by David Harvey. A view evidenced in the following quote by Harvey: "The relational view of space holds that there is no such thing as space or time outside of the processes that define them [...] Processes do not occur in space but define their own spatial frame. The concept of space is embedded in or internal to process" (Harvey, 2006, 123). Shaviro underscores the vital and forceful instability of the type of space that Harvey theorises: "Relational space varies from moment to moment, along with the forces that generate and invest it. It continually alters its curvature and its dimensions; it does not persist as a stable, enduring container for objects that would be situated solidly within it" (Shaviro, 2010, 16).

The film undermines analogue's previous habits of standing in for the bodies and spaces which it signified; instead, it detects and puts into effect the fast approaching capacities of video to transform bodies into endless iterations of frictionless and affective information.



Fig 4. [Top] Fashion models the Myer Twins. Extras in *Performance*.

Fig 5. [Bottom] Rosebloom and boss Harry Flowers.

Doubles populate *Performance* as iterations and 'flickering signifiers' (Hayles).

The film's concern with doubles and reproductions is enforced throughout by, for example, the appearance of: fashion models the Myer Twins delivering a Magritte painting to Turner's house; Chas's allusion to the dead film star James Dean through his adoption of the name Johnny Dean when he arrives at Turner's house; the naming of the criminal boss and his partner: Harry Flowers and Rosebloom. Flowers and Rosebloom, in turn, reference the East End crime bosses the Kray Twins, who had loose associations with the film. The affective intensity of the film leads the viewer to experience these doubles as iterations and not simply copies that would imply an originary image or referent. The film is less populated by facsimiles and is, instead, constituted by forceful iterations. *Performance* appears to rehearse a characteristic of video, as cinema departs from the analogue as a continuum of light towards a digital cinema that requires the translation of light into the zeros and ones of coding and delivers these packets of translation as iterations. As suggested earlier in this chapter, *Performance* is analogue but predicts many of the habits of video in that the bodies and senses of its viewers encounter the affective bodies of the film as discordant patterns of temporal shock, so that these cinematic bodies act as both points of orientation and disorientation. The viewer is left constantly transitioning between these paradoxical moments of intensively enmeshed sense and non-sense. It's these intense iterations, or what Hayles terms flickering signifiers, that Shaviro argues constitute a cinema that no longer represents social processes but actively participates in them and helps to constitute them. Working through Brian Massumi's translation and reading of Deleuze & Guatarri's *A Thousand Plateaus* (Deleuze et al., 2011), Shaviro differentiates between affect and emotion by suggesting that affect is primary, non-conscious, asubjective or presubjective, asignifying, unqualified and intensive.⁶ According to Shaviro, a cultural production that employs these things, these "blocs of affect" (Shaviro, 2010, 2), are 'machines for generating affect' and

for capitalising upon or extracting value from this affect. They generate subjectivity and play a crucial role in the valorisation of capital. Shaviro's claims around what he calls *Post Cinematic Affect* (2010) are discussed further in the last chapter of this thesis in relation to the romantic economics of derivatives and the bracketing of finance by probability.

On completion, studio executives quarantined *Performance* and threatened to burn the negatives, due to what was perceived as its abject content. The film was described at the time as a "psycho sexual lab" and "a seething cauldron of diabolical ingredients: drugs, incestuous sexual relationships, role reversals, art and life all whipped together into a witches' brew" (Faithfull and Dalton, 2000, 150). The film existed prior to its delayed release in 1970 and, in the eyes of studio executives, as a cultural object riven with chaotic and contingent materials impossible to mine and extract value from. It was considered abject not simply for its content but also for a lack of a form that would have made it market-ready for a Fordist cinema concerned with depth of field and stable bodies in space. The film's divination of a coming ontology of finance as an affective economy had not yet taken hold on a studio system whose cinematic bodies still retained some of the friction and material resistance of the subjects they depicted.

The film's capacity to act in a peristaltic manner, opening and closing to outside and internal influences at such speed that its boundaries are superseded by this delimited state, results in it being sited entirely in its historical and material cusp moment. As a cultural object, it is situated like a *Baudelairean, romantic*, aristocratic figure, poised on the stairwell in an era beset by change. It is an object embedded in forms of capital, attempting to locate where value lies, as cinema and music present themselves as media most readily able to engage with the new demands of a post-Fordist, experience economy, where products are no longer solely consumed, but felt. The language and rhetoric of popular revolution and individual freedoms that the film mines as part of its segueing of '60s counter culture into mainstream cinema, chimes with the social and political unrest in Europe in the 1830s and 1840s which, according to Schmitt in *Political*

Romanticism (1921), binds revolt, romanticism and individualism together to become the overarching principle of 'political romanticism', so that all politics became a romantic politics. As I argue in the second chapter of this thesis, cinema has, until recently, been the art form most saturated by the economics of its time and, so, reverberates with an ontology of finance. *Performance* is situated on a cusp moment that witnesses the mobilisation of bodies, objects and emotions and converts them into energies that can be valorised. The methods of conversion and mobilisation are two registers of violence. One is a narrative of violence, the other is the violence and speed of the film's editing; temporal and bodily distortions that assail the viewer and speak of the chaotic information contained in the signal.

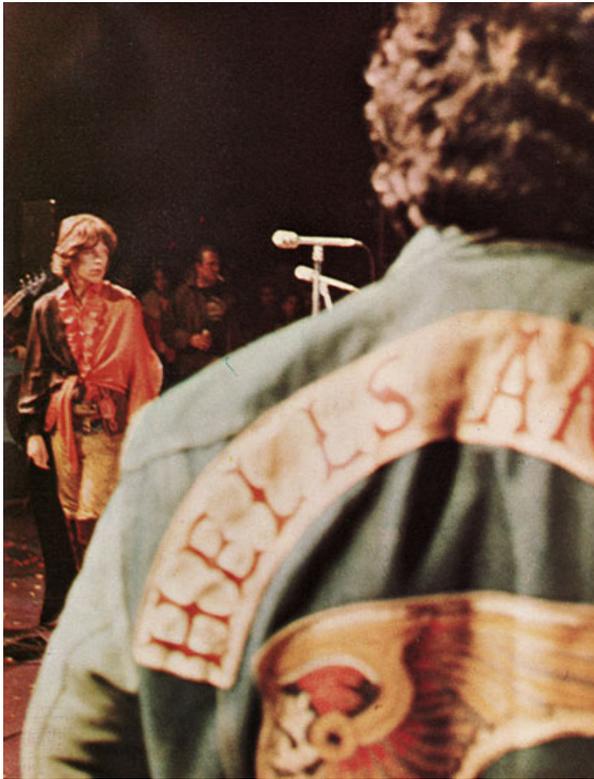


Fig 6. A Hell's Angel guard on stage during a Rolling Stones concert at Altamont Speedway Free Festival, 1969. Photo: Beth Bagby. A romantic violence that mobilises energies, humans and objects tips into a literal violence.

Performance is concerned with themes of violence and the technological and temporal violence of cinematic bodies as they move from one iteration to another, disrupting the film's patterning of visual information. Two actions occur: firstly, violence as an expression of one body inscribing acts of violence on

another body and, secondly, the dissolving, merging and shattering of cinematic bodies through editing, superimposition and other effects. Each of these actions corresponds with and narrates the other throughout the film to create the highly kinetic cinema that assails the viewer. Co-director Cammell underlined this affective correspondence of categories of violence in interview by describing the film as “[...] a poetic treatise on violence” (Buck, 2012, 102). The film adopts violence as a means of achieving affect and taps into a strain of the ‘60s counter culture, romantically fascinated by the affective potential of violence, but which had that dalliance dissolved in the flash of gunfire that saw a concert-goer killed by a Hell’s Angel gang member at the Rolling Stones’ Altamont free concert (1969). An event that saw a romantic violence made literal. The violence of *Performance* mobilises its bodies and objects so that they become fluid, interchangeable, convertible, frictionless cinematic visual data that we experience as simultaneously forceful but ungraspable.

This romantic violence releases objects from their previous categories, in the same manner that war can suspend the original and designed function of an object and redesignate its function towards the objectives of war. A church spire can become a navigation point or machine gun nest; a wall becomes a defensive position; a body becomes a barrier; the population of a village becomes a human shield; and fear becomes a weapon. In a state of war, all things and all aspects of those things are put to work and are simultaneously liberated from their previously fixed designations, creating a sense of release that converts objects to flows of potential energy. A highly capitalised cinema takes on all the functions of war, in that it mobilises everything in its path in order to achieve its goal of converting those things into a cinematic energy. The romantic violence of *Performance* is romantic because it appears to liberate cinematic bodies and objects from their referents and convert them into affective information that induces a precognitive moment (affect) in its audience, which, in turn, is captured as experience and mined as value. The two registers of violence threaten both to instate corporeal bodies that cause a tear in normal time and space; whilst the editing, for example, fractures and displaces time and bodies and causes the celluloid substrate of the film to be in correspondence with the

narratives of smashing windows and the cracking and piercing of bodies. The violence of the film threatens to instate a narrative of wetware as the embodiment of agency and sovereignty, whilst simultaneously foregrounding the affective, visual and informatic nature of that sovereignty via the fracturing of its cinematic ground.

The violence of *Performance* liberates bodies and objects from their heaviness and mass and converts them into flows of potential energy in a way that anticipates an ontology of finance, whose ground is experience and information, and not goods or services. The affective turn that *Performance* maps has its antecedent in the romanticism of the previous century and, in order to understand the constellation of a contemporary romanticism better, it is necessary to look in more detail at Schmitt's formulation of political romanticism. It is then possible to ask how bodies of weightless but forceful information unthroned the 'wetware' of human agency. But, also, how and why certain types of information are understood as having agency and others are not. The latter question is addressed at greater length in the last section of this chapter.

1.2 No Finance without Romance (Figure as Romantic Ground)⁷

This section deals more closely with Schmitt's formulation of political romanticism and the strands that connect its formulation in the nineteenth-century with its peculiar function as both ground and figure for finance and cultural production from 1970 onwards. The period of *Performance's* production marks the end of economies of real abstraction and a crisis in the commodity form that is still being felt today in the form of the derivative. The gestatory period leading to this transformation was an age of experience and of the self, exemplified by political actors of this same period and described by one of Carl Schmitt's translators, Guy Oakes, as being the inheritors of an early nineteenth-century romantic compulsion: "[...] towards self-disclosure and self-celebration." Oakes suggests this is exemplified in Norman Mailer's chronicle of his attendance at the anti Vietnam War protests in Washington, 1967 (Oakes in Schmitt, 1991, xxviii) – an event that provides Mailer with an arena for his

poeticized experience and which results in a romantic “[...] attitude that suspends practical judgments in the interest of preserving the spontaneity of sentiment” (Oakes in Schmitt, 1991, xxx). This phenomenon of what Schmitt describes as the need for all experience to be pursued by the “[...] colourful shadow of revolution” (Schmitt, 1991, 160) connects the romantic tendencies of the ‘60s with those of romanticism’s European antecedents in first half of the 18th century.

Romanticism’s development as a literary movement in Europe privileged feelings over rationalism and objective truth by rejecting classicism and instead embraced medieval revivalism and its adherence to nature. This guarantee was also afforded to the state or the nation so that the feelings of the individual and the feelings and energies of the nation were interchangeable. Notions of truth were, instead, guaranteed by inner feelings and philosophy would become a science of thinking beautifully. An exemplar of this move to aestheticize philosophy was the Berlin born Alexander Gottlieb Baumgarten who undertook one of the earliest systematic philosophies of art and a series of textbooks on metaphysics that became central to Austrian romanticism (Caygill, 2013, *Romantic Transdisciplinarity – Art and the New, lecture*). These developments led to nationalist movements, exemplified by German student revolts in 1848 demanding a united Germany. The key role of students in leading popular uprisings up to 1848 is partly explained by the emergence of the term *Bildung* (German for: education and formation), which refers to the German tradition of self-cultivation (as related to the German for: creation, image, shape), wherein philosophy and education are linked in manner that refers to a process of both personal and cultural maturation (Caygill, 2013). The ‘energies’ and ‘spirit’ of the nation were interchangeable with those of the individual and, in particular, those of the student vanguard, whose role it was to seek truth through their personal development and education. This spirit of *Bildung* permeates the descriptions of self-cultivation that Didion renders in her account of the late ‘60s. Didion’s actors are a vanguard of truth in search of words and gestures that will have effects on a macro and national scale. The personal becomes political. The notion that words and beautiful rhetoric, in particular, can be impactful is a continuation of a

romantic tradition that believed that philosophy could produce energies and effects rather than describing them (Caygill, 2013). Romanticism was not, therefore, a siloed concept autonomous from other philosophies, but one that could capture disciplines and concepts once it had aestheticized and converted them into energies. Art could, therefore, become a science and science an art (Caygill, 2013). The late '60s' cultivation of the self was a resumption and advancement of Schmitt's subjective occasionalism, or the ability to see every event and object as an opportunity for the development of one's romantic subjectivity. The work begun in the 18th century of aestheticizing knowledge production of all kinds took purchase again in the late '60s, only to become accelerated as the self became constituted as information. How the romantic subject becomes both figure and ground is, however, not solely reliant on a technological development but, just as importantly, on an earlier ontological shift unpacked by Schmitt.

In Guy Oakes' account of Mailer's experience, it is possible to see the reoccurrence of a nineteenth-century phenomenon, or what Schmitt argues is the displacement of God as the basic metaphysical principle by the 'revolutionary God', variously conceived as the people. Schmitt argues that God is equally replaced by the 'conservative God', conceived of as traditions that attempt to restore what society has revolutionized. As a result, God, as a metaphysical principle, is displaced in an oscillating process of revolution and counter revolution, with the human subject at the base of both (Schmitt, 1991, 58).

Here, I will briefly outline Schmitt's description of the reversal of metaphysics' asymmetry, which he claims takes place under the aegis of political romanticism and which makes the human the locus of an idealization of action for the pulsions of both revolution and of conservatism from the late 18th century onwards. This extended overview of PR also serves to further unpack the term 'subjective occasionalism' used earlier in this chapter (Schmitt, 1991, 140).

Schmitt is careful to state that, in order to place romanticism in modern intellectual history, it is essential to grasp the main consequences of the

development of metaphysics during the last three centuries, which is the displacement of a transcendental God as the basic metaphysical principle via Descartes. In a Cartesian dualist universe, God remains the cause of both mental and physical events and also the interactions between them. This means that it is not the human that acts, but rather God, for whom the person is only an occasion. In this way, the world becomes the contingent material for the action of God, the reality. However, under the conditions of romanticism, Schmitt suggests that the romantic movement retains the basic metaphysical schema of a dualist universe, but unseats God in favour of the romantic subject.

The subsequent collapse at the end of the 18th century of a traditional idea of God raises the spectre of a vacuum and two candidates step forward to assume that recently vacated metaphysical principle. These are: “[...] humanity or the ‘revolutionary god’ variously conceived as the people, the general will, the public or society (...) and ‘the conservative god’ conceived of as historically unique cultures, traditions and nations that restored what society had revolutionized” (Oakes in Schmitt, 1991, xx). Under the regime of romanticism, everything becomes an occasion for the subjective imagination; Schmitt writes:

“This is exhibited even more conspicuously in romanticism, where the concept of the *occasio* develops its full disintegrative power. That is because now it is no longer God, something absolute and objective, that stands in the centre. On the contrary, the individual subject treats the world as the *occasio* of his activity and productivity. For him, even the greatest external event a revolution or a world war is intrinsically indifferent. The incident becomes significant only when it has become the occasion for a great experience, a genial apprehension, or some other romantic creation. Therefore true reality has only what the subject makes into the object of its creative interest. By means of a simple reversal, the subject has become the creator of the world. It designates as the world only what served it as the occasion of an experience” (1991, 96).

Schmitt argues that romanticism positions itself in relation to these two faces of modernity, ‘the people’ and ‘tradition’, by grounding them both in the subjective imagination. As a consequence, God is replaced by the private individual of the bourgeois social order and the romantic ego becomes the final metaphysical authority. The romantic processes that Schmitt describes are parallel ones of secularization and privatization. In this way, Schmitt concludes that romanticism

may be understood as 'subjectified occasionalism'. In his own words: "Accordingly, I have proposed the following formulation: Romanticism is subjectified occasionalism. In other words, in the romantic, the romantic subject treats the world as an occasion and an opportunity for his romantic productivity" (1991, 17).

Schmitt's later theory of sovereignty developed in his 1922 book *Political Theology: Four Chapters on the Concept of Sovereignty* opposes what he sees as political romanticism's departure from political objectivity and the ability to make the 'decision'. However, his model of sovereignty teeters towards a romantic sensibility due to his personalisation of what he terms the 'decision', or a person who can break the regime of political romanticism by intervening and rupturing it from the outside. This exposes Schmitt's thinking as being held within a formal stranglehold that renders him and his remedy to an apolitical modernity as being, in itself, politically romantic. *Performance*, whilst being embedded in its historical and economic moment, also signals how this historical moment is infused with the romantic spirit of the 19th century. I talk, in chapter two, of how a similar bridging takes place in the film *Barry Lyndon* (Kubrick, 1975) that cites the 18th century as an age of debt, contracts and romantic economics, and heralds the coming of a second 18th century. *Performance* is similarly engaged in quoting and drawing on the energies and mores of a previous age, as it senses a new romanticism taking hold.

Performance maps this affective turn in culture and economics but it also displaces the metaphysical principle of political romanticism into the realms of visual, sometimes chaotic, information. If, for Schmitt, the metaphysical authority of political romanticism replaces God with the private individual of the bourgeois social order and the romantic ego, then *Performance* demonstrates how this principle shares its throne with affective information. The film, both in its production and in its exhibition, mobilises bodies, objects and emotions so that every occasion and every *thing* is converted into energies. All things become potentially contingent material for the film's production of affect, which the film then valorises and mines. These developments threaten to unthroned the

wetware of Schmitt's political romanticism with cinematic bodies and a body of visual information that is more adequate than the politically romantic subject. As a consequence, the private individual of Schmitt's political romanticism is rendered less than adequate in comparison to the romantic energies of the cinematic bodies that s/he witnesses on screen. Bodies or 'wetware' become a warranty for these super-adequate entities that assume a sovereignty of affective intensity. However, the film obscures this paradox with narratives of agency and violence that course through the film, obscuring an asymmetry of sovereignty that is beginning to appear. *Performance* maintains the schema of political romanticism but the romantic subject is joined at the centre of that constellation by affect.

The visual information of *Performance* and its cinematic bodies assumes a romantic sovereignty with seemingly greater capacities than that of the romantic subject. For political romanticism, a condition of sovereignty is the personalisation of agency. This condition is, however, problematized under a regime of affective information where pattern and patterns of information supersede presence as a condition of agency. Both personalisation and pattern are presence of a kind and Schmitt's work on sovereignty can help to elaborate why this is. The following section will explore this but, for now, we need to remind ourselves of how the kinds of pattern and randomness that *Performance* transmits relate to a crisis in the commodity form that extends to the present, and why this matters.

The film presents a post-Fordist vision of cinema and cultural production, but also a future crisis in the commodity form that is marked by the introduction of the derivative. The commodity form has within it all the sedimented forces of labour and machine power needed to compile a unitary thing; a discrete object that: "[...] calls forth an individual subject as its intimate partner in the market" (Wark, 2017). The consumer is able to think of the commodity as another body, a body like their own: somatically whole, complete, a thing that can be addressed and form attachments with other things. In contrast "[...] derivatives are a transmission of some value from a source to something else, an attribute of that

original expression that can be combined with like characteristics, a variable factor that can move in harmony or dissonance with others” (Martin, 2017, Lecture). Derivatives allow for forms of abstraction that differ from the commodity form’s condensation of labour and machine power. Instead, and in the case of derivatives, each of the:

“[...] component flows in commodification can be subdivided, valued, combined and sold again and again in the form of a financial instrument. On top of the quantitative abstraction of the energetics of production is a quantitative abstraction of the information about all of the possible future states of that system. Each of which can be separately priced and sold” (Wark, 2017).

This crisis in the commodity form presents an accompanying crisis of embodiment and signification. According to the logic of derivatives, value and power are no longer solely gotten from sedimenting certain forces of labour, for example in a commodity, but from continually wrenching open and decolonising objects, subjects, spaces and time. The consumer and consumer citizen are no longer valuable for their discrete qualities but for their connectivity and capacity for flexibility. For example, the cell phone or car is more valuable for its networkedness and is advertised with this in mind. Accordingly, the consumer starts to fragment and their intimacy with the market is realised only through a fragmentation of one’s capacities. This, however, does not entirely evacuate notions of discrete bodies that are the embodiment of action and power. It simply serves to have them coexist with newer forms of embodiment in order to obscure the diffuse and absolute power at play. *Performance* ceases to call forth an individual subject in the manner of previous commodity forms of cinema or cultural object and old metaphors become inadequate in terms of describing the newer forms of capital that *Performance* forecasts. For now, we need to step back and look at Schmitt’s work on sovereignty in relation to questions of pattern and randomness to understand how these older metaphors persist and coexist with newer forms of embodiment.

1.3 Schmitt’s Concept of Sovereignty

Why is it that concepts of sovereignty and agency adhere to notions of a discrete body, even where and when sovereignty is afforded to information that makes that body mutable, atomised and liquid? Schmitt and Walter Benjamin's direct and indirect correspondence over the temporal composition of Hobbes' *Leviathan* of 1651, or the sovereign figure that can produce revolutionary time, is mirrored by *Performance* and its speculation on bodies that are violent or/and are transformed violently. The film's speculation on forms of embodiment is weaved throughout this section and serves as a means of unpacking Schmitt's work, but also provides an introduction to the work of N. Katherine Hayles on pattern and randomness in information.

Schmitt's 1922 book *Political Theology: Four Chapters on the Concept of Sovereignty* is concerned with modernity's assault on what he views as the transcendental trajectory of politics and its subsequent transformation into a technical pursuit, aided and abetted by liberal conversation. He sees this development as being exemplified, for example, in the work of one of his contemporaries, the juridical theorist Hans Kelsen, whose work comes under a sustained attack from Schmitt.⁸ Schmitt feels that this development of the law, as a technically pure but ultimately aestheticized set of practices, will lead to the violent excesses of the state, not their regulation. In Schmitt's eyes, it is the job of the sovereign to abate the excesses of the state and politics' trajectory towards war. The two most frequently cited quotes from the book that expose its main themes concerning sovereignty, the 'decision' and the underlying theological impulses of politics, read as follows:

"Sovereign is he who decides on the exception" (Schmitt, 2006, 5).

"All significant concepts of the modern theory of the state are secularized theological concepts..." (Schmitt, 2006, 36).

The essays are an argument for a pure form of juridical law making and what he calls 'decisionism', carried out via a sovereign figure and dependent on a borderline concept that throws the sovereign into relief. A concept otherwise understood as the 'state of exception'. Decisionism, Schmitt forcefully and floridly argues, leads to an eternal Bible-like creation through the acts of a prince

who delivers the law without the need to call on codified laws. The demand, Schmitt says, is for the miracle of theology, not the moralizing of New Testament Christianity. This sustained attack on a post-Enlightenment condition that has, as he understands it, replaced God with the will of the people, is qualified by his reference to Hobbes' *Leviathan* as an almost inconceivable but affective mass. In this way, Schmitt's notion of sovereignty and Hobbes' *Leviathan* converge. At the same time, Schmitt is keen to emphasize that this formulation does not represent an anthropomorphism of the state, but a pure juridical construct that is time based and not organically produced; a point that he deviates from later in his thinking.

The two challenges that Schmitt poses to the reader are ones of transcendence and what he calls the situational nature of law making (Schmitt, 2005, 15). His response to these challenges is to process the concept of the Leviathan through the filter of previous Catholic conservative thinkers, who advocate dictatorship as the solution to the challenges of the modern state, as he pictures them. Before addressing this fault line in Schmitt's thinking, we first need to understand why the Leviathan is so important to both Benjamin and Schmitt as a schema for sovereignty and how this figure is at large in a cultural assemblage like *Performance*. To do this, we need to briefly revisit Hobbes' invention.

1.4 The Leviathan

Born out of the chaos of the English Civil War, Thomas Hobbes' creation constitutes a covenant that prioritizes the unity of the representer over the unity of the represented, as a means of ensuring peace in an otherwise natural state of war. Through the figure of the Leviathan, Hobbes inaugurates a modern theory of the state to which all warring factions in the English Civil War could agree to secede rights, in return for security. According to Hobbes, the state or sovereign can take the form of a collective or individual who can exact force upon those parties that do not behave in accordance with the covenant, but the covenant can be broken if the sovereign abuses the powers transferred to him/her/it by those parties. The represented must trust that the sovereign will not overstep the

potential for violence entrusted to him/her/it for the covenant to work. The Leviathan is then an image and thing participated in by its subjects, the effectiveness of which is guaranteed, not by a notion that it constitutes a collection of people in one place at one time, but a succession of people in one body over time. It is an entity built to last because it steps over the mortality of its participants.

The figure of Hobbes' Leviathan, for the political philosopher Carl Schmitt – often thought of as the German Thomas Hobbes – takes on a vanguardist characteristic, in that it is an extraordinary figure that arrives from the outside of a set of circumstances to create a break, an exception. Again, in the words of Schmitt:

“All law is ‘situational law’. The sovereign produces and guarantees the situation in its totality. He has the monopoly over this last decision. Therein resides the essence of the state’s sovereignty, which must be juristically defined correctly, not as the monopoly to coerce or to rule but as the monopoly to decide. The exception reveals most clearly the essence of the state’s authority. The decision parts here from the legal norm, and (to formulate it paradoxically) authority proves that to produce the law it need not be based on the law” (Schmitt, 2006,13).

For Schmitt, the performative moment of constructing the law suspends all universals in an exalted moment.⁹ However, the agent and substrate of the decision is, for Schmitt, personalised, and agency becomes inexorably tied to the human form. The figure, and not the temporality of the Leviathan, takes precedence in Schmitt’s formulation of the decision and of sovereignty. This discrepancy in Schmitt’s method that previously underscored that the Leviathan need not to be anthropomorphic, is born out by the art historian Horst Van Bredekamp’s commentary on Schmitt’s interpretation of the Leviathan:

“Hobbes’ objective is the permanence of the Leviathan, whereas Schmitt emphasizes the exaltedness of the moment. Schmitt, who attacked occasionalism as a delusion specific to German romanticism, is in fact, its involuntary heir. Hobbes is political, Schmitt romantic” (Bredekamp, 1999, 259).

Schmitt’s “[s]hock theory of the authoritarian avant-garde” (Bredekamp, 1999, 263) persists in *Performance* and is embodied by the character of Chas – a figure that reinforces a borderline concept by acting as what Agamben calls the force of

law without law (Agamben, 2005,39). Chas embodies a narrative of a permanent state of exception, a form of extra law. The film, however, speculates with this narrative and this body by rupturing it, breaking it violently and cinematically, both through depictions of violence and a cinematic violence that randomises the visual information that otherwise constitutes this vanguardist figure. The violently post-continuous nature of the film and its temporal, spatial and bodily violence apprehend it from being typical commodity-form cinema that we might crack open and find within a form of messianicity. The film generates a 'state of exception', a register of delimited time and space that predicts the derivative. The film does not, therefore, offer the same opportunities for critical recuperation that commodity-form capital once did, and which contemporary art practices have enjoyed. In the following section I examine the influence that the work of both Schmitt and Benjamin had on each other. This will help to understand the displacement by Benjamin of the vanguardism of the Leviathan into the commodity form and how it is then changed by the derivative.

1.5 Benjamin's Commodity Form after the Derivative

The dialogue between Schmitt and Benjamin's work is the focus of art historian Horst Bredekamp's paper *From Walter Benjamin to Carl Schmitt via Thomas Hobbes* (Bredekamp, 1999). The paper illuminates the formal stranglehold of the model of sovereignty that the two men deliberate over. Bredekamp's paper helps to unpack both the connecting tissue and differences between the interpretations of the Leviathan by Schmitt and Benjamin. The paper also serves to demonstrate the shortcomings of the commodity form as a conception of capital that fails to keep pace with capital's post-derivative transformation. And which, I believe, *Performance* forecasts and transmits. Whilst the commodity invokes the individual subject as its intimate partner in the market, the derivative breaks down the parts of the commodity that are normally located in it as a discrete object and invokes a less stable subject as its partner. Benjamin's theory of the commodity form underscores the commodity's allegorical potential to act as a fragment of a larger series of relationships, but it nevertheless has a unitary composition. The commodity form inadequately describes how

derivatives potentially unbundle, value, sell and sell again the component flows of the commodity as financial instruments, and how that process of financialisation becomes social relations and forms. An additional function of the derivative causes information about the potential future states of those flows to also be sold on. Abstraction, in the case of the derivative, is about undoing the whole and, therefore, it fails to invoke a discrete subject but, instead, and as I've said earlier, it thinks of commodities and subjects as distant warranties. The process of abstraction that derivatives perform is not one of mining certainties but of mining risk, so that the subjectivities that are summoned are perpetually renegotiable, unstable and improvable. The derivative, as McKenzie Wark explains "[...] make[s] available to capital accumulation what would be considered new materialities of ideas and perceptions, weather and war, bits of code stripped from tele-technology or DNA, the microscopic and cosmic. The derivative organizes the forces of production of the information vector" (Wark, 2017). The processes of financialisation that the derivative is key to are, as Wark says, those of knowledge aggregation: an economy of almost pure information. Whilst the commodity is a thing alienated from its means and places of production, left to float in circuits of debt and distribution, the derivative collapses these limits and produces something very different from the capitalism that we thought we knew. The derivative, with its ability to sit between the knowable and unknowable, in a knowledge environment that aggregates information to levels that are beyond cognition, affords sovereignty to patterns in information whilst, at the same time, mining out uncertainty.

For now, let's return to Benjamin's conception of the commodity form via Schmitt's work on sovereignty in order to understand whether, within that connection, something remains that persists within derivatives. In addition, it is helpful to revisit the commodity in order to understand it as a stage prior to the derivative and, therefore, necessary to understanding it. Primary evidence of the connection between the two men's work is laid bare by Horst Bredekamp's paper on Schmitt and Benjamin. Bredekamp cites the discovery of a letter from Walter Benjamin to Carl Schmitt written in 1930, declaring the debt that Benjamin owed to Schmitt in the writing of his book *The Origin of German Tragic*

Drama in 1928. Benjamin declares his indebtedness to Schmitt in a letter that was described by Jewish academic Jacob Taube as: “[a] mine that explodes our conception of the intellectual history of the Weimar period” (Bredekamp, 1999, 250):¹⁰

Esteemed Professor Schmitt,

You will receive any day now from the publisher my book, *The Origin of the German Mourning Play*. With these lines I would like not merely to announce its arrival, but also to express my joy at being able to send it to you, at the suggestion of Mr Albert Salomon. You will very quickly recognize how much my book is indebted to you for its presentation of the doctrine of sovereignty in the seventeenth century. Perhaps I may also say, in addition, that I have also derived from your later works, especially the "Diktatur," modes of research in the philosophy of art from yours in the philosophy of the state. If the reading of my book allows this feeling to emerge in an intelligible fashion, then the purpose of my sending it to you will be achieved.

With my expression of special admiration, Your very humble
Walter Benjamin.

(Bredekamp, 1999, 250)¹¹

It is the potential for ‘rupture’ by the concept of the Leviathan that captivated Benjamin. Benjamin, however, resists Schmitt’s tendency to personalise sovereignty and, so, reinstates the permanency and artificiality of the Leviathan that Hobbes had intended. Schmitt requires the agent of this rupture to have a somatic personalized form, whilst Benjamin resists this, urging instead that an inorganic, mineral-like shard ruptures the occasionalism of the here and now – previously frozen but awaiting activation so that the present is shot through with shards of weak messianism.¹² Meaning that previously forgotten struggles residing in the sedimented forces of the commodity form can be released and put to use, once again bringing the past and the present into a form of torsion. This torsion, according to Benjamin, would, rather than produce a state of exception, bring an already existing one (namely Fascism) to halt.

Benjamin’s present to Schmitt, *The Origin of German Tragic Drama or Trauerspiel*, employed the mainly ignored genre of the German Baroque theatre of the 1700s to alight on Marx’s “[...] spectral theory of the commodity form as social relation, according to which the social appears as phantasmatic” (Diefenbach, 2006, 1). In

the first chapter of *Capital* (1867), Marx attempts to rationalize the commodity form as a set of “material relations between persons and social relations between things” and evacuates the commodity form’s mystical qualities, forgetting that this act of unveiling is, in itself, fantastical and quasi religious (Marx, 1992, I, 72-73). Benjamin seeks, instead, to encounter the phantasmatic in the commodity form, once it is released from its use value and at the point at which it becomes the detritus, the glacial moraine of history. Benjamin deploys the under-regarded theatre of the baroque, seeking to break open a seemingly unworthy cultural phenomenon and unlock previously frozen forces within its cast-off and sedimented form. Through a dialectical procedure that examines the detail of his chosen genre against the historical context of its inception, Benjamin addresses Classicism’s totalizing idealism with these fragments of a decaying, partially dismissed genre of drama that incorporated the historical contingencies of its time.¹³ Benjamin’s examples of baroque theatre are littered with bodies and parts of bodies that take on an allegorical role, manufacturing a profusion of meanings. Benjamin envisaged that all art would become allegory as it moved from commodity to the fetish and once it became alienated from social use.¹⁴

Bredekamp feels that, whilst Benjamin is seeking, through the commodity form and through allegory, a real state of exception that will call for a “messianic cessation of happening” and address Fascism, he remains stuck within the formalism of Schmitt’s conception of sovereignty (Benjamin, 1999, 254). The concept of ‘decisionism’ is so seductive as a remedy to the stalemate of liberalism that they both fall foul of being seduced by the beauty of the idea rather than its political efficacy. According to Bredekamp, it is for this reason and because of this interface between Benjamin and Schmitt that Derrida subjected *Critique of Violence* (Benjamin, 1995) to analysis. Derrida addresses a moment in the text where the problem of time arises in the moment of legislation, and it is here that Bredekamp feels that the affinity between the two men’s practices becomes apparent:

“It is the moment in which the foundation of law remains suspended in the void or over the abyss, suspended by a pure performative act that would not have to answer to or before anyone” (Derrida, 1989, 991-993).

Both thinkers, in Bredekamp's view, are compelled to seek a means of embodying the state of exception: Schmitt, through the figure of the Prince who makes the decision, and Benjamin, through the commodity form. This embodiment by Benjamin is, however, the aesthetically manifested state of exception. A politically romantic trap that Bredekamp suggests Benjamin couldn't remove himself from, even when he was trying to "turn it against itself" (Bredekamp, 1999, 265). Both men reach for a solution to the dilemma that the Leviathan offers as an entity that can alter time, and both men, according to Bredekamp, "[...] conceive of filling time with substance" (Bredekamp, 1999, 265). It is this compulsion towards embodiment and the tethering of agency to that embodiment that persists in the informatic realms of derivatives trading. Pattern in information is afforded substance and supersedes presence as the prerequisite for agency. It is this question of pattern and randomness in informatics that needs unpacking in the following section but, for now, it is worth underlining how *Performance* speculates with this question of embodiment, whilst possessing the intensity of Deleuze's paradoxical "grin without a cat, an intensity that does not refer to a subject or an object" (2006, 10); a quote that refers to Lewis Carroll's *Alice in Wonderland*.

1.6 Pattern & Randomness / Presence & Absence

Notions of randomness, chance and contingency reign supreme in the narratives that sustain finance capital. Randomness is equated with creativity, flexibility and openness to change; as something to be cherished, in contrast to state planning, which is, according to these narratives, ossifying, unnatural, undynamic and constraining of the individual's freedom. This chimes with the market's transition from an industry that dealt in securities to one that manages risk. In what writer Mark Fisher calls 'capitalist realism', financialisation is framed as post-ideological, an empirical fact or biology (Fisher, 2009). The work of reversing a nineteenth-century critique of capital as mechanistic can be mainly attributed to right-wing think tanks in the 1940s, such as the Mont Pelerin Society that included such figures as Friedrich Hayek.¹⁵ Hayek sought to halt what was seen at the time as a global slide towards socialism and Keynesian

planning. Hayek's pushback against this global tendency was expressed as a rolling back of politics and the state. Instead, economic growth would become the ideological function of government – a function expressed as post-ideological. However, financialisation has come to assume a polity and perform an extrastatecraft that is more absolute than the state, unable, as it is, to recognise the limits to its activities. Its expression of itself as non-ideological has become, in itself, ideological, and randomness and uncertainty are integral to that narrative.

The work of think tanks such as the Mont Pelerin Society took purchase on the political landscape in the '70s and '80s, at the same time as technologies began to make it possible to automate the markets and convert these narratives into algorithmically driven logics. What followed, in the case of derivatives, was the factoring in of randomness into processes of pricing. As mentioned earlier in this chapter, derivatives sit in the space between the knowable and the unknowable and then price that function. Therefore, the technical and informatic means of achieving a price must perform randomness, or at least the appearance of randomness, but, in order for us to arrive at that price, we must also be able to discern pattern. As a result of needing to attain some certainty whilst maintaining narratives of risk, pricing became a function of probability. Future unknowable states of the world would be predicted according to previous states of the world and, the higher the incidence of those events, the more it was welcomed as a certainty from which a price could be ascertained. I talk at more length in chapter four about derivative's reliance on probability but, at this juncture, N. Katherine Hayles' work on informational pattern needs to be explored in order to understand better how pattern functions in information theory as a function of probability and how randomness coexists with pattern. It is important to understand how the relationship between the maths that enables the pricing of derivatives and the technology that automates that pricing amplifies the function of probability.

I cite Hayles at the beginning of this chapter to describe how money's transformation into information has meant that we increasingly access the

former as pattern and not presence. Derivatives similarly mine “information vectors” (Wark, 2017) and patterns in those vectors. But, as Hayles argues, these are peculiar signifiers that go beyond Lacan’s notion of floating signifiers, defined by “[...] networks of relational differences between themselves rather than by their relation to signifieds” (Hayles, 1999, 30). Lacan’s floating signifiers originate from a time of print and the typewriter. In the realm of information technologies, the floating signifier is replaced by what Hayles calls the ‘flickering signifier’ that is subject to a rich internal play of difference. Let me explain. In the case of informatics, signifiers can no longer be understood as single markers, like ink on a page, but, instead, are flexible chains of markers that can be altered at the press of a button. Small changes to the code can make enormous universal changes, ad infinitum. Whereas, with the typewriter, there exists a direct correlation between the pressure placed on the keys and the blackness of the ink on the page, for example; with the computer, many levels of intervention are responsible for producing the flickering text on the screen as image. This includes the polarities of the computer disk, the operating system, the processing programme, and so on and so on. This chain of flexible markers results in a signifier at one level becoming signified at a higher level. The relationship between each iteration is unstable, impermanent, unfaithful, never final and always contestable. The typewriter would require the typist to change each line of writing in order to change the font. In stark contrast, the word processor only requires one universal command to do the same. The longer the chain of codes, the more dramatic the transformations. The amplification that is afforded even to very small changes is, says Hayles, because: “[...] the constant reproduced through multiple coding layers is pattern rather than presence” (Hayles, 1999, 31).

Hayles draws on the work of mathematician, electrical engineer, cryptographer and father of information theory Claude Shannon who, in 1948, defined a mathematical quantity he called information. Shannon’s theory characterises information as: “[...] a probability function with no dimensions, no materiality, and no necessary connection with meaning. It is a pattern not a presence” (Hayles, 1999, 18). Shannon made a distinction between message and signal. In

information theory no message is sent. What is sent is a signal. Instead, a message has to be encoded into a signal for transmission through a medium, whether that is ink on paper or the magnetic pulse emitted between the polarities of a computer hard drive. Shannon's quantitative theory of information installed a distinction between materiality and information that became important for its adoption in the post-war era. A post-war society, secular in name, was ready for theories of information that rendered it a decontextualized, quantifiable entity. It was imagined that this type of entity could: "[...] serve as the master key for unlocking secrets of life and death" (Hayles, 1999, 19). Shannon's mathematical quantifying of information is weighted towards its portability and so stands in contrast to the more local, contextualised and material theories of information by Friedrich Kittler, for example, that consider the mediums and substrates through which a signal passes as co-constitutive of those signals. But, it is precisely because these technological contexts change that it becomes possible for concepts of pattern and randomness to both supersede questions of presence and absence, and obscure the materiality of these new contexts.

Derivatives are a case in point. The portability of Shannon's concept of free floating, reified information means it continues to be attractive. Especially to finance capital's manufacturing of narratives of freedom and agency, now that it trades in vectors of information. Does this narrative not only obscure the underlying materiality, infrastructure and polity of the technology that makes this narrative possible, but also choose to misunderstand randomness itself? Is what normally gets expressed as unknowable in derivatives trading, in fact, simply the product of probability and of pattern? Are these narratives of freedom and agency, in fact, falling foul of the same formal stranglehold that Schmitt and Benjamin were unable to escape? The need to fill time with substance? In this case, the substance of pattern. For derivatives, the pattern is sovereign whilst, for Schmitt, it is the Prince who makes the decision and, for Benjamin, the commodity form that brings the past and the present into a form of torsion. How, then, does randomness function differently from these obfuscating narratives and as a function of the material substrates of information technology?

Within information theory, explains Hayles, information is identified with choices that reduce uncertainty. She gives the example of having to choose a book out of a list of ten books on her student's reading list for that week's class. To get this information to students she will need to transmit a message. In accordance with Shannon's concept of information, this communication will consist of a sender sending a message encoded as a signal through a channel. In an email, for example. The receiver then decodes the signal and reconstitutes the message. In the case of an email, the encoding is as a series of binary digits, which are then sent to the server, which then reconstitutes the message in a form that can be read. However, the opportunity for noise to enter these processes is ample. These occasions stretch from the senders making a simple spelling mistake to the server having a faulty operating system and delivering the message as a series of random characters. Pattern, therefore, exists in "[...] dynamic tension with random intrusions of noise" (Hayles, 1999, 32).

Uncertainty enters this set of relationships such that, whilst information is defined by reducing uncertainty, it also depends on it. Randomness is that which makes it possible to recognise pattern. Here, most interestingly, probability enters the frame. Hayles gives the example of there being only one book on her reading list and sending a message to her students to read that one book. The probability, therefore, of choosing this one book is 1. The students have received no information that they don't already know and no information is communicated. The most unexpected information that could be sent would be random letters. Remember that information in this case has nothing to do with meaning. According to Claude Shannon's mathematical theory of communication, the amount of information sent is not consistent with the degree of meaning achieved. Accordingly, it follows that the amount of information increases as the probability that the event will occur decreases. In Shannon's theory, this quantity is called the 'surprisal'. If nine of the ten texts were from the same book, *We Have Never Been Modern*, for example, and the last was from *Empire*, the students would receive more information in a message telling them that reading for that week was *Empire* than they would if the message told them to read a text from *We Have Never Been Modern*. *We Have Never Been Modern* would have been the

more probable event and, therefore, the least surprising. Hayles goes on to stress that electrical engineers, for the most part, are not interested in individual messages but all the messages that will come from a single source. Their primary concern is not the surprisal but the average amount of information coming from that one source. This average increases as randomness increases. Were the likelihood that any symbol could appear in any position, the average would go up – “[...] which is to say, when there is no pattern or when the message is at the extreme end of randomness” (Hayles, 1999, 32). Therefore, information should be understood as depending on both predictability and unpredictability, pattern and randomness. On the other hand, they are not valued equally. Pattern has a value within vectors of information as being that which requires less information and less bandwidth, for example. Pattern is also what one needs to capture in order to increase certainty and, in the case of derivatives, arrive at a price. When finance capital becomes a technological platform, as it has done, both randomness and pattern are necessary, but pattern hedges against uncertainty.

I alight, in chapter three, on Steve Shaviro’s framing of video as a bracketed medium that mirrors the relational spaces of finance capital. According to Shaviro, video production appears to offer infinite options but is, in fact, a modulated medium where both the operator and the software move rapidly between a large number of preset choices but is unable to break the bounds of those presets. The rapid oscillation between these presets, in both the automated pricing of derivatives and the software of video production, produces a sense of disorientation, in danger of being experienced as autonomy and freedom, but remains powerfully bounded by probability and the material constraints of managing volumes of information. The random part of the signal, the noise in its workings, is ignored as redundancy. As a result, finance and video produce narratives of speed, decision, autonomy and agency whilst obscuring their methods of underlying control. These bounded processes install our imagined relationship to production. The affective intensity of these narratives no longer represents social processes but actively participates in constituting them. It is the obfuscated ideological function of the derivative and its materialism that I wish to explore in the next chapter.

Chapter Two: How Cinema Thinks the Derivative

The function of cinema for this thesis. Cinema as a refraction of ideology that shows us its thinking. Truffaut and Fassbinder's cinema think ideologies, materialism and the human as ideological excess. Performance thinks the derivative's ideological materialism. Barry Lyndon thinks the apparatuses of debt and the contract, whilst Roeg explores the breaking open of sovereign currency and centralised architectures of value.

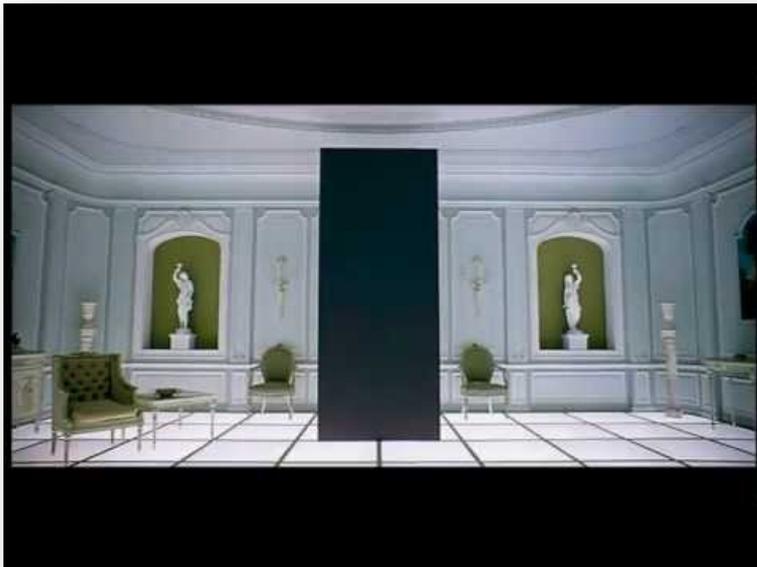


Fig 7. A frame within a frame. Kubrick's cinematic Solar Anus. A non-logical matter that threatens the limits of the frame. *2001: A Space Odyssey* (Kubrick, 1968).

Chapter Two enables me to explore further the methodology opened out in Chapter One through the use of *Performance* (1970) as an example of cinema from this period that can think the emerging logic and reign of the derivative. But also how it can rethink bodies and objects as nodes of energetic information that point towards the ideological apparatus they are folded into and which in-turn forms them. This logic is mirrored in the work *DEAD STOCK* completed as part of this research that used vampire genre literature to make a work whose elements formed an assemblage of mutable, affective information. Some of it chaotic and other parts more embodied and patterned. This chapter begins to open up the possibility for artworks to both think the ideological excesses and the ideological

materialism of the derivative but also how to make this ideological materialism confront the materialism of information's engineering and bring these materialities to bear on one another. The chapter really begins to explore how art's objects can act as a false form of orientation that stands over an abyss of disorientating matter or information that forces us to come into new human to information relationships that extends our capacities by leaving the ideology of the human behind. The chapter begins to build towards a notion of how cinema and artworks might think and intuit complex and distributed forms of cognition of which the derivative is an impactful example.

In this chapter, I claim that cinema is the form of cultural production that is most able to detect and think the ideology and materiality of derivatives. The question here is not, how does cinema project our thinking outwards, exposing to the light an otherwise internal conversation, but, how does it think in itself? How does it speculate and experiment? Not, what does it represent, but, what do its processes constitute as thought? Cinema is deployed in this thesis as a form of cultural production that is most sensitive to its economics and its administration. It is crafted out of powerful sets of economic relations and resources, which it mobilises towards its manufacture.

Its stories and the bodies that populate those stories both enable and obscure the underlying ontology of finance that cinema affectively maps. As Jean-Luc Comolli and Jean Paul Narboni (C&N) underscore in their 1969 essay *Cinema / Ideology / Criticism*: "Because every film is part of the economic system it is also part of the ideological system" (Comolli and Narboni, 2001, 60). Cinema serves as an affective documentary of its own technology, economics, legalities and expenditure. As a consequence, even when it talks of or attempts to recreate another historical period, it is situated entirely in its own time, economics and ideology. For cinema, there is, in effect, no outside to this set of relations, or outside of ideology, even when cinema attempts to exit the mainstream. Comolli and Narboni note how Godard's claims in 1969 of wanting to work outside of a system, take no account of how his adopted meta-system is a reflection of the

system he claims to have exited. This separation becomes, then, a form of connection and not disconnection. Contemporary cultural production has taken on the characteristics of cinema and the derivative, as consumption and production, have merged and its networks have taken precedence over its objects. My question is, then, *How Does Cinema Think?* And, how can that 'thinking' increase our understanding of contemporary cultural production and its materiality, as the commodity form unbundles and becomes the derivative?

Comolli and Narboni propose that film is one of the languages through which the world communicates itself to itself. That cinema is not a depiction of the world but a "refraction of ideology" (2010, 60), a process of "ideology presenting itself to itself, talking to itself, learning about itself" (2010, 61). Comolli and Narboni don't quote Althusser but appear supported by Althusser's essay published in the same year: *Ideology and Ideological State Apparatuses (Notes Towards an Investigation)* (Althusser, 2006). I will explore this essay in the subsection titled *Cinema as Apparatus* but, at this juncture, it's important to cite Althusser's definition of ideology as the: "[...] imaginary relationship of individuals to their real conditions of existence" (2006, 86). Unlike Marx's definition of ideology, for Althusser, ideology always has a material existence because it exists in an apparatus and in the practices that form that apparatus, and that are also reproduced by it. For Althusser, ideology hails concrete individuals as concrete subjects for whom ideology is real, not illusory. The materiality of ideology, for Althusser, is further concentrated in ideology's ensuring of its longevity. Which it does by reproducing the conditions of production as an ultimate condition of production through certain apparatuses or practices and processes. In Althusser's words:

"It follows, that in order to exist, every social formation must reproduce the conditions of its production at the same time as it produces, and in order to be able to produce. It must therefore reproduce:

1. the productive forces,
2. the existing relations of production"

(Althusser, 2006, 86).

Cinema plays and experiments with these ideological refractions, acting not only as an ideological apparatus that reproduces the existing relations of production but also as what Comolli and Narboni call a specular device, that performs a double mirroring. In effect, it can show how it performs this process of reproduction but also show that thinking to itself, as sets of material practices. This is one aspect of the way in which cinema thinks and is channelled by this thesis.

How cinema attempts to reconfigure this relationship to ideology, in particular, how it installs the human figure, as a sun at the centre of ideology's constellation, is the key aspect of *cinema's thinking* that this chapter and thesis traces. I will use Comolli and Narboni's critical matrix for classifying cinema's different methods of mapping and shattering this relationship, in order to better categorise the films I deploy.

Comolli and Narboni's approach is to group the different torsionings of cinema's thinking, in order to revise film criticism after the reign of 'realism' in French film criticism, under the editorial steer of André Bazin at *Cahiers du Cinéma*. Bazin advocated depth of field as a technique that installed stable subjects in cinema but, because cinema is, above all, a process that leaves behind bodies and places in order to free itself from these objects, it is able to both centre and eclipse these bodies. It is this capacity for cinema to refract the wetware of humanness and reconfigure those bodies as information and energies, that is a key concern of this chapter. Whilst the narrative of film appears to place the human at the centre of the frame, cinema can simultaneously point to the process by which this happens, whilst departing from the human. In doing this, cinema renders the sovereign human figure into an empty, but active, ideological frame — an image that invokes George Bataille's own in his second world war account of spiritual crisis, *Guilty* (1944). As the human figure is eclipsed in cinema it is in the edge of the frame, the "[...] fiery penumbra [where] meaning is subtly withdrawn" (Bataille, 1988a, 12), and in which a truly delimited concept of sovereignty and agency might be afforded us. Bodies in cinema function like

pattern in information theory, providing orientation and a medium for agency that distracts us from the noise and randomness in the signals of light and sound that constitute cinema.

I will group the films employed in this thesis in line with Comolli and Narboni's categorisation of cinema, according to the different ways in which it is able to disrupt or sever itself from its ideological function. The additional function of this process is to ascertain how some of my cited examples of cinema overcome the ideological function of the human figure as an embodiment of sovereignty. Comolli and Narboni underscore that what cinema productively registers is the unformulated, untheorised, clumsy world of a dominant ideology and that this is what makes all film political: "inasmuch as it is predetermined by the ideology which produces it (or within which it is produced, which stems from the same thing)" (2001, 60), and in certain cases how it speculates with those untheorised materials.

- a The first and major category of film that Comolli and Narboni float is the one that aligns itself, without friction, with the dominant ideology. This is ideology talking to itself, as there is no mismatch for audiences between the ideology they experience every day and what they see on the screen. This is not an unthinking ideology but one that closes the circuit and has the answers ahead of any questions.
- b The second category is film that addresses the first category by identifying a political subject, the signified, who in some way addresses the dominant ideology, in turn, theorizing it. This approach, Comolli and Narboni stress, is only effective if the method of signifying is also addressed and the means of depiction experimented with. In this category, political and formal approaches become compacted.
- c Comolli and Narboni's third category advocates some form of recuperation where the content of the film is not explicitly political but: "[...] becomes so through the criticism practised on it through its form" (2001, 62).

- d The fourth category is the type of film that has explicit political content but unquestionably adopts the language and imagery of ideology. These are the kinds of cinema that look to counter the dominant ideology but use the same tools to do this work.
- e The fifth category is those films that appear to belong firmly within the dominant ideology but in an ambiguous way. These films let us see and feel ideology and how it works but then counter that operation and interrupt its flows. This internal criticism, it's suggested, "cracks the film apart at the seams" (2001, 63). This kind of film is able to describe and map how ideology is reflected in it.
- f This sixth category is 'living cinema' or 'cinema direct' and its practice arises more from social events or reflections but differs little, in Comolli and Narboni's view, from purely ideological cinema, as it does not challenge ideologically conditioned methods of depiction.¹⁶ According to them, these kinds of film suffer from the illusion that, once traditions of dramatization are thrown off, then a kernel of truth will reveal itself to us. These films apparently suffer from the notion that 'seeing is understanding' and witnessing correlates with the truth. This equating of seeing with truth, for Comolli and Narboni, simply extends and confirms ideology's capacity to contemplate itself but not criticise itself. Comolli and Narboni appear to double down on the idea of a witnessing camera that goes out for us and sees the world as it really is without attempting to understand how the presence of that camera inflects and alters what is being surveyed.
- g The seventh and final category is what Comolli and Narboni call the other 'living cinema'. Here, the workings of cinema don't simply serve as the receptacle for a reality outside of the camera but begin to take an active role in the concrete stuff of cinema. In this way, it becomes productive of meaning.

Before I apply these categories to the examples of cinema that I deploy, it is worth noting that cinema is used in this thesis as a divining mechanism for cultural production that straddles epochs, most specifically those of the late 1960s and early 1970s in the Anglo-American world. This cinema sits aristocratically at the dawn of a new era of financialised capital and I cite this cinema because it is squarely situated in its time and ideology. The key pieces of cinema used to bring this moment into relief are:

Performance (Cammell, Roeg, 1970)

Barry Lyndon (Kubrick, 1975)

Performance (1970) occupies categories C and E but also exceeds these categories. Appearing, on the one hand, to not be explicitly political but with the potential, through criticism, to become so. Category E, because it appears to occupy genres and align with dominant depictions and ideologies of, for example, the gangster film and the counter-culture film. Because it brings these two genres together, it interrupts the flow of each and the audience is asked to question the normative ideology of each genre. It exceeds these categories because of the way in which the passage of time is affected by the intercutting of scenes; average shot lengths are increased for sections of the film and the identities of the two protagonists become interchangeable. The cinematography and editing by its co-director Roeg marks the advent of a much accelerated and intensified cinema. It is not overtly political but can be considered as such because it can be recuperated by criticism through these experiments in form. The film's use of normative genres locates the signified and then hollows out and eclipses that ideological construct.

Barry Lyndon overtly performs the role of costume drama but allows us, through both a forensic reproduction of the era (the 18th century) and the use of reverse zooms, for example, to see how the dominant ideology of the period works. In addition, the amassing of the resources of cinema by Kubrick mirrors the installation of debt in the 18th century, which, in turn, mirrors the transition to a debt and risk managing economy that is occurring at the time of the film's

making. The film appears to have no obvious contemporary politic but, through its form, a political economy can be detected, mapped and drawn into the present. Like *Performance*, but through less obviously disorientating techniques, the film is able to calcify the human object as an ideological construct or armature, constituted by debt and contracts. The film maps the then forthcoming collapse of money and the commodity in the form of the derivative contract.

Other examples not of this period but which extend the concerns and operation of the above and which herald a newly intensified cinema include:

***Boarding Gate* (Assayas, 2007) via Shaviro**

***Black Hawk Down* (Scott, 2002)**

These can be seen as examples of pre-2008 financial crash cinema that actively explore the typologies of embodiment and signification arising from global financialised capital. These films mainly appear to belong firmly within the dominant ideology but only do so in an ambiguous way. In *Boarding Gate* (2007), the traits of a noirish thriller genre are pursued but are accelerated to an extreme through the emotional detachment of its actors and the fast cutting rates of the edit. *Black Hawk Down* (2002) occupies the role of a contemporary war film but manages, through a forensic account of the processes and administration of war, to install a narrative of war as narrative of risk management. Mirroring the operation of derivatives as it does so. The above examples practice an intensity and shortening of Average Shot Lengths (ASLs) that parallel the liquidity, perceived speed and 'decisionism' (Schmitt) of finance capital. They are films that indulge the dynamism of supply side economics.¹⁷ Or, what Jean-Joseph Goux cited as being post-modern capitalism's ability to untether itself from the values of the enlightenment and the pious economics of the bourgeoisie. These films attempt to exhaust the notion of exchange in an atmosphere of always-renegotiable contractual arrangements.

In this genre of cinema, bodies become contracts of the kind that Shaviro describes in *Boarding Gate* (Assayas, 2007). They have all the qualities of

decisionism, a temporal violence that upsets categories, for example, but remain attached to bodies in a way that keeps the decision bracketed by the most powerful ideology of all, that of the human or politically romantic subject. This category of film intensifies the ideology and dynamic of supply side economics, producing an ambiguity and potential shattering of the signifiers employed. Bodies and objects in these examples of cinema make us see and feel that, in a supply side economy, everything becomes “[...] a potential medium of exchange, a mode of payment for something else” (Shaviro 2010, 46).

I will use Comolli and Narboni’s approach to explore the materialism that cinema’s speculative play with ideology produces and how this detects the emerging logic of derivatives. Then, in the latter half of the chapter, I will look at how cinema thinks the decolonising of sovereign currency as it violently mobilises previously sedimented forces and proceeds to think of action as a material.

2.1 Cinema as Apparatus



Fig. 8. *Germany in Autumn* (Fassbinder, Brustellin, Cloos, *et al.*, 1978)

The Repressive State Apparatus and the Ideological State Apparatus collide.

I have gone some way to describing cinema's ideological function and its own speculation on those functions but need, at this juncture, to expand on its apparatic nature. The film *Germany in Autumn* (Fassbinder, Brustellin, Cloos, *et al.*, 1978) is a portmanteau exercise with thirteen German directors producing a series of vignettes that describe the two months following the kidnapping of former SS officer and industrialist Hans-Martin Schleyer by the Red Army Faction (RAF). The film begins with the funeral of Hans-Martin Schleyer and ends with the funerals of the members of the RAF at a cemetery in Stuttgart, sanctioned by the mayor of Stuttgart whose father, Field Marshal Rommel, was given an elaborate state funeral by the Nazis after being forced to commit suicide by the National Socialists. For this and many other reasons, the film is squarely situated in its historical moment. It is a disparate collection of responses, including a section by novelist Heinrich Böll about television executives that decide not to air a dramatization of Sophocles' *Antigone* because they believe it

to be to 'topical'. The film and its episodes move between registers of documentary, high artifice and visual lyricism.

The section directed by Rainer Werner Fassbinder appears as a documentary of the director's emotional and psychic upheaval at the news of the hijack and execution of Schleyer, followed by the deaths and probable state executions of the RAF members in Stammheim Prison, Frankfurt. The section includes a fraught Fassbinder drunkenly questioning his mother in the light of this crisis in what appears to be a genuinely emotional, fly-on-the-wall moment, which is then followed by Fassbinder fighting with his apparently apolitical, apathetic boyfriend. The latter appearing as somebody unable to theorise events, in contrast to Fassbinder's absorption and reflection on the political trauma unfolding in Germany in this period. These scenes were, in fact, scripted but give the sense of a politically romantic moment where the energies of the state and of the individual become interchangeable. The film is effective in exploring Comolli and Narboni 's categories of ideological cinema, both discretely in each director's section but also as a collection that juxtaposes these approaches, all the time ensuring we remain conscious that the production is firmly situated in its historical moment. It is, therefore, speculative and experimental in the way that it shows "ideology presenting itself to itself, talking to itself, learning about itself" (Comolli and Narboni, 2010, 61).



Fig. 9. *Germany in Autumn* (Fassbinder, Brustellin, Cloos, *et al.*, 1978)

Cinematic political romanticism. The energies of the state and the individual become interchangeable. Fassbinder's body both orientates and disorientates.

What I believe Fassbinder to be doing is intensifying the capacity of cinema to act as an ideological mirroring device. Fassbinder is using film to affectively explore how cinema and the state operate as ideological apparatuses that, in Althusser's words: "[...] interpellat[e] individuals as subjects in the name of a Unique and Absolute Subject" (Althusser, 2006, 107/108), but also act as specular devices or mirror structures that are: "constitutive of ideology and also ensur[e] its functioning" (Comolli and Narboni, 2006, 108). As I outlined earlier, this is ideology's centring operation in which Fassbinder's character sees himself in the Absolute Subject of the State but we, the audience, also see ourselves in the image of his embodying of the Absolute Subject of the State. His image threatens to install the traumas of the State in us.

In Fassbinder's section, we are explicitly shown the state's violence in its handling of the burials of the members of the RAF. Therefore, it is made clear to us by Fassbinder that the state can be a '(Repressive) State Apparatus' (Althusser) which functions in the main by 'violence'. But there are, for Althusser, ideological apparatuses that work alongside the state apparatus and that interact and compliment it. These, for example, could be schools, cinema, art, finance, technology, infrastructure projects, regulatory bodies and economies of knowledge. These are all Ideological State Apparatuses and they function primarily and in the first instance by 'ideology'. This last apparatus is the one that Fassbinder engages with and intensifies through his scripted faux hysteria. What we encounter here is the film taking on the categories of both 'Direct Cinema' (the use of documentary style camerawork and chaotic scenes from the burials) that reflects a realism that is external to the camera, *and* of a cinema that has a signifier that is political, that theorises the events taking place and presents this theorising to us, the audience.

However, each of these approaches was, in fact, part scripted and a sense of the uncanny undermines the functions of both categories and renders them ambiguous. We begin to see *in* Fassbinder's expressionistic portrayal of the embodying of the Absolute Subject of the State, the appearance of the Ideological State Apparatus (ISA). Fassbinder subjects his body, as an actor, to an abjectness

that is difficult to watch as he appears to get drunk, take narcotics, half heartedly masturbate, becoming, as the film progresses, a remorseful, narcissistic husk. The overriding effect is of a body composed of emotional ticks that spasm in correspondence with the state's emotional spasming. For Althusser, ISAs reproduce productive forces and the existing relations to production through interpellating (bringing into being through the habits and rituals of an embedded ideology) individuals as subjects. He writes:

“[...T]here is no ideology except by the subject and for subjects. Meaning, there is no ideology except for concrete subjects, and this destination for ideology is only made possible by the subject: meaning, *by the category of the subject* and its functioning. (Althusser, 2006, 103/104)

In Althusser's view, no class was ever able to secure and maintain state power without also having a hold on Ideological State Apparatuses. Through the subtle interplay of the State Apparatus and ISAs, a class can manage the contradictions between the two. As I've said, examples of these ISAs could be the media, schools and knowledge economies, as subtly disciplining institutions. This makes for a very fragmented organising principle, or body, but one normally managed by a class having access to each of these apparatuses. In this way, the ISA and Repressive State Apparatuses become conjoined as part of a larger State Apparatus. Fassbinder's chaotic body becomes the plain on which this subtly unified State Apparatus or body starts to fragment and its contradictions appear. Fassbinder's section of the film points to the director's body as an organising principle, a centring device, and then heightens that effect to the point of ambiguity. Fassbinder's cinematic body begins by invoking the 'occasionalist' subject of Schmitt's political romanticism but renders it into an hysterical figure that, instead of performing a centring function, begins to point towards an abyss at the centre of that function. The body, in this instance, becomes all apparatus and leaves its objects behind, those of the subject and of the living being.

Fassbinder's cinematic body acts as a site where the apparatus comes into view and in which its contradictions point towards an historical separation between being and action, ontology and praxis. Agamben unpacks Foucault's term

'apparatus' as a concept with theological origins: a concept that arose from the challenge in the early church of how to conduct the administration of God through the Holy Trinity without reintroducing a polytheism that threatened the singularity of God (Agamben, 2009). Whilst God remains singular, his body is disseminated and multiplied through his government or administration. This causes a multiplication of subjects born out of a multiplication of apparatuses. Agamben goes on to propose a reclassification of beings into two groups: "[...] on the one hand, living beings (or substances) and on the other apparatuses in which living beings are incessantly captured (2009, 13)." This coming together of "[...] sets of practices, bodies of knowledge, measures and institutions that aim to manage, govern and control the behaviours gestures and thoughts of human beings [...]" (Agamben, 2009,12) installs man as an ideological excess.

Fassbinder performs both the effects and functions of an apparatus so that what we are presented with is an armature evacuated of an originary living being (or substance). An overlap occurs between the apparatus and Agamben's third classification, that of the subject. This thing, the subject, arises from the friction between the apparatus and the living being. At times, the categories of subject and living substance appear to have some overlap. In fact, subjectivities proliferate in accordance with the apparatuses that proliferate. Not necessarily in accordance with the proliferation of living beings. Subjects are, then, not tethered to living beings but are the product of apparatuses. Cinema can, then, affectively present this apparatic armature and frame as a simultaneously animated but empty object. A thing that is both full and empty. A paradox that Fassbinder accelerates towards absurdity but which *Performance* thinks explicitly, showing us this thinking as it does so.

2.2 Performance's Method – The Derivative as Baroque Frame





Fig. 10. *Performance* (Cammell, Roeg, 1970.) Co-Director Cammell illustrates his methodology. *Performance* forecasts the derivative as the mobile baroque frame that perpetually unbundles the component flows of the commodity.

Director Donald Cammell's exposition of his own methodology in the film *Performance* (1970) alights on this function of the cinematic body as an ideological armature. Cammell, however, recasts this armature as baroque frame that forecasts the derivative's function to produce value in motion, as it perpetually unbundles the component flows of the commodity. Remember, derivatives are contracts that take each sedimented component of the commodity form and then sell the assurance of the future price for that component. They then take those contracts, those financial instruments, bundle them and sell those bundles as securities on a global market. Value is no longer stored in a discrete commodity but from this action of unfolding and of breaking open enclosed sovereign forms. The role of cinema in charting the derivative's function in decolonising the commodity form and sovereign currencies is broached later in this chapter.

Cammell overtly foregrounds and describes his cinematic method. A Magritte painting is delivered to reclusive rock star Turner's house and the painting is rejected in favour of the frame. Chas, the gangster in hiding, discovers a store of frames in the cupboard adjacent to his bedroom. In the last scenes of the film, Turner's cadaver is found along with the frames but Turner's face replaces that of Chas as he is being driven away. This is shortly after we witness Chas' bullet entering Turner's head, converting the bullet hole into something akin to a Baroque moving frame.

Actual frames and meta-cinematic frames in *Performance*, such as the bullet hole, point simultaneously towards and away from the subject and the living substance we attach to that subject. Cammell and Roeg's explicit, almost didactic exposition of their method and play with the form of film accelerate the ideological function of some cinema to install subjects to the point of violent ambiguity. So much so, that the thinking of cinema threatens to become an unbracketed thinking, in danger of violently exceeding and dispossessing us. The film, therefore, understands the implicit function of cinema to install the subject as a set of practices that centres the subject, but is able to foreground the method of centring in a manner that eclipses the human. It is in this eclipsing of the

human by cinema and in the half-light of the penumbra of that eclipse that the apparatus comes in to view and its real energies and materials become apparent.

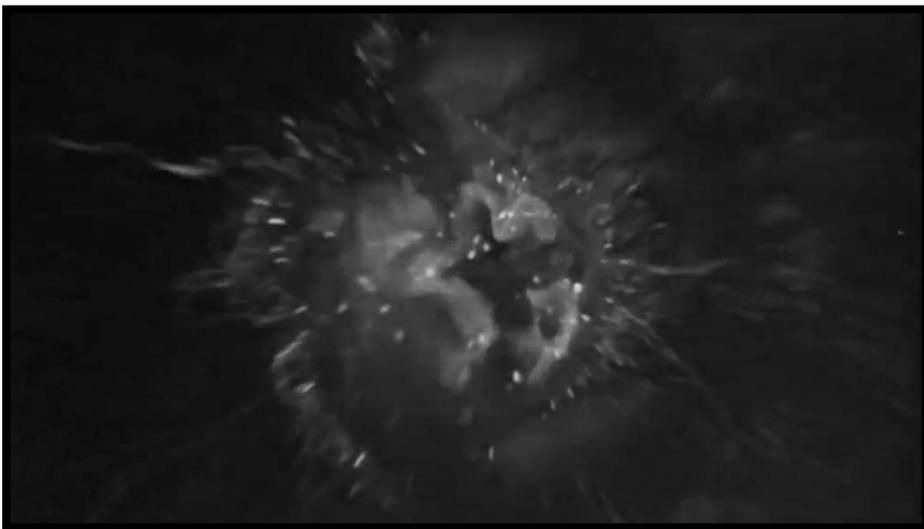


Fig. 11. Bernini. *Altar of the Chair of St. Peter*, Cathedra Petri (1666).

Fig. 12. Solar Eclipse

Fig. 13. *Performance* (1970). The camera pursuing the bullet into Turner's head becomes a Baroque meta-cinematic frame.

The subject and its living substance becomes secondary to the active frame of the apparatus in the manner of the baroque where: "The frame casts off its subservience to the painter's art of representation aspiring instead to the status of an autonomous aesthetic object" (Adams, Glenn, (Hills), 2011, 149). But, as Helen Hills underscores in her introduction to *Rethinking the Baroque* (2011), this predominance of the frame over the artwork is not a stable frame or a frame

that produces stable subjects and objects, but a moving and disorientating frame, or rather a frame as an operative system. Deleuze's reading of the baroque is not that it refers to "[...] an essence but rather to an operative function, to a trait. It endlessly produces folds" (Deleuze, 2006, 3). The frame, then, is an action of folding the outside into the inside and back again, such that we can no longer make a distinction between the two. It, like the derivative, is a frame that is constantly devouring its own limits as it decolonises the commodity.

Bodies and subjects in the baroque are often on fire or bursting into the air or the soil, observes art historian Helen Hills. They are envisioned more as texture than structure, constituting an 'involution' where and when the surface becomes matter but which is no less forceful for being surface. The baroque frame is exemplified by Bernini's *Altar of the Chair of St. Peter* (1666) where a series of framing devices fuse with one another to lift the relic of St. Peter's throne, encased in bronze, towards a stained-glass depiction of an ascending dove. Architecture, sculpture and decoration combine to give a sense of violent liquidity where the frame becomes a moving, writhing structure leading to a sense of disorientation that is in danger of being misread by the subject as autonomy and agency. Again, this dynamic framing both points towards the subject and, at its most violent extreme eclipses it, rendering it into a forceful but empty entity. Hills concludes that: "Deleuze's materialist understanding of the baroque prioritises dynamic properties of matter" (Hills, 2011, 31). It is to questions of materiality and the materiality of the apparatus that I turn, in the next section.

2.3 The Materialism of the Apparatus – Truffaut’s Vase





Fig. 14. An object becomes captured by the apparatus of film as depicted by the apparatus of film. The total mobilisation of objects and energies is demonstrated by the medium itself (*Day for Night*, Truffaut, 1973).

In his 1973 film *Day for Night* (French: *La Nuit Américaine* or the American Night), François Truffaut depicts the making of a studio film and the drama and emotional life of its technicians, actors and administrators – as a film within a film. Truffaut, as well as directing the film, acts the role of the director of this *mise-en-abîme*.¹⁸ *Day for Night* indulges the technical aspects of cinema; revealing its tricks, back lots and the overall dialectic at work in the fabrication of illusion itself. In one sense, it pulls back the frame to uncover that which could be said to be behind ideology, were we to think of ideology as simply an illusion

generated by a clique seeking coercive control of a majority. But the movie also shows how ideology functions through the mobilisation of all objects, subjects and energies in its path and is, therefore, situated in material procedures and processes and not as pure illusion.

In one scene, which takes place in the hotel where the crew and actors are staying, Truffaut is seen walking the corridors of the hotel where he stops and looks intently at a vase. He is distracted by an assistant who wishes to discuss the casting of an actress who has recently suffered a nervous breakdown and they talk about her looks and suitability for the role. Another crew member interrupts this last conversation in order to demonstrate a prop that he has made that will give the impression of a scene being lit by candlelight. At this point, Truffaut lifts the vase from the hotel table, taking out the dried flowers, and suggests that it will be perfect to include in the next day's scene they intend to shoot. In this moment of nomination an object becomes captured by the apparatus of filmmaking. Truffaut suggests to the prop man it is perfect; in other words, it has all the qualities in its design that will make it function as one part of the ideological thinking of the forthcoming scene. The scene we are watching, where Truffaut nominates the vase, is an affective illustration of the capturing of an object by the apparatus of film and its transmutation from one modality into another. The object is simultaneously captured and mobilised in the same manner in which the actress is about to be captured or contracted and cast for the film. Her looks and even her current emotional state are thought of as aligning with the trajectory of the project. The processes of capturing each, the vase and the actress, are put side by side as being equally valuable to the objectives of the film. *Day for Night* (1973) affectively demonstrates film's thinking and its thinking as ideology, rooted in physical material rituals and processes. This materialism, however, is not, as Althusser suggests, the same as the materialism of "[...] the paving stone or a rifle [...]" but "[...] it exists in different modalities, all rooted in the last instance in 'physical' matter" (Althusser, 2008, 40).

Cinema's function as an ideological apparatus presents us with a materiality that cannot be looked upon directly but is material, nonetheless. Ideology can, argues Althusser, be understood as illusory in that all reality can be considered external to the object being represented. However, this definition can be complicated by asking us to consider the object which is being 'represented' as the imaginary form of ideology; but we also need to consider the materiality of ideology itself – the materiality of the frame and, in particular, the cinematic frame. It follows that we need to question the proximity of reality to ideology. On this, Althusser has the following to say:

'What is represented in ideology is therefore not the system of the real relations which govern the existence of individuals, but the imaginary relation of those individuals to the real relationships in which they live" (Althusser, 2008, 39).

This assertion by Althusser follows on from his primary claim that every social formation, if it is to continue to exist, must reproduce the conditions of its production at the same time as it produces and in order to be able to reproduce.

In *Ideology and the Ideological State Apparatus* (1970), Althusser tussles with the concept of ideology as entirely illusory. In a subsection entitled *Ideology has no History*, he asks, *how* can it be entirely illusory, as this logic would mean ideology having no historical moment, existing only as a pure dream, a nothingness with all reality external to it? Althusser asks how the object is represented in the imaginary form of ideology and what this means for a concept of the materiality of ideology. The question remains that, if ideology is a representation of the imaginary relationship of individuals to their real conditions of existence: "why do men 'need' this imaginary transposition of their real conditions of existence in order to 'represent to themselves' their real conditions of existence?" (Althusser, 2008, 37). Why is it, Althusser asks, have men been given this potential, independent of any clique that we believe instigated this illusion? Why, and ultimately how, have they reproduced this illusion? And are these acts and rituals of reproduction not themselves situated in physical matter?

In Althusser's second thesis of the paper: *Thesis II: Ideology has a Material Existence*, he concludes that: "[...] an ideology always exists in an apparatus, and its practice, or practices. This existence is material" (Althusser, 2008, 40). Althusser goes on to qualify this assertion by describing the actions of individuals in relation to ideology. Individuals adopt certain practices according to what sets of ideas they decide to believe. If it is God, they go regularly to church and kneel before the altar and make the sign of the cross. We could extend this to many other practices, including those that take place in institutions, but also those that install and reproduce ideology through the actions of an individual moving through less spatially determined institutions. The checking of email on a smartphone, the buying of coffee on the way to work, the tapping in and out of a transit system using an electronic charge card. These contemporary rituals are what Althusser might have called the adoption of 'practical attitudes' (Althusser, 2008, 41). These rituals seem slight but, as Althusser points out, the reproduction of ideology can exist in examples of more meagre apparatuses, including attending a local football club meeting, a political party meeting, a school day, or a funeral. These latter instances could be considered a smaller part of any apparatus. These events and the attendance at these events simply aggregates, installs and reproduces an apparatus and its ideology. The subject conducting these rituals is, therefore, acting according to his or her ideas and inscribing those ideas into their material practices in the ritualistic manner that Althusser describes in the following manner:

"... I shall therefore say that, where only a single subject (such and such an individual) is concerned, the existence of the ideas of his belief is material in that *his ideas are his material actions inserted into material practices governed by material rituals which are themselves defined by the material ideological apparatus from which derive the ideas of that subject*. Naturally, the four inscriptions of the adjective 'material' in my proposition must be affected by different modalities: the materialities of a displacement for going to mass, of kneeling down, of the gesture of the sign of the cross, or of the *mea culpa*, of a sentence, of a prayer, of an act of contrition, of a penitence, of a gaze, of a handshake, of an external verbal discourse or an 'internal' verbal discourse (consciousness) are not one and the same materiality" (Althusser, 2008, 43).

Althusser uses this passage and its emphasis on ritual to reach his central thesis: how ideology interpellates or brings into being individuals as subjects. I have

covered earlier in this section this aspect of Althusser's thesis that underscores how ideology is *for* the subject. Althusser, at this point, excuses himself from unpacking these different modalities of materiality that he alights upon, but which arise again in his late work on *aleatory (dice-like) materialism* or the materialism of the encounter.¹⁹ This rich dimension of Althusser's work seeks to uncover a previously hidden current or tradition in the history of philosophy using such figures as Hobbes and Machiavelli. It has informed and been cited by writers and thinkers associated with Speculative Materialism but would require far more space to unpack than can be afforded here without distracting from the core object.

Truffaut's vase is, then, captured by the apparatus of cinema and becomes, at that moment, an intensified convergence of energies. The object appears as a *mise-en-abîme* within a *mise-en-abîme* of the film within a film. It is first captured by the film we are watching and then captured again by the film within the film. The apparatus of film is suddenly doubly drawn down onto the object whilst, at the same time, we sense the whole of the apparatus in that moment. That one becomes conscious of the modes of consciousness because of the mirroring operation of the film makes the moment no less disorientating. Whilst Fassbinder's cinematic body in *Germany in Autumn* (1978) becomes all ideological armature, eclipsing its living substance and subject through a process of the director exaggerating cinema's apparatus, then Truffaut's vase becomes a site on which the energies of the apparatus descend in a hyperintensified way. The materiality of the vase becomes displaced by the energies of the apparatus of film. The vase, as a result, becomes this refractory object where we can witness, but only indirectly, the energy and materialities of the apparatus that capture it: a materiality that you cannot look upon directly.

2.4 *Barry Lyndon* (1975) – Bodies as Points of Convergence in a Schema of Debt



Fig. 15. *Barry Lyndon* (Kubrick, 1975). Bodies as points of conversion in a schema of debt, negotiation and exchange.

Cinema's objects, including cinematic bodies, are important, not in terms of what narratives they seek to tell, but the ways in which they point inadvertently to the physics of the apparatus that produces them. Certain cinematic objects and bodies appear to act as punctuation points that hold the grammar of the film together but, instead, create the ambiguity of C&N's category in which films appear to belong firmly within the dominant ideology but in an ambiguous way. These are the films that let us see and feel ideology and how it works but, then, counter that operation and interrupt its flows and "crack[s] the film apart at the seams" (Comolli and Narboni, 2001, 63).

This operation is exemplified in Kubrick's production *Barry Lyndon* (1975): a film based on Thackeray's tale of an 18th century Irish adventurer who makes his way through the wreckage and turbulence of mid 18th century Europe and The Seven Year's War.²⁰ The production is a highly capitalised, lavish and slavish celluloid reproduction of the paintings of Gainsborough and Hogarth but the underlying narrative of the film is the getting of fortune and the acquisition of debt. The sumptuous quality of the film, its regard for the cinematic, the painterly image, and its extended scenes without dialogue, all make the film an alluring, affective whole. The cinematic bodies of its protagonist Barry Lyndon and the accompanying players exist, not as autonomous subjects, but as relational objects within Kubrick's machinic vision.

This is emphasised in Kubrick's work by, for example, slow reverse zooms that leave characters adrift in their settings, de-centring the human. Art critic and co-founder of the journal *October*, Annette Michelson, proffers that this machinic vision conceives of Barry's humanity as something "[...] fundamentally non-human, as something projected onto Barry by complex networks of history and society. Barry, in effect, has no subjectivity other than that provided by what surrounds him. He is an empty vessel waiting to be made human" (Ayers, 2012, 116). Michelson suggests, in her 1969 essay *Bodies in Space: Films as Carnal Knowledge*, that it is Kubrick's machinic vision that disorientates and throws into relief the cinematic subject as an ideological construct (Michelson, Annette, 1969).



Figs. 16/17. Kubrick's machinic vision. Slow reverse zooms leave characters adrift in their settings, de-centring the human whilst simultaneously pointing to the human as ideological excess. *Barry Lyndon* (1975). *2001: A Space Odyssey* (1968).

I use this film as another example of cinema from the early to mid '70s that maps capital's shifting materialism as the Fordist project stalled. In addition, it acts as a form of divination of a coming economy by pointing towards its prototype in the 18th century and an age of market speculation that included the South Sea Bubble crash (Dale, 2004); a development that might allow us to think of the '70s as the advent of a second 18th century.²¹

The film is composed of a series of contracts that Lyndon enters into and either fails to make binding or defaults on. During the first half of the film, these transactions are carried out in cash and, in the second half, they are expressed as cheques and promissory notes. His father is killed in a duel; he is cuckolded by a woman seeking to improve her position by marrying a rich English officer; he enters into a duel which is fixed by the family of the woman in question, leading Barry to run away and join the British Army, only to desert disguised as an officer. Barry is then entrapped by a Prussian officer who sees through his disguise and who, in turn, has Barry spy for the Prussians in return for not delivering him back to the British Army and certain execution for desertion. He then enters into another contract with the subject of his spying who becomes his partner in a gambling racket that tours the European courts, salons and spas. Barry falls in love with a rich English Countess whose husband dies. Barry marries the widow, providing him with a fortune to squander as he attempts to gain enough influence in English society to secure a peerage. In doing so, he indebts the estate of his wife and invokes the contempt of his stepson who later challenges Barry to a duel and seizes back the estates after wounding him and sending him away with the promise of an annuity on the condition that he never returns. Promissory notes, cheques, negotiation and the settlement of debts through duels figure throughout the film.

Cash exchanges feature early in the film and are then displaced by an economy of contracts, promissory notes and deferred promises in the second half of the film. Barry himself is captured by this process, becoming, in the second half of the film, a point of conversion in a schema of debt and negotiation. A walking derivative. This points towards an economy, not regulated by law, but by contracts that

have all the qualities of the law. Here, anything can be exchanged for anything else, renegotiated and exchanged again. Shaviro uses the film *Boarding Gate* (2007) to describe just this kind of world where:

“[...] everything is interchangeable, or at least exchangeable: sex, money, drugs, business trade secrets, personal identities, and clothing and other consumer goods. Even human actions, qualities and feelings are subject to promiscuous exchange. [...] Everything is a potential medium of exchange, a mode of payment for something else. And all these exchanges are regulated, not by law, but by contract: import-export contracts, murder contracts, prostitution contracts and BDSM contracts” (2010, 46).

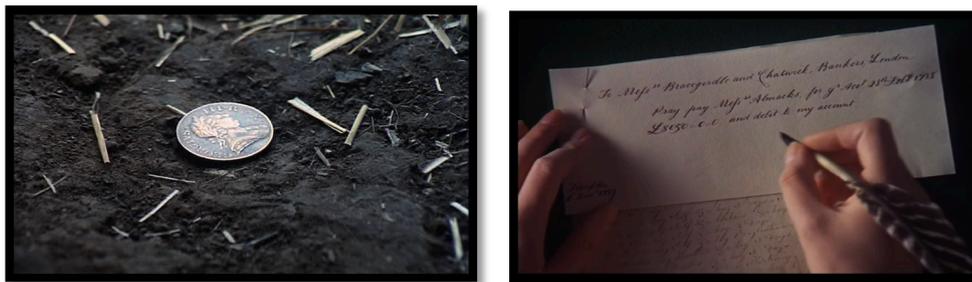


Fig. 18. *Barry Lyndon* (1975). The shine of coinage contrasts with the earth during a duelling sequence. Lyndon moves from cash exchanges early in the film towards an economy of contracts and deferred promises in the second half of the film. The derivative begins to emerge as the money form and production collapse into one another.

A marked characteristic of the film’s choreography of bodies are the multiple occasions in which the figures are still and then become increasingly *more* still as the protagonist Barry Lyndon moves from poverty to fortune – becoming, as he ascends a feudal architecture towards a property owning class, a glittering object captured by his surroundings. This development is polarised when violent movement occurs that unsettles this development from creaturely expressiveness into static poise. Lyndon’s provoked attack on his stepson causes a visual eruption of bodies attempting to restore order in the bewigged salon of Lyndon’s country house. An event that serves in the latter half of the film to polarise how Lyndon’s body is otherwise stilled and captured by the apparatus of debt.



Fig. 19. *Barry Lyndon* (Kubrick, 1975). Barry becomes a glittering object captured by the apparatus of debt.



Fig. 20. *Barry Lyndon* (Kubrick, 1975). Repose, stillness and order are temporarily upended and categories confused. Noise enters the signal and pattern is thrown into relief.

The relational nature of the film's objects and bodies is underscored by the ensemble nature of the film, the use of strong cameos, the technical virtuosity and the casting of an actor to play the main role possessed of a limited range and history in American TV drama. The combined machinery of the film is foregrounded over and above its individual parts.

The character of Barry Lyndon originates from the remains of a semi-agrarian feudal economy but passes into an age of accumulation, debt and rationalism, enabled by a militaristic order stemming from the Seven Year's War. The accumulation of debt, at this time, becomes the engine for the mutual development of banks and war, with government and personal debt in 18th century England rising to staggering sums as part of a project of rising British power. The sheer scale of the figures mirrors western economies' current debt landscape:

“Over the long eighteenth century, public debt increased from a nominal capital of under £2 million in the reign of James II to reach an astronomical level of £854

million or 2.7 times the national income when Lord Liverpool's administration returned the monetary and financial system to the gold standard in the aftermath of the Napoleonic War" (O'Brien, 2006).

Whilst Lyndon is shown to be avaricious, he is not calculating, nor is he able to fully comprehend his historical context and the seismic shifts that accumulation and speculation are bringing to Europe, and in which he finds himself captured and deployed as a medium for these forces. Lyndon functions throughout the film as what Bataille terms a "principle of insufficiency", a being that is always open to others and, therefore, in a relational state. Bataille's "principle of insufficiency" (Bataille, 1985, 172) operates as what he terms "the labyrinth" (Bataille, 1988a, 171), the most powerful example of this principle being language, which imposes itself upon us and puts us in relation to others. The principle is not simply, then, a labyrinth which is disorientating and which we can hope to master and find a route out of, but one which is itself disorientated. The labyrinth's relationship to an outside is not to a stable outside but to an uncertain topography. The labyrinth of language, for example, becomes, then, the dispersal of this 'being in relation'. For Bataille, our sense of insufficiency and of being lost leads us to attain a false sense of sufficiency and of being autonomous. Being lost in the labyrinth does not, according to Bataille, constitute autonomy.

In the case of *Barry Lyndon*, the labyrinth or apparatus is debt and its capacity to capture and bring into relationship all the actors in that narrative. A dynamic mirrored by the industrial scale and highly capitalised nature of the film production itself. For Bataille, beings deal with the instability of this 'insufficiency' by creating seemingly sufficient centres or wholes. This could be cities, empires or gods, which, in turn, produce an ideal matter that orientates thought. But the falseness of this idealism is, in Bataille's scheme, always exposed by the insufficiency of the periphery that threatens attempts at instituting a centre to the labyrinth. In this way, the matter of the periphery, the insufficient matter becomes what Bataille calls the "nonlogical difference" of matter (Bataille, 1985, 129). Barry Lyndon or the 'insufficient' body of Barry Lyndon moves through the film as a 'nonlogical difference' of matter that attempts to conform, to become sufficient, but whose presence exposes his own and the centre's

‘insufficiency’. His matter oscillates between an ideal and a criminal matter but it is the profoundly non-logical nature of his matter that exposes a fundamental instability that intimates the derivative contract’s shaky claims of authority.

I suggested earlier in this section that the ‘70s begins to function as a second 18th century with the growth of proxy wars, debt and the instantiation of individuals as contracts and not citizens. The ‘70s saw neoliberals experiment with and promote the democratisation of capital with the aim of creating a shareholder democracy that, over time, converted the citizen into an investor.²² An investor, as a homeowner, a private pension holder, student loan holder and small shareholder in previously publicly owned services. This conversion results in citizens coming to be seen by government as ‘individual measures of risk’ (Martin, 2014, Lecture). These measures, or markers, become what debt is bound into as capital transitions in the ‘70s from an operation that manages securities to one that manages risk.

This development signals the transition of government’s role as that of providing security to one of managing risk, now that risk has been transferred down into the individual. It follows that, in the eyes of policy makers, those individuals who are not managing risk well are assumed to be putting the state at risk.

Government policy becomes one of continually assessing where or in what group risk lies through the application of performance indicators and metrics, for example. This produces an unstable subjectivity liable to experiencing this sense of risk as autonomy and freedom but is an expression of the derivative’s ability to bring the: “far into the near” (Martin, 2014, Lecture). To put it another way, the derivative does what political romanticism does in terms of converting and making interchangeable the energies of the state and of the individual. So that, what is felt by the state is also felt by the individual and vice versa. As a marker of risk s/he is imbricated in the state but experiences this embeddedness as freedom from the state. Put yet another way, the subject is projected into the workings of the state but experiences this connection as disconnection and a process of colonisation is experienced as decolonisation.

Risk is pushed down into the individual but ameliorated in the derivative by the function of probability in both the use of the Black Scholes Merton Formula and its algorithmic and informatic automation. However, risk continues to serve as both a narrative and ideological function of the derivative, in terms of creating and recreating relations to production, and so has very material effects. Individuals align themselves with narratives of risk and freedom, reproducing their relation to production as they do so.

Returning to the cinematic body of *Barry Lyndon* it is clear that, whilst depth of field, stillness and single point perspective use the figure to anchor a scene, this is not Bazin's cinema of stable subjects. Nor does Kubrick's vision present the figure as the intimate partner of the commodity form in the market, as a store of value, meaning and agency. Instead, what we witness in Barry is a subject that appears to act as Bazin's stable subject but instead operates as what Bataille terms a "reversal of signs" (Bataille, 1988a, 219). Both the figure of Barry and Kubrick's monolith for the film *2001: A Space Odyssey* recall Bataille's disorientated labyrinth and the need to provide a sufficiency that orientates but which, in fact, points to an abyss. Both Barry and *2001*'s monolith appear as secular edifices that can provide a "sufficiency" that will induce a permanence and stake space and time to the ground but, instead, they do a "reversal of signs" (Bataille, 1988a, 219) in that they point to the abyss over which they are suspended. *They proffer a sovereign permanence whilst also being an object caught up in the moment of sovereign freedom.* The instability, which they attempt to conceal, is the very thing they stand in for. Visually, the monolith acts as a meta-cinematic frame, puncturing a hole in the space and time of the scenes in which it is cast so that its action is twofold. On the one hand, it suggests a capacity for the gathering and ordering of space and time into one point, one centre, but simultaneously threatens the dispersal of that centre by the actions of time and space.

This double action parallels the capacity of derivatives to act as an idealisation of risk and agency. As I explained in the previous chapter, it is the function of probability in the Black Scholes Merton (BSM) formula used in derivatives

pricing to employ previous events to arrive at a future price. It ameliorates risk by bracketing it and envisioning the future as a set number of possible outcomes. The function of probability for the derivative is to provide a sufficiency in the otherwise chaotic space of the market whilst sustaining a narrative of risk. If we return to Shannon's theory of information as a parallel: noise or random information is needed in any signal to identify pattern and pattern is then afforded agency. Probability demands and provides assurance of pattern. A process that is then amplified by the electronic engineering demands of computational trading. The figure of Barry as a living derivative and contract shows us film thinking this false sufficiency of derivatives' ideology. It points towards the noise in the signal whilst also pointing towards pattern as ideological excess.

The film *Barry Lyndon* points to a culture of contracts and promissory notes that offers liquidity because of its potential for endless renegotiation. The form of the contract makes it capable of drawing value from the far towards the near and from the future into the present. In addition, the contract itself can be bought and sold as a security – a promissory note of a future payout. This malleable form of exchange is in stark contrast to centralised architecture of sovereign currencies. I talk, in the first chapter, about how *Performance* marks a post Nixon Shock cinema that detected a departure from the centralised Gold Standard; but how does cinema think this process of breaking open the sedimented forces of this kind of economic architecture, and how does the action of breaking open become a material in itself?

2.5 Cinema as the Marshalling of the Sedimented Forces of the Cosmos





Fig. 21. Eureka (Roeg, 1983). Film thinks the breaking open and decolonising of a sovereign currency.

The Bretton Woods Conference of 1944 sought a post World War II plan for international and monetary financial order and viewed the dollar as a sovereign currency, essential to the post-war settlement. The dollar was pegged against US gold reserves and was intended to act as a global currency. This act of enclosure or colonisation saw the dollar become the thing that anchored financial activity, bringing all foreign economic activity into an American sphere of influence. This colonising procedure effectively brought all foreign currencies into the enclosure of US interests. However, other forces came into play that later levered open this colonising procedure. The growing economies of Europe and the exponentially expanding power base of OPEC (Organization of the Petroleum Exporting Countries) meant an accumulation of dollars outside of the US. These could not all be guaranteed by limited gold reserves and, by 1973, Bretton Woods was terminated. This meant the ending of currency sovereignty and the decolonisation of the centralised finance architecture.

As I explained in Chapter One through Randy Martin's work on the derivative, post-1973 government began to think of devolving risk down into the individual or what was previously thought of as the citizen. So that, whilst the end of Bretton Woods in 1973 was the disassembling of a centralised finance architecture, it was also the devolving of the logic of finance down into the individual. Therefore, this process of decolonising a sovereign currency was also a colonising of the individual. The year that Bretton Woods was dissolved, 1973 is also the year that the Black Scholes Merton formula was first published and

put into the public domain. It is from this point that derivatives begin to take hold and radically alter the temporal and spatial architecture of finance. How did cinema think this decolonising of sovereign stores of value?

The film *Eureka* (Roeg, 1983) is an exploration by director Nicolas Roeg of the tale of Jack McCann, a Klondike gold prospector who, having struck one of the biggest finds of gold in history, bought a Caribbean island and then slowly, unwittingly and subtly invited his own violent murder. The early scenes of the film show McCann hitting a liquid seam of gold deep under a mountain, then falling into pools of gold before explosively resurfacing through the ice on the plain below, anointed and gilded. McCann releases from the mountain the sun's earthly metaphor and bathes in its energies, having released a sovereign base material from its corralled and solid state.

The film thinks of a process of mining as a releasing of matter from a solid to a liquid state, of bringing into motion value. The capacity of derivatives to map space and time in order to abstract the distant and the future in the present is a means of ensuring what is termed in finance as 'liquidity'. Distant and future potential revenue streams are converted into a priceable product in the form of the derivative contract that can be sold in the here and now, ensuring a steady stream of cash liquidity (Martin, 2014, Lecture). Whilst the mining of a mountain for gold might be a finite exercise that potentially exhausts a stable geological location of its store of value, the derivative, through its ability to bring the distant towards the near and the future into the present, is able to mine spatially and temporally. The derivative, like the baroque frame, constantly consumes its own boundaries as it locates and quarries temporal and spatial sites. Whilst *Eureka* describes this process of decolonising a sovereign currency, it does so from the vantage of cinema that has a time consciousness within its form. It is, therefore, able to mirror derivative's latitude to also speculate with time and space, in doing so, making visible the emerging logic of the derivative.

As in the examples of bodies in the baroque that I give earlier in this chapter, where figures are often depicted on fire or bursting into the air or from the soil,

an unstable but forceful form of embodiment is speculated with as, again, Roeg's cinema detects the polity of the derivative. The gold-rich McCann's drift towards a violent death continues Roeg's directorial habit of rending bodies apart. McCann knowingly invites his own death by denying the sale of the island to representatives of the Jewish mafia wanting to build an offshore Casino. The film's extended scenes of McCann's murder involve him being tarred, feathered, burnt and dismembered. His body is torn asunder and broken open in a mirroring of his actions on the mountain and its reserves of gold. The film thinks of this conversion and displacement of sovereignty from a centralised and, in the case of the mountain, a stable body into a violent mobilisation of its otherwise sedimented forces.

There are, however, different registers of violence at work in cinema. Other instances of cinema from the same period explicitly explore bodies and characters intent on violence and for whom violence bestows on them a sovereign power that cuts through a retarding indeterminacy. These cinematic bodies register an imagining of information as both embodied but dematerialised and capable of scything through material and ideological impediments. The following chapter will use an example of cinema from the same year as *Performance* (1970) that thinks this genre of cinematic body and of information.

Chapter Three: Cinema Thinks Violence as Form and Force

How cinema thinks violence. Violence and sovereign power. The obscured and immense power of informatics. How cinema's violent bodies act as the sovereign actors of informatic power. A mythical violence that gives information all the qualities of the law.



Fig. 22. The Conformist (Bertolucci, 1970). Clerici, the aspiring assassin, is given a gun and asked to be "quick and decisive". Cinema clumsily but usefully thinks of the decision as violence and violence as form.

Through additional examples of cinema, Chapter Three further levers open the aspect of the artwork that thinks of the violence of information (both material and imagined) as being parallel narratives. Narratives of force on the one hand, that install an embodied, authoritarian notion of agency alongside a thinking of information's material workings that is more chaotic and which shatters the hubris of an ideological imagining of information. This chapter really confronts the challenge that arose in the artwork and it's thinking of force and who and what does power. This challenge was polarised when I was confronted by the forceful statecraft of Harlow and how its artworks extended its extra-law in order to become a town. In the post-war envisioning of the town a decision needed to be made as to how to construct and build an affective architectural

collage that did that statecraft which the town's author (Gibberd) then duly enacted. Casting back for answers and tactics for breaking through the deadlock of a contemporary extra statecraft conducted by the quotidian financialised, infrastructure beautifully mapped out by Keller Easterling was this singular vision by one person the remedy to the absolutism of the derivative? Could informatic power be countered by the singular vision of a person using artworks that made a claim for an extrastatecraft or was the question more subtle than this? The chapter carefully recalibrates this perceived force that is cinematically expressed at times as violence that is an absolute, Hobbesian authoritarian power. But also at times a violence that motions towards the 'splice' (Hayles) that acknowledges our collaboration with the chaotic aspects of information and which extends our capacities. This notion of force and violence permeates through a work such as *DEAD STOCK* and the developing work that uses the affectively violent aspects of *Performance* (1970) for example, to think of violence as an oscillating principle that both instates a narrative of human will and authority but also expresses a break from this conception of agency as embodied and authoritarian. This chapter helps to underscore the emerging politic of the work in its capacity to both think and challenge the informatic hubris and ideology of the derivative and so undermine its logic and the spectre of Hobbes' Leviathan that haunts its circuitry.

The previous section explored how cinema thinks the derivative's decolonising of sovereign currencies, and I touched on how this action of setting loose centralised financial architectures was imagined as a ceaseless and violent rending open. I began to chart this question of cinematic violence in the first chapter and describe the parallels between war's capacity to convert objects and bodies into energies and highly capitalised cinema's ability to extend this logic. Nonetheless, I left unfinished the question of how different registers of cinematic violence conflate and think the sovereign power of the derivative. I begin, here, by examining how sovereign power and, in particular, power-as-information is made *more* powerful by not laying bare its material limitations. This last point demonstrates how the informatic nature of the derivative (an instrument derived from the mining of vectors of information) lends it the capacity for

greater sovereign power because of its lack of tangible limitations. I then consider how cinema's bodies think of information as dematerialised. I suggest these forceful imaginings of dematerialised information act as the sovereign actors of the immense underlying spectral power of the derivative. However, I then claim that we can encounter examples of cinema that threaten the stability of these sovereign actors and, in doing so, throw into relief their ideological function. Lastly, I briefly explore Benjamin's notion of a mythic violence and law. This conception of violence and the law will help in our understanding of how cinema's affective narratives of violence best detect and transmit the law-like logic of the derivative. I use Benjamin's theological framework to further explore Schmitt's assertion that all modern political concepts are ultimately secularised theological concepts. I extend Schmitt's maxim, however, and suggest that politics is now done by a forceful informatics that takes on the qualities of theological conceptions of the law.

This section serves to introduce chapter four's exploration of how video and contemporary art become functions of probability. I claim that this phenomenon mirrors the logic and underlying control of derivatives, which is otherwise obscured by the acceleration and expansion of those cultural fields. I suggest that this obfuscation of control is a result of digital information's capacity for modulation, or the potential to move at increasing speeds between pre-determined outcomes. For now, let us return to violence.

3.1 Violence as Form – *The Conformist* (1970)

Donald Cammell referred to *Performance* as a “[...] a poetic treatise on violence” (Buck, 2012, 102), but a concurrent production, *The Conformist* (Bertolucci, 1970) similarly speculates with violence. Violence is explicitly explored in *The Conformist* in a manner that exposes an underlying and problematic ‘decisionism’ (Schmitt) in the culture of the early ‘70s. The film literalises a founding violence that sits at the base of ‘decisionism’ or ‘state of exception’ (Schmitt) that derivatives create. In doing so, the film detects and speculates with an emerging sovereign power in ways that are both different from *Performance*, and usefully clumsy. At this juncture, we need briefly to revisit definitions of sovereign power.

If sovereignty or political sovereignty, in the Hobbesian sense, is a question of who or what holds ultimate power, it is also a metaphysical question. For a power, in this sense, to be final, it must remain only partially visible. We mustn't know or understand its physical limitations if we are to believe in it as having unlimited, almost unimaginable capacities for violence that can be used to restore order and avert war as the logical endpoint of politics. The institution or person that holds power must, therefore, avoid displaying the finite qualities of that power if it, or they, are to maintain the transcendence that gives a limitless aura of power. The gestures, rituals and speech acts of sovereign actors must also serve only as a partial reminder of the unimaginable scale of a power that remains unseen.

For the layperson, derivatives are hard to represent and give shape to. An internet search for visualisations of derivative trading yields few satisfactory results and, yet, their power and influence, in terms of how their logic gives rise to certain social formations, spaces and polity, is unimaginable: their partial visibility, complexity and the sublime sense of scale attached to the flows of information they require, and the value of trades they represent, renders them beyond cognition. Yet, their effects graze our skin, our biology, form the spaces we rest in and move through, enact forms of extra government without being asked or acknowledged as doing so – but we find ourselves unable to address this power or locate boundaries so that we might turn to face it. This set of qualities lends the derivative a metaphysics of power that renders it as a contemporary Leviathan, an unimaginably massive power. *The Conformist* speculates and plays with registers and forms of sovereign power, using a cinema saturated in the qualities of illusionistic space and that fly in the face of a political cinema of the immediate preceding years. Instead, the film appears to divine a more spectral power whilst telling (through highly affective cinematic means) a story of overt and explicit power. How to represent and do power that has a founding quality is a question that weaves its way through the overt narrative and also more implicit, affective qualities of the film.

The Conformist, based on Alberto Moravia's novel of the same name, can be read as an existential account of fascism's fantasy of embodying the 'decision' (Schmitt). But, also, how the 'decision' is understood by fascism as having inscribed into it a literal violence that can't help but re-enact a law's founding violence. The film mirrors Schmitt's question of what or who makes the decision but is unable (just as Schmitt was) to escape the formal stranglehold of political romanticism. This stranglehold results in the 'decision' becoming embodied by the occasionalist subject exacting a literal violence, seeking to connect with founding laws' violence. The film's protagonist Clerici perfectly illustrates Schmitt's maxim that, under the conditions of political romanticism, a "[...] complex of powerful political energies is not able to find its objective and strikes an occasional point with great force" (Schmitt, (1919), 1991, 147). But this description of occasionalist violence could as easily describe an informatic entity as it could a living substance. The cinematic body of Clerici operates, for this text, in two ways. Firstly, as a sovereign actor whose actions, gestures and rituals serve as a partial reminder of an emerging, unimaginable, informatic power that remains unseen. Secondly, as cinematic body that shows the limitations of its power and cannot help but re-enact a founding violence. This generative contradiction will be explored later in this section.

The Conformist is set in pre-war Rome and Paris and follows the attempts of Clerici (Jean-Louis Trintignant), a weak-willed son of the bourgeoisie, to join the Italian fascists, restore order and overcome a childhood sexual trauma and family alienation – a family that includes a morphine-addicted mother and an incarcerated, mentally ill father, who may himself have committed atrocities on behalf of the fascists. Clerici suffers from the illusion that, as a child, he murdered a chauffeur who tried to seduce him using a gun employed as part of that game of seduction.

A condition of his acceptance into the fascist elite is that he assassinates his communist former professor, currently living as a political exile in Paris. Clerici travels to Paris on honeymoon with his new, apolitical bourgeois wife and meets the exiled professor under the pretence of reconnecting with his mentor. In the

process, Clerici falls in love with the lecturer's wife who, in turn, seduces the fiancée. Having secured the trust of his old teacher, Clerici sets up the circumstances for his assassination but, at the last moment, is unable to carry out the act himself. The fascist agents shadowing the operation are forced to complete the mission, stabbing to death both the professor and his wife at a remote forest location while Clerici watches, immobilised in his car. The film ends with Clerici and his blind fascist friend wandering a decimated Rome and the Coliseum in the last days of the war. In the film's denouement, Clerici comes across the man that he thought he had killed as a boy. He proceeds to denounce the man and his blind friend as fascists to a mob, which then carries both men away.

The Conformist (1970), like *Performance* (1970), conveys a strongly decadent sensibility at odds with a political cinema of the prevailing years, and Vittorio Storaro's (*Apocalypse Now*, 1900, *Last Tango in Paris*) lush cinematography transitions between a palette of gold, red and blue with the assassination scenes descending into negative. The film privileges dialogue as much as it employs visual strategies to affectively engage with Clerici's embodying of the question of violence and the decision. Bertolucci was a protégé of a Godard but he uses the film to signal a departure from his mentor; in one instance, using Godard's actual Paris address as the address of the Italian communist professor that will be assassinated. This 1970 film deserts the overt programmatic politics and the more securely anchored emancipatory subjects of Godard's cinema, opting, instead, for a cinema that saturates us in rich visuals in a knowing reference to cinema of a previous period and of the period that it recreates. Like Italian director Pier Paolo Pasolini's *Salò, or the 120 Days of Sodom* (1976), the film visually references Italian fascist era cinema, otherwise known as *Telefoni Bianchi* (White Telephone Cinema), with its rigid social hierarchies, art deco sets and the presence of a large white telephone. An object unaffordable for the film's audiences and which represented bourgeois wealth and status. It, therefore, thinks overtly but affectively about how cinema thinks. It does this, however, in a confused but productively untheorised fashion.

3.2 The Imagined Relationship To Dematerialised Information

The Conformist (1970) places its methodology in plain view and, whilst the film's narrative is concerned with the embodying of the decision, this is presented to us as a technological and cinematic brilliance. Cinema arrives with us as refraction of ideology but the film also seeks to explore the ideology of fascism. Within *The Conformist*, violence becomes the medium for both the film's protagonist and the viewer to explore their romantic occasionalism, and to recreate images of what the 'decision' and power might look and feel like. A literal violence comes to be seen as the only possible medium of the decision and of self-determination, as the narrative of the film travels towards a climactic murder. Simultaneously, however, we experience this narrative as knowingly cinematic. Its technological brilliance is foregrounded and we start to see the film as a documentary of its technological make up.

Power is pictured in two ways by the film. On the one hand, the figure of Clerici presents himself as the Prince whose acts will become law, by dint of it being he who will commit those acts. Meanwhile, the sublime technology of the film's craft and certain scenes point to power already existing within and constituted by matrices of technology. One such scene allegorizes this entanglement with power-as-technology. In this scene Anna the wife of the political exile shows Clerici's wife Giulia a printer.



Fig. 23. Clerici's apolitical bourgeois wife, Giulia is urged by the exiled Professor Quadri's wife, Anna to print out anti-fascist pamphlets. Giulia engages *with* a machine of politics. *The Conformist* (Bertolucci, 1970).

Anna, as part her seduction of Giulia, invites her to vigorously turn out antifascist leaflets in their Paris apartment. The scene underlines Giulia's almost erotic engagement literally *with* a machine of politics, but with no regard for its contents. She becomes entangled in a thing, a ritual, and a practice and becomes constituted by an ideology in which she is momentarily but materially invested. This image of entanglement helps to overcome the notion of ideology as an illusion that can be demystified and becomes, instead, something in which we become materially invested. The film acts in a specular fashion showing us how we, the viewers, are using the machine of cinema, participating primarily visually but experiencing, as affect, the rituals and practices it depicts. By showing us film's affective capacities, these and similar scenes in *The Conformist* ask, how does information work, over and above what it means? My earlier exploration of information theory and informatics helps to unpack this materiality further.

In chapter one, I describe how, in Claude Shannon's (1948) theory of information, no message is sent, only a signal. According to Shannon, a message is what is encoded into a signal, which then travels through a medium. In addition, Shannon characterises information as a probability function with no dimensions,

no materiality and no necessary connection with meaning. Information is, says Shannon “[...] a pattern not a presence” (Hayles, 1999, 18). To continue to recap from chapter one: Katherine Hayles explains that, within information theory, information is identified with choices that reduce uncertainty. The key concern for electrical engineers is not individual messages but the average amounts of information coming from a single source and how to keep any inflation of the volumes of information in check. The more random and untypical a message, the more information is encoded into a signal, which then increases the overall amount of information. An untypical message is termed as a ‘surprisal’ by electrical engineers seeking to avoid volumes of information swamping the capacity of a given system. Managing information, therefore, becomes a question of probability and hedging against uncertainty. However, these material limitations of engineering information and the function of probability become obscured by an imagined relationship to information. This imagined relationship to information, in turn, becomes informatics’ ideological function. Let me explain.

The fault line in Shannon’s theory weights the portability of information over and above the local, contextualised and material theories of information, by Friedrich Kittler, for example. Shannon’s theory of information does not (nor would it in 1948) factor in an ideological materialism. An imagined relationship to information, acquired through the lens of Shannon’s theory, has the potential to view information as post-material and post-ideological. This is because information that is pictured as portable, non-material and dimensionless becomes imbued with a quality of a truth that has the imagined potential to slice through complexities, unencumbered by material impediments. This capacity results in the aspect of Shannon’s theory that thinks of information as non-material, obscuring the aspect of that theory that thinks of information as a probability function – as a function of the limits of information engineering. Like the unimaginable mass of the Leviathan, information takes on a delimited quality that affords it a transcendental power that obscures its materiality and its effects. Information is dematerialised by Shannon’s theory but it produces material effects. The phantasmagorical bodies that do a cinematic violence cleave through limits, creating a ‘state of exception’ as they do so. These bodies, in themselves,

by being explicitly violent, are in danger of showing us the physical limitations of their power and so losing any capacity for transcendence that transmits the potential for unlimited power. However, they also intimate and act as refractions and sovereign actors of a spectral underlying power.

I will return to this question of sovereign power and decisionism later in this section but, for a moment, I need to revisit the film's foregrounding of its thinking of cinema. The film seems overly concerned, even guiltily troubled, by its own immersion in the illusionistic nature of cinema and pushes into the foreground an exploration of what cinema is, as ideology.

3.3 Plato's Cave – Cinema Threatens its Sovereign Actors



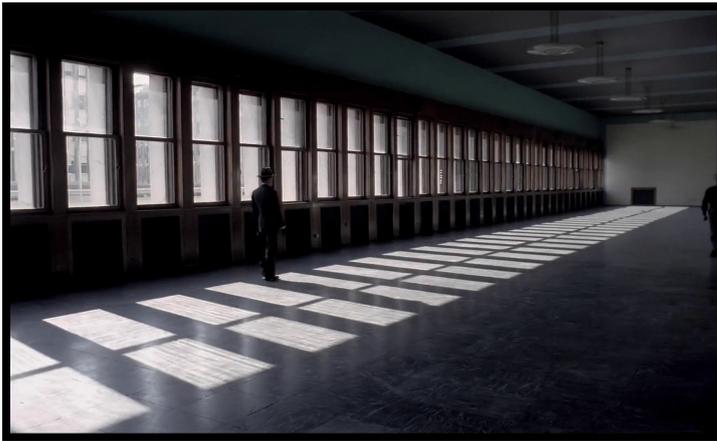




Fig. 24. *The Conformist* (Bertolucci, 1970). The architecture and proto cinema of Plato's cave is echoed throughout *The Conformist*. Questions of ideology as an illusion and ideology as material practices compete with one another throughout the film, as it foregrounds the affective mechanics of cinema.

A reoccurring and, again, clumsy motif throughout the film is the allegory of Plato's cave, which is explicitly told in a scene where Clerici meets his university mentor Quadri in his Paris apartment. The reference continues throughout the film in a series of visual plays on light, shadow and architecture that replicate the architecture and proto cinema of Plato's cave. It is worth reminding ourselves, here, of the architecture of Plato's cave. The tightly shackled prisoners of Plato's allegory are able only to see the shadows on the back of the cave wall, created by figures passing in front of a fire, and mistake those shadows for reality itself. Both the figures and the fire are positioned at the top of a slope that rakes away and upwards from the backs of the prisoners.

This architecture of Plato's meta-cinema is replicated again and again in the film, and the allegory explicitly retold by Clerici in a scene that foregrounds the film's thinking. In one such scene, Lino, Clerici's blind mentor and a broadcaster on state radio, organises a party attended by a community of blind colleagues to celebrate Clerici's forthcoming marriage. The party takes place in a half-basement room with small windows set high up in the wall on one side of the room, and through which one can see the legs of passing figures with the shadow and light populating the space along with the bodies of the blind. The scene culminates with a fight breaking out between the blind attendees in what is a heavy-handed allegory of fascism but also a commentary on cinema. The scene in

Quadri's office begins with Clerici closing the shutters of the windows to tell the allegory of Plato's cave and ends with the professor extinguishing Clerici's fascist saluting shadow by opening another shutter and flooding the spaces with light. The explicit message here being: fascism lives in its own shadow but the political Left ushers in the light that will evacuate that illusion. However, the assassination by stabbing of the professor is a reminder that, in Plato's myth, any of those prisoners that escape the cave and witness the sun will be captured and killed. Clerici is commissioned to enact revenge on a captive of fascism that would dare to leave the confines of its ideological cave.

The Conformist employs an overt story of fascism to consider what or who constitutes a final power and, to all intents and purposes, it is a story of the illusory nature of fascistic ideology. Its implicit and subtler narrative suggests that sovereign power is displaced into technological platforms in more diffused but intense ways than state ideology can imagine. A scene earlier in the film, when Clerici is given a gun by a fascist agent to conduct the murder, shows Clerici's fumbling mastery of the weapon. It appears to be in control of him and he finishes the scene with a mock suicide, pointing the gun at his own head before walking out of the frame. The gun would appear to stand in for the apparatus of cinema. The scene suggests that, whilst the film presents a body as the embodiment of sovereign power, ultimately, it is the technological apparatus of the film that reigns and can put to death its sovereign actors.

This last point sketches out what may be the critical opportunity that the film offers. Certain cinematic bodies persist, as I describe in chapter one and in chapter two, as both figure and ground. They exist as a persistent and powerful ideology – that of the liberal human subject. *The Conformist* speculates with this figure but also undermines it and suggests suiciding it. In doing so, it identifies this figure as a conceptual limit that must be breached. Whilst the protagonist views a literal violence as a medium for creating a 'state of exception', the film suggests an even greater violence. One that would evacuate the very ground of that concept. The following chapter gives an example of contemporary video that attempts this evisceration of the liberal human subject but, before we leave

behind *The Conformist* entirely, we need briefly to explore another definition of violence that the film effects; that which Benjamin called a mythic violence and law. It is this mythic violence that will help provide an understanding as to why cinematic narratives of violence become an expression of affective information, and why this information possesses the qualities of law. As mentioned in the beginning of this chapter, I use Benjamin's theological framework to further explore Schmitt's assertion that all modern political concepts are ultimately secularised theological concepts. I extend Schmitt's maxim, however, and suggest that politics is now done by a forceful informatics that takes on the qualities of theological conceptions of the law.

3.4 Mythical Violence

The Conformist speculates with the question of how conceptions of justice and the law are in danger of collapsing together whenever the law is interpreted and performed. Clerici, in an untheorised fashion, understands that, to have authority and legitimacy, he must commit an act that speaks of justice that has the quality of new-testament acts or founding laws. In Clerici's intentions and actions, we can begin to see and feel that conceptions of justice haunt the law as an historical and pre-political act that installed the political. These haunting historical acts of founding law and justice invite the potential for what Benjamin calls, in *Critique of Violence* (1921), a mythic violence, which is inscribed in the law and in danger of being literally re-enacted whenever it's interpreted. It is this mythic violence that haunts Benjamin's work, having previously haunted Schmitt's work on sovereignty. What exactly does Benjamin mean by a mythic violence and what are the images that these ideas stem from? Why does cinematic violence both detect and transmit a forceful logic of the derivative that feels like law?

For Benjamin, man-made law is instantiated after the fall of man and his expulsion from paradise. These laws must be thought of as different from the divine law of God but, because of man's hubris, this form of law attempts to have all the qualities of God's law and possesses the truth that only God has access to. Benjamin attempts, in *Critique of Violence*, to make a distinction between the law,

as we imagine it, and what it actually is. What we imagine the law to be is classed by him as mythic, in that it is something we project onto God but is entirely man-made. What *it actually is* remains something that can only exist in God's mind. We cannot know what God thinks and so it is idolatry to believe that we can. We give our laws all the qualities of truth that are not ours to give (only God's) and, therefore, our laws are mythic and idolatrous.

Benjamin offers an archetypal example of mythic violence and law in the Greek myth of Niobe and her eternal punishment. In the myth, Niobe (a mortal) is punished for challenging the gods' authority and legitimacy. Niobe brags of having fourteen children, whilst Leto, the mother of Apollo and Artemis, has only two children. In revenge for Niobe's hubris, Apollo and Artemis kill all of Niobe's children. Executing the boys and girls slowly, alternating between girl and boy. Niobe is then transformed into a weeping rock condemned for eternity to mourn the loss of her children. Benjamin emphasises that Apollo and Artemis are not only punishing Niobe, but establishing a new law. The crying-stone that Niobe becomes is a physical manifestation of the law, and a boundary stone on the frontier between gods and men that provides evidence of their power. The tale of Niobe is evidence, for Benjamin, that laws created by men mimic those of the gods and, so, have at their base a violence that is unavoidably re-enacted whenever the law is interpreted. Niobe's fate is to suffer this violence for eternity, having had the hubris to challenge the gods' legitimate power. Her body acts as evidence of a metaphysical power.

Benjamin suggests this form of violence and law never settles matters for good and, in fact, it simply perpetuates itself. 'Power', says Benjamin, is the principle of mythic law making (Benjamin, 1995, 248) and this kind of law is only ever manifested as force or violence (the German word *Gewalt*, used by Benjamin, applies to both terms: force and violence), and has no other purpose than to perpetuate itself. Benjamin puts it yet another way: "[the] law's concern with justice is only apparent, whereas in truth the law is concerned with self-preservation" (Benjamin, 1995, 232). If one follows this logic, it is possible to understand Benjamin's view that this form of law cares little for human life.

Mythic law, suggests Benjamin, is inextricably linked to the moment of a judgement that marks the fall of man, as it is the moment in which language, as Benjamin puts it, descends into a permanent prattle – which is a characteristic of myth. Here, Benjamin seems to be suggesting a form of law that combines qualities of myth with allegory. It is a genre of law and violence that is entirely man-made and, therefore, exists in an: “[...] ambivalent limbo, always vulnerable to change and exposure” or, what he calls, a “[...] mythic ambiguity of law” (Benjamin, 1995, 248). Mythic law, as he suggests, attempts to disguise its vulnerability by having all the qualities of fate and destiny that would have us believe that it is one of God’s laws. This law, says Benjamin, is attempting to grasp at a truth it does not and cannot possess. That is for God to give and to which we might never have access. The mutability of mythic law stands in stark contrast to the finality of, what Benjamin calls, a divine or mystical violence that he illustrates with a Hebraic counter-myth. This messianic violence has the capacity to extinguish conceptions of the law, altogether. Benjamin’s complex and problematic counter-myth requires more unpacking than is useful here, but the notion of mythic violence and its hubris provides a sense of why information that has the forceful characteristics of the law expresses that force as violence. Remember that Benjamin uses the term *Gewalt* for both violence and force, making them interchangeable. On the other hand, however, this conception of mythic law allows us to understand the vulnerability of a power that needs to keep demonstrating its force through sovereign actors and narratives of violence. This form of power is unsure of its legitimacy and needs to keep asserting itself, in order to reinstall its power as a quasi-metaphysical authority. We can witness cinema beginning to think this paradoxical force and vulnerability in *The Conformist*.

Narratives of violence, highly accelerated average shot lengths (ASL), and discontinuous styles of editing in cinema from the late ‘60s onwards augmented an experience of media as forceful. *The Conformist* indulges this trend in its affective style of filmmaking, but also begins to think and speculate with a mythical violence, having asked its audience to cinematically enjoy the potential for violence that Clerici offers. It shows its protagonist to be tussling with the

question of mythic violence, whilst allowing us to feel, through the film's landmark art direction (Ferdinando Scarfiotti), the texture, grain and glamour of Clerici's hubris and desire to be in flows of power. *Performance* thinks of a mythic law through the body, attitudes and violent acts of the gangster Chas and rock star Turner's subsequent fascination with this violence. The violent temporality, cuts and splices of *Performance* echo and amplify the breaking of objects and bodies to create a sense of both force and violence. Force and violence become synonymous with one another, as these films sense and think an emerging logic of the derivative, not only as an informatic phenomenon, but also as legalistic.

The derivative is, like the law, a form of contract. And, like the law, it is a contract that demands interpretation and reinterpretation. As discussed in chapter two with regard to Barry Lyndon's conversion into a contract within a schema of debt and Shaviro's citing of the role of contracts in contemporary action cinema, derivatives are contracts that have all the force of law but are in a constant state of interpretation and reinterpretation, investment and divestment. They exist, as Benjamin says, in an "[...] ambivalent limbo, always vulnerable to change and exposure" or, what he calls, a "[...] mythic ambiguity of law" (Benjamin, 1995, 248). These contracts are never final but are experienced and felt as such. The derivative amalgamates the dynamics of the law with the money form in ways that invoke the forceful qualities of mythic law. It is understandable, therefore, that cinema, which detects and transmits the forceful logic of the derivative, assumes affective narratives of violence. Using Benjamin's terms once again: the derivative, as a mutable contract, descends into a permanent prattle of traded information – which is a characteristic of myth. It is something born from man's words alone, and not of the world as it is. However, it is a contract that feels final in the moment of pricing because probability allows it to convincingly create the present. It makes a claim on the truth that is not its to give, but makes that claim decisively. The derivative contract's mutability requires that it keep reaffirming its shaky claims on the truth and do so forcefully, in order to maintain its quasi metaphysical authority.

Performance, *Barry Lyndon* and *The Conformist* point to their bodies as potential proxies of sovereign power. However, they then frame those bodies' claims on power, force and the truth as hubristic, frail and vulnerable. These bodies act, then, as markers of an underlying contradiction that some etymology may help to productively unpack. Horos, the ancient Greek word for a boundary marker or stone (something that points to a limit and horizon), suggests a root to the word horror (Small, 1995). Horror's Latin origins (*horrere*) suggest a trembling or shuddering. The fraying cinematic bodies of *Performance* and *Barry Lyndon* can be seen as akin to these unstable boundary markers. These figures think the force and hubris of a spectral, legalistic and informatic power, but also display the fragility of those claims for legitimacy. Figures of Horos arise, once again, in the following chapter but in more recent examples of culture that think the limits of cultural production, bounded by probability and its spectral, but forceful, authority.

Chapter Four: Accelerating to a Standstill – Probability’s Reign

The acceleration and intensification of cinema and video as they transmit the logic of derivatives. The function of probability in both accelerating and bracketing cinema. The temporal impasse this bracketed speed installs. Grace Jones’s hyperspatial, stuttering, bundling and unbundling body. Exiting Life for the sake of the living. How the logic of the derivative is enacted by contemporary art, architecture and infrastructure space and becomes romantic productivity. How art becomes informatics. The derivative and its embedded narratives of mastery. Evacuating life for the sake of the living. Detecting emergent structures and distributed forms of cognition.

Chapter Four mirrors and explicates the method that the artworks are performing which is of intensifying the derivatives logic. The chapter suggests that one way of overcoming the bracketed (Shaviro) but highly kinetic production of contemporary art is to take its torsioning of space, time and bodies to a level where its ideological excesses break apart, become chaotic and our relationship with information is recalibrated. This thinking and approach was beginning to be developed in commissions completed for the Harlow project *Let Us Pray...* including a temporary pavilion the design and decoration of which violently collapsed together images of key buildings in the town as a means of intensifying and torsioning its built ideology. This approach has really taken hold in the work *DEAD STOCK* and the projects being developed that use the examples of cinema cited in this text as raw material for new works that seek an ideological breaking point in the perceived but controlled intensity of that material. The chapter’s examination of what it calls art’s romantic productivity fleshes out the conditions of art production according to the peculiar, binding but non-binding contractual logic of the derivative and then asks what can be recuperated from this paradox. In other words what kind of political agency can be derived from this logic which is not already captured by capital and then finds that agency in the material workings of information engineering. I stated earlier in this text that I understood the sculptures of Harlow to act as a form of

concretised contract that had atrophied along with the form of statecraft it served. This chapter attempts to understand the nature of a new less visible statecraft and contract that is inscribed into the space between contemporary arts objects, the romantic subjectivity of its audience and the economic extrastatecraft that they serve.

4.1 Intensification – Exiting Life for the Sake of the Living

Chapter one considers the intensifying of cinema as exemplified by *Performance* (1970). Statistical evidence of this is provided by American film theorist and historian David Bordwell in his paper *Intensified Continuity* (2002), which focuses on the speeding up of editing rates in mainstream cinema from the late '60s onwards. Bordwell conducts a form of film criticism termed *cognitive criticism* or *neoformalism*. This approach focuses on the cognitive processes of the filmgoer, separate from a textual analysis of film. According to Bordwell, the Average Shot Lengths (ASL) of film departed from a rate of 8-11 seconds in the 1930s to a rate of 5-8 seconds by the late '60s. This intensified over the following forty years to the extent that we can now expect current rates of ASL to be 1.5 seconds. A process enabled by digital video editing where ever smaller parts can be shaved off a shot. Which begs the question: when will this trend of intensification, in Bordwell's words, "hit a wall" (2002, 17); when will cinema become unwatchable? This has led to what Bordwell suggests is a post-continuity and post-causal condition for filmmakers and for viewers. These developments, as I will explain further, signal a temporal impasse experienced as acceleration.

Video as a medium has aligned with the intensified nature of the financial markets, so that both finance capital and video become what Shaviro names as modulated systems. They are both bracketed by the underlying fixity of probability whilst saturating us with their speed and seeming liquidity. As I explain in previous chapters, the growth and intensification of derivatives-trading since the period of the early '70s has, in the main, been enabled by

probability based tools, such as the Black Scholes Merton model (BSM) and its digitisation that has, in turn, led to high frequency trading, for example. Meanwhile, digital film production has become the product of 'modulation' (Shaviro, 2010, 15) in that infinite variations are perceived in video but remain tethered to an underlying system of control.

To elaborate: the video signal is expressed as binary code, formed by means of algorithmic procedures or commands, with all its outcomes predetermined by that code, its software and the laws and regulations that determine it as that particular piece of software, and not another. In turn, the sheer capital outlay for the development of that software and the anticipation of a financial return by its developers ensures that the actual underlying means of production are quarantined from the user with only limited means of 'glitching' the code and its outcomes. This leads to a bracketed series of outcomes, unable to move outside of these parameters but which saturate us with a sense of a frictionless movement and unlimited choice. All outcomes become predetermined outcomes, but deliriously so. The video signal carries greater extremes of information than the analogue signal, adding to the sublime sense of a deluge, but one that masks an underlying disposition for control.

The modulated limitations of digital video differ radically from those of analogue video and film, for example. In the analogue, there are an infinite number of colours that can be painted or sounds and tones produced and heard, but in the digital these are finite and preset in ways that are markedly different from analogue audio, for example. The controls are set in advance of use. For example, an analogue sound wave represented on a graph, with the horizontal axis being time and the vertical being voltage, would be represented as smooth and continuous. The signal might be pegged to minimum and maximum values but there can be an infinite number of variables within that range. 50 volts can become 50.4 and then 50.42 and then 50.424, for example, with these in-between values becoming increasingly infinite and precise values.

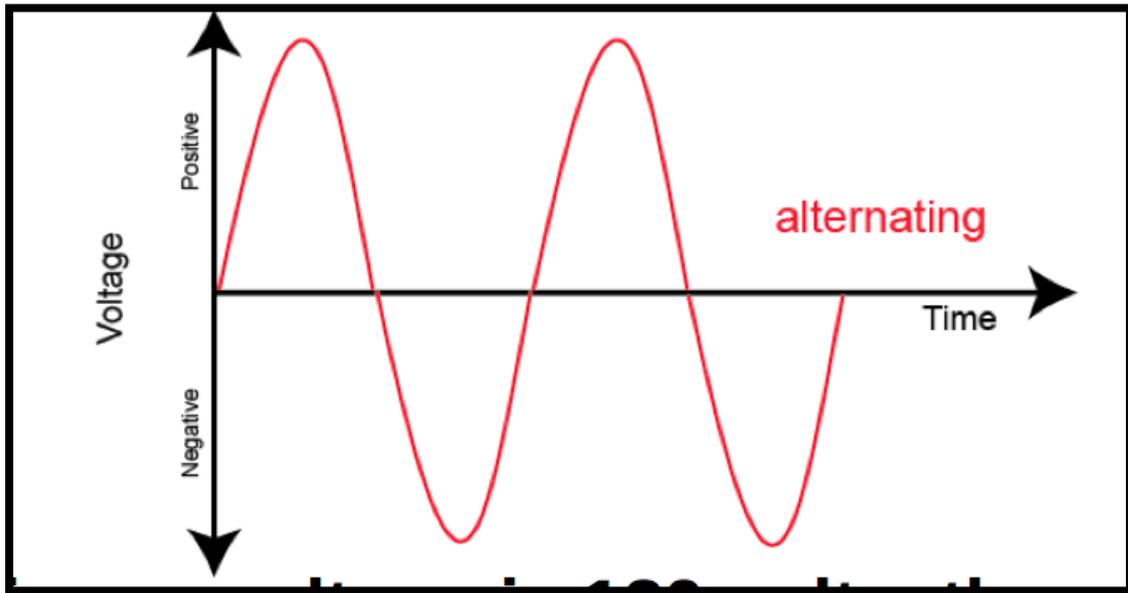


Fig 25. Analogue Sound Wave

In contrast, a digital signal must have a finite set of potential values. These values can be between the number two and a very large number, but not infinity (∞). A digital signal will typically be one of two values: either 0 volts or 5 volts, for example. A graph with a time axis illustrating this kind of signal will appear as a series of blocks.

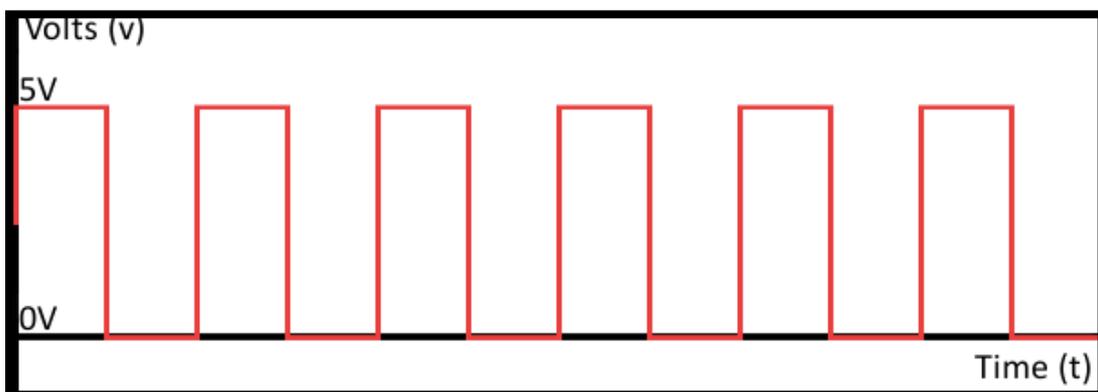


Fig 26. Digital signal expressed as preset values. 0-5 volts.

When an attempt is made to represent a digital signal in a waveform, an appearance is given of a smooth and continuous wave, but closer inspection

reveals small discrete steps in the wave, as the digital signal tries to approximate values.

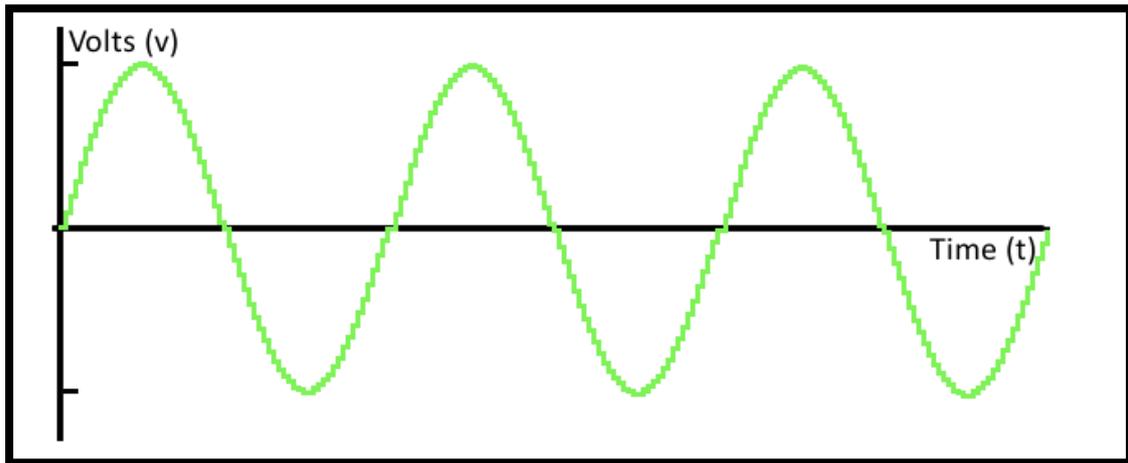


Fig 27. Digital signal presented as a sound wave.

This material peculiarity of the digital signal is augmented by proprietary software. A commonly experienced example would be the filters on Adobe Photoshop that give a seemingly infinite range of effects but little room to find variance in between those preset options. This logic is further exacerbated by filters for both Adobe Photoshop and After Effects, for example, aping the look of analogue cinema and, in the process, denying digital video an aesthetic that gives full representation to its own dynamics.

The logic of the digital video signal with its discontinuous blocks or shocks of signal appears to percolate up into digital post-production, where the viewer is assailed by discontinuous images that no longer sustain analogue cinema's habits of duration. Like the films of Michael Bay (*Transformers*, 2007- onwards) who purportedly takes the view that: "any two shots spliced together will work" these films install the sensation that effect precedes notions of cause (Shaviro, 2010, 80). This discontinuity happens with digital video in ways more dramatic than analogue film's attempts at overcoming its own grammar, in part, because of the sheer throughput of information that a digital signal allows. Added to this is the effect of the signal's potential to be converted from sound to image and

then back to sound again, so that all values become convertible values but do not have to sit within a chain of cause and effect.

What results, in multiplex cinema and increasingly in television and online/on-demand productions, is a swirling, disorientating sense of power, movement and action, experienced as bursts of bundled effects that are emphatic, unquestioning and unreflective. We experience these as moments of decision that feel final in the moment of viewing, but are superseded by the finality of the consequent block of signal. Suspended from a sense of continuity, each of these condensations feels delimited, empowering and unconstrained. The resulting sense of delimited power is in contrast to the underlying control of the video signal. As a consequence, what video does and what the derivative does are markedly different from what they purport to do, and what we experience as them doing.

Probability installs an imagined relationship to information and data that perpetuates a narrative of freedom and self-determination, whilst sustaining an underlying and obfuscated control. This double action is probability's ideological potential. Armen Avanesian, in his paper *Today is Tomorrow*, declares that, in the age of the derivative, we are “[...] left bereft of a future or of a present” (Avanesian 2015, 2). By this, Avanesian means that all potential possibilities have already happened in the digital and financial regime, according to the very system of probability that these economies rest on. Avanesian is describing a temporal impasse, perceived as an acceleration. Whether it is the carefully modelled, out-in-space catastrophe of the film *Gravity* (Cuarón, 2013) or the high-frequency, algorithmic derivative trade, each arena has exponentially expanded and speeded up to a standstill. Steven Shaviro describes in more detail the modulatory effects of probability on video:

“[...]there is no proliferation of meanings, but rather a capture of all meanings. Every event is translated into the same binary code and placed within the same algorithmic grid of variations, the same phase space” (Shaviro, 2010, 13).



Fig 28. Grace Jones aligns with the forces of capital and risks evacuating the human. *Corporate Cannibal*, still from music video (Jones, Hooker, 2008).

Shaviro is optimistic that there exist examples of video that can short-circuit this impasse; but this entails evacuating the human. Shaviro alights on director Nick Hooker's video *Corporate Cannibal* (2008) for the singer Grace Jones, as an example of video that accelerates an otherwise modulated media towards a productive 'torsion' of video's relational spaces. His claim is that this spatial temporal 'torsion' is produced by delivering Jones's subjectivity to the actuality of digital image production and away from a human-centred ontology. The video appears to turn Jones's body into a viscous, abstract liquid, moving over the screen like mercury with only the occasional punctuation of an eye, mouth or teeth to give the identity of the singer away. In time, with the bass of the soundtrack, the pool of matter shivers and slides, threatening to become corporeal before dispersing, once again, to the chorus of a sustained rim shot. In Shaviro's words:

"She [Jones] embodies, and transmits, flows of affect that are so intense, and so impersonal and inhuman, that they cannot be contained within traditional forms of subjectivity" (2010, 20).

Shaviro's assertion is that Jones is able to identify so absolutely with digital image production that she becomes an iteration that affirms video's capacity to produce a space internal to its own processes, as opposed to being tied to any indexical referents, including that of the human. If, unlike classical cinema, video is about the composition of forces, as opposed to the duration of bodies and images, then *Corporate Cannibal* detaches Jones the image from Jones the person completely.²³

Shaviro underscores that 'affect' is something that escapes critique because of its ungraspable nature but that this might be the very reason to engage, perform and manufacture 'affect'. The 'allure' of video is something always present, material but, at the same time, beyond us – a non-conceptual and non-cognitive event. The pop star, Jones, in this instance, simply acts as some form of temporary anchoring point or eddying concentration of intensity and 'interaction' (2010, 10) – a characteristic of pop, which is also an aspiration towards stillness and solidity whilst remaining fluid and mobile. This generative contradiction exposes the desire by Jones to assume an object form, but only as an evocation of underlying forces and as a temporary pooling of intensities. Jones's video body becomes a marker of an underlying disposition and organisation of power. I will unpack the terms 'marker' and disposition' with regard to Keller Easterling's work on infrastructure space further on in this chapter.

For Shaviro, *Corporate Cannibal* (2008) so identifies with the workings of capital that it reclaims and gives new life to its reifications. He suggests that this process leads to an implosion of these forces: "[...] some kind of stuttering ... some sort of hyperspatial torsion and distortion" (2010, 24). According to Shaviro, Jones and director Nick Hooker make the decision to turn towards the "[...] malaise of the digital" in order to give us a stronger dose of the same so that, whilst they map that malaise, it arrives with us as an affective topography. Within this terrain, there exist materials, perhaps less saturated by capital than we think, but that are captured and weaponised by it.

Shaviro claims that Jones's 'hyperbolic' video figure is manufacturing its form in real time, despite it being pre-recorded. The spaces of video become what David Harvey terms as the relational spaces of capital that vary from moment to moment in response to the forces of negotiation and renegotiation, investment and divestment. A process of extended deferral like that of the derivative. Relational space continually alters "[...] its curvature and its dimensions; it does not persist as a stable, enduring container for objects that would be situated

solidly within it” (Shaviro, 2010, 16). The video body arrives, instead, as a condensation of temporal and spatial abstractions that are akin to the bending of time and space by the derivative. *Corporate Cannibal* manages to become (in video terms) a baroque body which, rather than ascending and bursting into flames, pools, collects and disperses as an expression of the derivative’s spectacular deluge. In the eddying mercurial plane of Jones’s liquified body we can detect the dispositions of an underlying power and control.

Shaviro claims that *Corporate Capital* is practising accelerationism as a form of aesthetic provocation. By accelerationism, I refer to the school of thought stemming from the work of philosophers Sadie Plant, Nick Land and the Cybernetic Cultures Research Unit (CCRU) (1995) and the loose association of writers, musicians and artists whose work is informed by CCRU, including Mark Fisher and, more recently, invoked in the Left-orientated *Manifesto for an Accelerationist Politics* (2013) by Nick Srnicek and Alex Williams. Within the terms of Shaviro’s reading of *Corporate Cannibal*, the video becomes an expression of the accelerationist maxim that, in order to leave capital behind, we must accelerate, travel and synthesise with its machinic and technological trajectories. Accelerationism claims that to pursue some form of hypercapitalist subjectivity that would stop resisting capital’s momentum, would also rupture the limits of capital. To do this would be faithful to Marx’s view that capital is simply a stage that we must move through. This would also entail acknowledging that certain technologies had a life before capital and are less imbricated in its logic than we think. These technologies, it’s argued, need to be liberated from the restraints of capital that always seeks to install old means of drawing down value from technological advances. To accelerate is to leave capital behind.

Accelerationism’s key characteristic is its understanding of capital as a mainly technological platform and, as a consequence, to accelerate this platform means also leaving the liberal human subject behind. This threat of breaching the bounded human and allowing the self to dissolve in a deluge of informatics is *Corporate Cannibal’s* aesthetic provocation. It is a provocation aimed at a traditional Left aesthetic that has sought to reinstall the human when faced with

the alienating forces of capital. However, rather than leaving the human behind, as it and accelerationism's provocation may suggest, *Corporate Cannibal* may, in fact, be asking us to think of a recalibration between human and non-human forms of cognition that is less anthropocentric and recognises the material reality of informatics as a distributed form of cognition.

The video body of Grace Jones operates within a vein of cinema and moving image bodies that think their underlying economics and informatics. The violently fraying and unstable bodies of Turner in *Performance* and the stilled but then violent body of Barry Lyndon in Kubrick's tale of 18th- century debt and contracts act as cinematic precedents to this digital informatic body. The mythical, violence that these bodies practise threatens to evacuate life as an ideological excess. These bodies are violently rendered liquid and unbounded, shake and shimmer becoming in the process a combination of both *Horos* the ancient Greek boundary marker and the Latin *horrere* – a shuddering, trembling entity. Jones's body dispenses with the human narratives and metalized bodies of a Michael Bay CGI juggernaut (*Transformers*) that act as the stories, which occlude the films' logic of disorientation and control. As a consequence, it lays the dynamics of these films bare so that we can detect and feel the underlying polity of the derivative and of residing within the ebb and flow of informatic space.

Before unpacking the terms 'markers', 'disposition' and 'distributed cognition' further, we need to pause and consider how the logic of derivatives functions for contemporary art and its objects. Do these seemingly analogue objects function in similar ways to the borderline objects and bodies of cinema and, as a consequence, think the ideology and informatic materiality of the derivative?

4.2 Art's Romantic Productivity

Avanessian proffers that, because contemporary art's objects are irreducible to price, this makes them the perfect object of speculation and also the ideal "[...] transmission mechanism of financialisation permeating all aspects of society"

(Avanessian, 2015,1). Put another way, art's objects can be seen as both stores of value but, at the same time, they have many more component flows than a typical commodity, and these can be unbundled exponentially over time. This process of unbundling, between the art object as a store of value and its markers of effect, becomes a to-ing and fro-ing of information that sustains volatility. This volatility is expressed through contingent aspects of the work, such as its visibility, its critical standing, its association or lack of association with other artworks and their value. In order for contemporary art to both perform and transmit the function of the derivative, its content needs to provide as little friction as possible to ensure its circulation. Without its circulation and movement, it is simply a commodity and not in this state of unbundling. This latter process mirrors the conjoining of distribution and production where circulation and the production of value become one and the same. A process that not only shortens the supply chain but almost entirely evacuates it.

This development has important ramifications for, not just contemporary art, but also other arenas of cultural production, knowledge production and governance. The ways in which the financial markets under the conditions of BSM has come to be enmeshed in and transmitted by, for example: the creative industries, video production, parametric architecture and planning, statecraft and extrastatecraft coming out of the development of infrastructure, or the measuring of 'impact' by research in Universities, has been creeping and dynamic. These apparently dynamic systems appear underpinned by two forces. The first is that which is common to creative industries and to derivatives trading, which is the demand for a departure from a Fordist routine in order to flexibly and imaginatively find ways of distinguishing oneself from other workers and competitors. A characteristic expressed in derivatives trading as volatility. The other factor is the damping down of risk by the use of probability, so that the demand to be creative and for volatility results in a bracketed creativity. This demand is, in turn, performed by actors as something we can recognise as creative and, in the case of derivatives, something we recognise as volatility. Under these circumstances, the ability to recognise what is creativity and what is volatility

usurps the breaking of any actual limits that would disrupt the ground on which these judgements are performed.

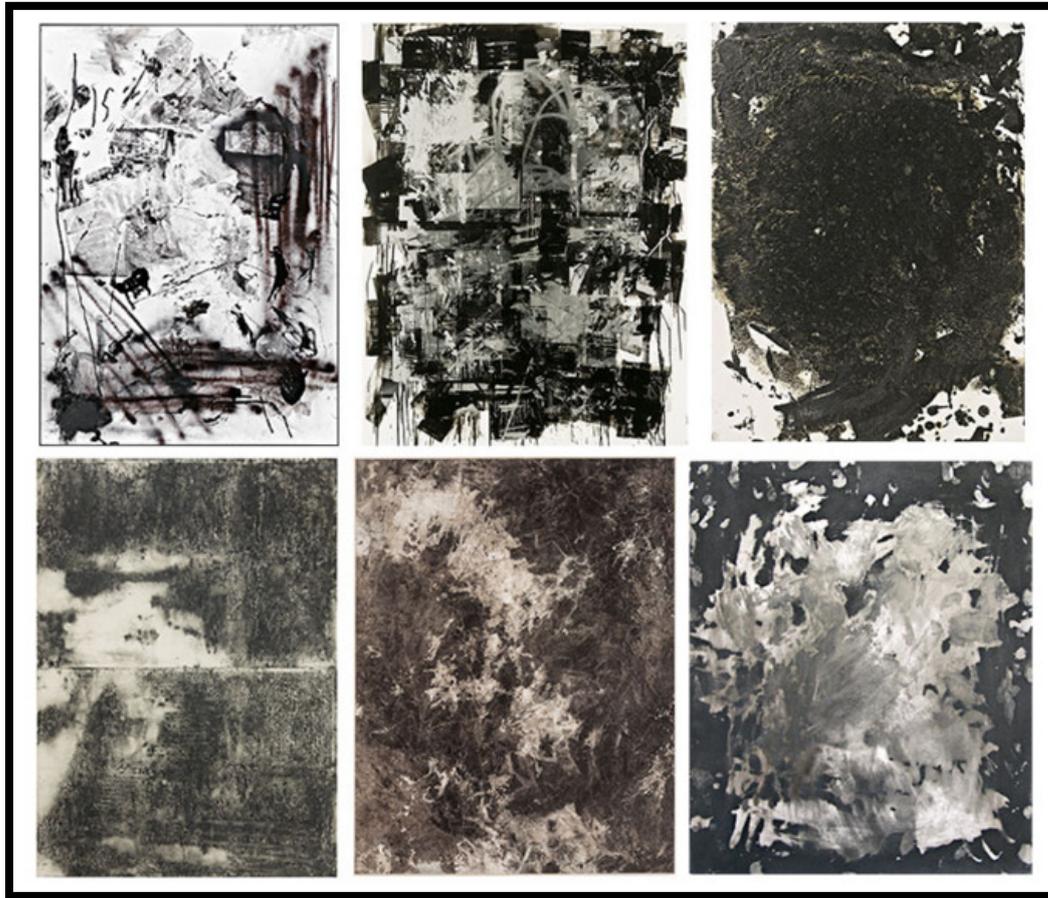


Fig. 29. Top row, from left: *All You Hear Is Beads Rattling* (2012), by Leo Gabin; *Untitled #0904* (2009), by John Bauer; *Untitled (JS06198)* (2006), by Josh Smith. Bottom row: *ST-AA (Transfer Series)* (2013), by Angel Otero; *Big Squid Ink* (2014), by Jamie Sneider; *I* (2011), by Rosy Keyser.

Art critic Jerry Saltz's rumination *Zombies on the Walls: Why Does So Much New Abstraction Look the Same?* (2014) provides anecdotal evidence of this phenomenon of contemporary art transmitting the dynamics of a derivatives market, based on probability. Saltz points to the proliferation of what's been termed 'crapstraction' as proof that the markets are risk averse and artists are complicit in doing a recycling of abstraction's greatest hits. And that they do this in order to capture an increasing bubble in a market that supplies the 1% with an investment that is interior-design friendly or acts as a backdrop to the art fairs and 'places of exception' that international capital requires.

A slide show by Saltz of this 'zombie abstraction', from the last five years shows six works by six artists that demonstrate an uncanny resemblance; washed out greys, moiré effects, references to the stretcher that say "I know I am making a painting." Saltz cites two of the main attractions of abstraction for the agents of this trend: abstraction's potential for a handsome elegance and its non-portrayal of difficult subjects; its referencing of canons of painting, including, for example, colour-field painting, minimalism and post-minimalism, that act as a store of stable value that can be abstracted. To these core characteristics are added a knowing reflexivity that demonstrates to the viewer the painter's post-modern credentials. In addition, forms of metacritique are inserted that promise 'edge quality' and a politic which, in turn, produces a unique selling point (USP) and differentiates this zombie abstraction from another zombie abstraction. For example, it is claimed the canvas employed was used by homeless people as a shelter in Colombia (Oscar Murillo). The works are commonly sold sight-unseen and therefore, suggests Saltz, lend themselves to be viewed on the artfair-iPad or buyer's iPhone, arriving to market, as they do, in a predominantly vertical format. In conclusion, the works offer little material or conceptual resistance and easily become a form of currency. Something that Saltz suggests makes 'crapstraction' the bitcoin of the artworld.

This conclusion should be taken with a measure of caution as art has, in the recent past, been considered as not-liquid-enough by auction houses wishing to make the dealing of art 'high-frequency', to the same degree as derivatives trading (Zorloni, 2013). The reasons are various but, in the main, include the need for the object to be transported between buyers, the acquisition of status associated with the purchase, meaning the retention of work by the buyer and limited access to key works by buyers. In short, the supply chain is complex and costs are incurred over the length of that chain. These factors require a social intimacy that slows trading down and apprehends the art market's automation.

These factors do not, however, impede the mixed economy and affect that arises from the showing of contemporary art. Whether that be tourism, art handling,

media and press, production houses, lifestyle associations – so that, whilst costs are incurred at many intervals in the supply chain, value can also be extracted at points along the work's journey to market and during its time with a collector, as part of experience and knowledge economies. It is this last factor or stream of value that is most liquid and points to the role of the artwork as an enabler of these potentials for extracting value: acting, as it does, to create intimacy amongst communities of interest.

Contemporary art functions, then, as the interface between production and consumption and, whilst some of its requirements for face-to-face contact resist the automation of long-tail economics, many of its behaviours are in correspondence with those technologies and anticipate similar metrics of value including attention (Pine & Gilmore, 2011), experience, and the frictionless circulation of the work's image, if not its stuff or substrate. The individual works of zombie abstraction no longer act as expressive solitary 'stones in the stream' but a product that can be rolled out internationally as one aspect of the 'spatial products' that, argues writer and urbanist Keller Easterling, constitute 'experience architectures' (Easterling, 2014).

Included in Easterling's long list of examples of these proliferating archipelagos of market determined activity are: tourist complexes, free-trade zones, theme parks, technological and industrial campuses, airports; but might easily also include the art fair or the museum. This form of club, that temporarily inhabits the city, acts as state within a state or what Easterling calls a 'place of exception'. Here, one can pay not for a thing but for the experience of being in this 'place of exception' where lifestyles can be experimented with and the artworks act as a dynamic architectural element within a series of spaces that court a 'formalised informalism' and herald the accumulation of cultural capital. According to Easterling, the client of American entertainment spaces is not meant to buy anything yet, but to pay to have access to the experience of inhabiting the space itself. This new 'spatial product' provides islands of experience that occur as internationally distributed havens between which the actors can move, safe in the knowledge that each space will provide what Agamben has called 'the

encampment' (1998) within the emerging global neoliberal market – spaces that afford positive states of exception to the elite few. Here, in 'the camp', laws and politics can be suspended, in order that the camp's international and highly mobile community can make its own rules, laws and forms of organisation within its hermetic confines that paradoxically act as forms of 'interior exteriority' (Preciado, 2014). In other words, the life that goes on there is neither public nor private but segues into what we historically called public space, through its role as a laboratory for living and organising life.

The parallel development of art-as-bitcoin and these 'places of exception' demonstrates how contemporary art's objects shift from being autonomous content towards becoming nodes within a matrix of forces and information. Contemporary art's objects begin to take on some of the characteristics of Easterling's architectures of infrastructure space. On the one hand, these objects and investment vehicles act as stories that obscure the extra law of finance, which enacts forms of soft power through the triangulating effects of international encampments of art. On the other hand, these objects also act as what Easterling terms as 'multipliers', in that the existence and presence of these works enable a multiplication of global encampments. International development companies combine signifiers of local and international architectures and employ these stylistic amalgams as skins that veil the exponential growth of replicable and fully tested 'spatial products'. Similarly, 'hot' local and international political narratives are weaved into the programmes of the art encampment, whilst 'colder', more prosaic, but far more pervasive forms of power are conducted through the proliferation of art and capital's infrastructure.

Easterling uses the example of the car and the elevator as objects that have acted as multipliers for architecture and urban space. Their existence causes, in the case of the elevator, an increase in tall buildings and, in the case of the car and increased car ownership in the USA in the 1950s, the expansion of the suburbs and particular typologies of building. Certain objects in certain relationships to one another have, then, the power to effect and put in motion processes of power,

without being the single source of that power. Their composition reinterprets space as information. Similarly, contemporary art becomes a multiplier, but also a marker of an underlying, inexpressive, highly bureaucratic and technocratic power, whilst also being a 'story' that obscures these effects. To put this in yet another way: the introduction of mass car ownership has produced houses with garages, changed the layout of rooms and altered the city and its communal spaces. Similarly, but in a less impactful way, the objects and practices of contemporary art have helped to produce specific typologies of public space and public/private institutions. As the derivative converts the qualities of commodities, people and space into information, so the logic of infrastructure space turns art's objects, spaces and institutions into: "[...] collections of objects and volumes that demonstrate a disposition" (Easterling, 2014, 72). A simple metaphor that Easterling uses to describe 'disposition' would be the image of a ball at the top of an incline. Here: "The geometry of the ball and its relative position are the simple markers of potential agency" (2014, 72). The ball, even by being static, is doing something by occupying that position. Its potential for movement in the future is having effects in the present. Its very presence is promoting an unfolding relationship between potentials and, as a result, information is coursing through and between those potentials. Objects begin, then, to act as markers of these underlying potentialities and shifting currents of information. Easterling uses the metaphor of the eddying surface of the Mississippi River to describe the function of these markers. The surfaces of the river was read by author Mark Twain, during his time as a steamboat captain, as markers of underlying dangerous currents and shifting river beds. Twain was reading information from the face of the water, the occasional ripple here, or bulge there, which, in totality, indicated the: "inherent agency" (2014,21), or the disposition of its organisation. Objects and, in the case of this text, art's objects, can begin to be read in a similar fashion, as markers of an underlying organisation of capital and culture. The shape and content of artworks becomes secondary to the ways in which they indicate the organisational patterns quietly but persistently occurring below the surface. As Easterling very importantly underlines, we need, in these circumstances, to be able to read the declared intent against the underlying disposition. In this case, between what art is saying

and what art is doing. Paradoxically, the underlying disposition is hidden in plain view but its edges are hard to detect, leaving us only with these markers of the extra law at work that, in turn, lead to the extra spaces of art.

The museum, like the art fair, becomes the club-type space which, as I've outlined earlier, is neither public nor private but comes to act as a laboratory for living and organising life (Preciado, 2014).²⁴ What used to be called the wholly public sector now survives in a mixed economy, taking on the characteristics of the encampment and laboratories for living. These spaces become the 'places-of-exception' that Easterling suggests are the engines of neoliberal statecraft. The polity of the market begins to occupy public spaces through an informal intermingling in an atmosphere of social experimentation. In turn, the museum serves to legitimise the informal practices of the encampment and communities of interest that move between them. In these now quasi-formal/quasi-informal spaces, practices that had a friction and a politics find these qualities converted into energies, which are then used to decolonise and perforate the enclosures of once sovereign institutions. These once wholly critical practices become subtle and informal mediums for breaking open the centralised architectures of sovereign cultural value.

Marginal cultures and social movements, radical film and video collectives, anti-universities and experiments in arts education, the digital commons, early examples of artists working in industry and government, identity politics, mail art, radical design collectives, the minor archive, institutional critique, minor futures, a faraway and remote location, become the occasion for artists and curators to engage in a romantic productivity that breaks open the sovereign architectures of art. The qualities of these histories are unbundled in an atmosphere of formalised informality that reconfigures the gallery, museum or institution as laboratory. This doesn't lessen the intent and seriousness of the work but its qualities are used to lever open architectures and allow for the infiltration of a more rhizomatic polity that remains largely invisible for being in plain view. Put another way, the work is captured by an apparatus that exists as a form of extra law doing its work through mainly technical and legal

instruments. The temptation to be avoided here is to think of this atomisation of the artwork and the extension of its capacities through informational prosthesis as entirely in the negative or as entirely modern. There are pre-modern examples of art that demonstrate a distributed cognition, but this derivative styled approach to informatics has seeded in it a notion of mastery, autonomous will and an illusion of control. More on this a little further down the page where I will talk more about: “[...] dynamic partnerships between humans and intelligent machines” (Hayles, 1999, 288) and information. To return to the question in hand, one such example of this phenomenon of a minor history being abstracted was the appropriation and reassessment of minor modernisms during the early 2000s which captured the work of such artists as Martin Boyce, Goshka Macuga, David Thorpe, Eva Rothschild, David Noonan, and Florian Pumhösl. Some of these works suggested the unearthing of futurities yet to be fully enacted but found these futures being mined out in order to realise a curatorial value in the present – as something to be captured as stable stores of value, cleansed of the contingencies of their time. This accorded with a political project in the UK during the ‘90s of ‘New Labour Modernism’ (Hatherley, 2011) that took on some of the architectural signifiers of post-war state building but which served to thinly disguise aggressive property speculation. These related abstractions of modernism are an expression of a temporal impasse, or what Mark Fisher calls the “[...] slow cancellation of the future,” (Fisher, 2014, 2) through a neutralisation of modernism’s chaotic dynamics and internal contradictions. This annulling of the future through an emptying out of its signs and signifiers is, of course, what accelerationism, as an aesthetic and programmatically political project, sought to overcome. Whilst its own imaging of the present and the future fell into the formal and stylistic strangleholds that I mentioned earlier, its thinking with regard to the splicing of human and informatic entities provides some scaffolding for the final part of this text. In the meantime, let us return to the question of contemporary art’s transformation into an informatic entity.

Questions of site and materiality come into play when these become affective information, in an information environment that anticipates the drawing down of value across the whole spectrum of a cultural object’s lifespan. An artwork’s

development, production, placement, critical reception and discursive value become opportunities for drawing down value at multiple points. As a consequence of this unbundling, the work is atomised across space, time and platforms and becomes a series of intensities rather than a stable form of sedimented forces. These circumstances raise the question of what it is that we confront when we encounter an artwork. In the case of the work of an artist engaged with notions of site and the archive, for example, both of those things provide an occasion to engage the romantic subjectivity of the artist, so that the site that we, the viewer, then encounter is the romantic subjectivity of the artist. It is the artist who has experienced and been emotionally grazed by the archive or the remote location and it becomes this 'subjective occasionalism' that we experience. In turn, this affective site becomes an occasion to engage our own romantic subjectivity, which we feel as material because of its affective capacities. The materiality of the work arises from a series of informational encounters that assail us from multiple platforms. In the past we might have thought of this information as ancillary and simply the stuff that orbits an art work situated at the centre of a constellation of art's practices. Instead, the spectral apparatus of contemporary art as a mainly informational network eclipses the sovereignty of the artwork and its source materials.

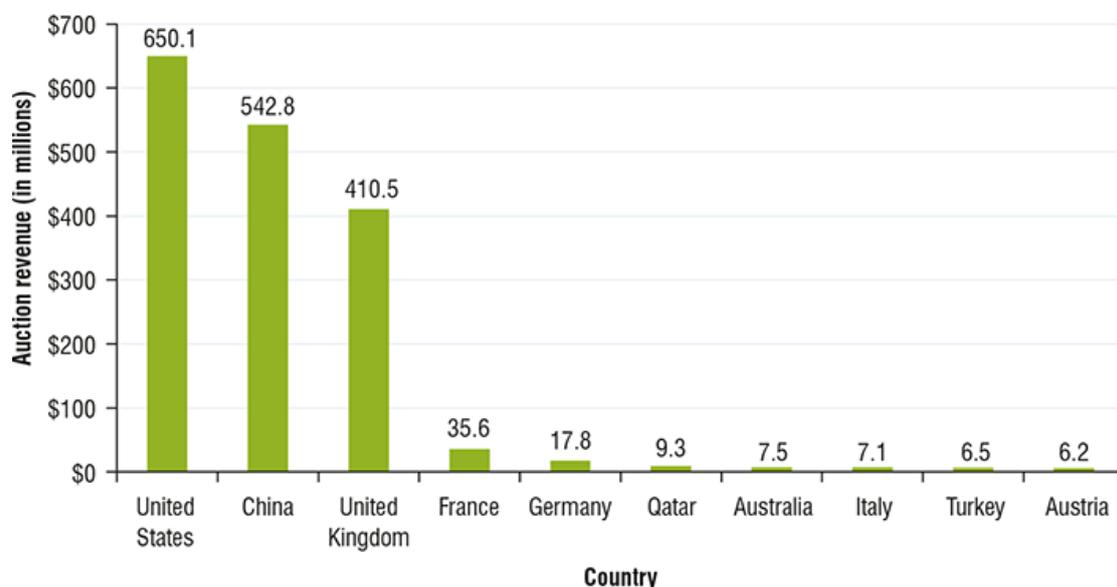


Fig. 30. Data: Top 10 Countries in Contemporary Art Auction Sales – SAGE Business Researcher. Contemporary Art Market Sales by revenue July 2014 – June 2015. Contemporary artists are defined as artists born after 1945.

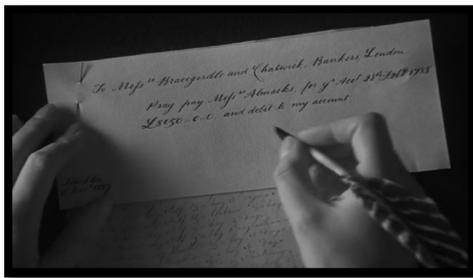
In 2014, art sales globally reached 66 billion dollars (Kazakina, 2014). This financialisation of contemporary art, as an activity that can be measured in terms of its financial outcomes, has led to the demand for public institutions' other qualities and effects to be equally measurable. As a consequence, museums and public spaces in the UK, for example, from the early '90s onwards found their value being increasingly measured by Arts Council England (ACE), against a potential for socio-economic 'impact', the provision of 'experiences' and the requirement to express these things easily. Knowledge production, under the auspices of the museum or public spaces, found itself taking on the same dynamics as probability based derivatives trading. Museums began to trade in and re-enact images of their own productivity in order to hedge against risk and keep funding in place. Risk began to be devolved down onto the museum instead of the funding body in ways that meant that institutions could be deemed more or less of a risk to the state.

This pragmatic absorption by art's institutions of the logic of the derivative has resulted in the cultural, architectural or intellectual product coming to serve as a signal of the "[...] underlying pattern, movement and inherent agency" of the derivative (Easterling, 2014, 21). In this sense, the artwork is made to behave according to the logic of the derivative and becomes a marker of the "[...] disposition of the market" (Easterling, 2014, 21), but simultaneously acts to obscure those mechanisms in much the same way that architectural facades and cladding tell obfuscating narratives. This phenomenon points to artworks increasingly acting as the substrate to an economy of information, as those vectors of information are mined. Against this background, art's informatic potential becomes intensified by these dynamics as its qualities are spooled out and displaced across networks in ever more increasing degrees.

I discuss in the section on violence how cinema could think of its bodies as a limit that, once approached as an ideological threshold, its form becomes conceptually unstable and revealed as excess – it shakes. This body, constituted by information, acts and has effects but has within it informational noise that is

random as well as patterned, formlessness as well as form. Latour writes that form is “[...] simply something that allows something else to be transported from one site to another [...] To provide a piece of information is the action of putting something into form” (Latour, 2007, 39). To mistake this form as a technology that extends the capacities of being human and of autonomous will, is to forget that results: “[...] actually come about through chaotic dynamics and emergent structures” (Hayles, 1999, 288). These structures might not be known to us but, through social interaction and activity, categories and organisation begin to appear. Therefore, to think of these forms as an extension of the liberal humanist subject is to tether that form to a narrative of the human in which: “[...] conscious agency is the essence of human identity” (Hayles, 1999, 288). Yet, this is not the post-human view but neither is the post-human view one that needs to leave the liberal human subject behind, or be understood as antihuman. Instead, the post-human view and the work of CCRU, for example, offer ways and means of rethinking the calibration between human and informatic agency. Instead of a binary separation between the human and non-human Hayles describes a constant and on-going calibration that she terms as the ‘splice’. How can a more thorough working through of the derivative’s logic illuminate both the underlying narrative of mastery contained in its use of probability, whilst exposing its more contingent and chaotic materials? But also how might we find ourselves in correspondence with these chaotic materials which were previously thought of as without agency and meaning because of their seeming lack of form.

4.3 A Contract with all the Weight of the Law



Black Scholes Option Calculator

Call
 Put
 All

strike price
stock price
time (days)
volatility (%)
risk free interest rate (%)

Call: \$5.6351
Put: \$0.0402
d1: 1.8394
d2: 1.8247

Fig. 31 Early derivative. Globular clay envelope with a cluster of accounting tokens. Sumerian clay tokens and corresponding vessel. The derivative begins as an embossed clay informatic. (Mathers, William S, 2013)

Fig. 32. *Barry Lyndon* (Kubrick, 1975). One of the many scenes in which contracts, promissory notes and cheques are ceremonially written out. Kubrick portrays the 18th century as an age of debt, contracts and deferred promises. The derivative becomes an ink and paper informatic.

Fig. 33. An online Black-Scholes calculator used to get values for both calls and puts (the right to buy and the right to sell). Users enter the required fields and the calculator does the rest. The derivative becomes a digital informatic and its substrate and materials become data and network.

In this text various claims have been made for the derivative; what it does, how it functions and what its effects are. These claims need, at this stage, to be qualified with more detail and examples but also balanced by an account of work by specialists in the field of derivatives whose own claims bump against my own. I claim, in the previous chapter, that the logic of derivatives has in it an underlying decisionism that is reflected in and transmitted by cinema, contemporary art, architecture and infrastructure space, for example. How the actual derivative performs this decisionism and how probability plays a role in this needs further explanation. The distinct differences to the commodity that the derivative confronts us with as an iteration of capital are: the ways in which it, as a contract, acts as both a currency and asset; its never-resting hyperspatial and hypertemporal effects that exceed the spatial and temporal distortions of the commodity; and, lastly, its potential for privileging informatics, so that we receive objects, relationships and space as information. As a consequence of this last point, what we previously thought of as bounded, circumscribed objects and persons (as 'stones in a stream') become things that have a disposition for changing matrices and circuits of information. This chimes with social scientist and cybernetician Gregory Bateson's analogy of a man, a tree and an axe as an information system (Bateson, 2000, 464). All parts of this diagram become constitutive of the circuit it presents, and talks of a distributed cognition that is embodied and evolutionary. Here, (and using Bateson's terminology) "thinking" is done by both human and non-human actors (Bateson, 2000, 464). In our present, we occupy information environments that exceed the complexity of the man, a tree and an axe analogy and outweigh our cognitive capacities. To insert a narrative of mastery into any account of our ability to construct and work in these environments is to ignore what Hayles refers to as a history of emergent

structures as the story of what propels human/technology interfaces towards a genuine futurity. Before considering the contingent and chaotic materials of the derivative that may represent its emergent structures, we need to look further at the processes that produce the forms and narratives of mastery that obscure these materials.

In chapter one, I outline how the probability based Black Scholes Merton (BSM) model assisted derivatives pricing and trading and how it became the only tool-in-the-box for the markets, rather than the aid for pricing it was intended to be. BSM partly enabled the explosion in derivatives trading and the appearance of a highly kinetic market, enthralled to its own dynamism but locked into a set of outcomes, dictated by past events, rewritten as potential outcomes – a function of probability. I also talk about how derivatives are seemingly final contracts but constantly in a state of bundling and unbundling the temporal and spatial components of an asset, the financial instrument itself, and the vectors of data that derivatives mine. These contracts are the hyperspatial and hypertemporal ‘blocs of affect’ that Shaviro claims Jones’s video maps and gives representation to. At this juncture, we need to unpack these claims about the derivative, using examples and a more detailed analysis of its composition. I will look at how, in particular, the pricing of derivatives is achieved through this multi-temporal process and give an example of the bundling and unbundling I describe. This will offer an understanding of what genre of contract the derivative is, and give texture to the temporal and spatial violence it does. Whether it does a mystical or mythical violence. Firstly, I feel it would be useful at this juncture to give a clear and straightforward (vanilla) example of how probability is used in derivatives trading.

The complex history of the development of probability and its application in the sciences from the seventeenth-century and then resurgence in the twentieth-century would be the focus of a more technical text than the speculative one presented here. Despite this, it is worth stating that early probability theory was motivated by attempts to solve a gambling problem (Pierre Fermat & Blaise Pascal) and remained on the edges of respectable mathematical discourses until

the twentieth-century. Work, in the interim period, on probability to do with statistical modelling and gases later informed work on Brownian Motion and stochastic processes (understanding randomness), which in itself informed work on signal processing. The earliest theoretical application of probability theory to the financial markets was in 1900 by Louis Bachelier, modelling price changes on the Paris Bourse. Subsequent work amongst Russian mathematicians became the basis of modern probability theory but Bachelier's work continued to sporadically resurface over the next 60 years before gaining considerable traction on approaches to financial modelling, subsequent to the translation of his 1900 work into English in 1964. Let us return to a prosaic example of the application of probability to the markets.

If we were attempting to value or price a stock or security, we might look at the performance of that stock over a period of time and see how it performs in various states of the economy. Our conclusions might lead us to say that the stock will pay £50 in a boom, £30 in a stable period, and £0 in a recession. We then look at the probability of these outcomes happening. We subsequently conclude that 25% of the time we see a boom, 50% of the time we see stable and regular outcomes, and 25% of the time we see a recession. Using these figures, we can express today's value of that stock as $(0.25 \times 50) + (0.5 \times 30) + (0.25 \times 0)$. The sum of those terms is £27.50 and this is our expected price or return. This simple example demonstrates the claim that previous states of the world are folded into the present, in order to build complex systems that hedge against uncertainty. This logic can be built upon and made infinitely more complex by adding more and more variables and data. At the point at which calculations are managed computationally, the capacity for input and speed of valuation becomes limited by information engineering and physical restraints such as data storage and, in the case of high frequency trading, the proximity of servers to exchanges, for example. It is, however, and by its nature, an approach that is incapable of predicting what has been termed in finance as the Black Swan event. Not only is it incapable of predicting these events but also it produces an image of the markets as a closed system in which external material contingencies recede into the distance. A Black Swan is an event that is unknowable, unpredictable and

previously unthinkable – but still material. Nassim Nicholas Taleb, a finance professor, writer and former Wall Street trader, uses the term *Black Swan* (2010) to critique systems of thought in markets too fragile to endure an unthinkable external event such as 9/11. It is also the title of his book on this subject, which is part of a series that includes *Fooled by Randomness* (2001). A book that explores how random events are misread as causal. The term Black Swan is derived from a widely used Latin term meaning the unthinkable or that which exists outside a matrix of thought and whose existence threatens that system of thought. I will return to a development on Taleb's work later in this section. Let us now return to the question of what is a derivative and what makes it different from a commodity; what gives it simultaneously such weight and such a lack of discernable form?

Derivatives or options are exactly that, the purchase of the option to buy a commodity at a later date. Some options (plain vanilla options) are designed to have straightforward payoff schedules, whilst other more exotic options are linked to more complex arrangements or 'sequenced payoff schedules', 'linkages between different assets', and so on. The volatility of the instruments in themselves, and in relation to each other, produces the tradable price for these instruments; but also, the maturation of the instrument in relation to the underlying asset is also productive of prices. "Valuation [then] is the completion, exhaustion and conclusion of the pricing process" (Malik, 2013, 764). Derivatives differ from a normal contract of sale for a commodity, for example, because of this period of maturation. Writer on financialisation and art Suhail Malik, in his essay *The Ontology of Finance* (2014), marks out this temporal characteristic as the distinguishing feature of derivatives, in that the contract of sale becomes a malleable entity because, as Malik explains, the challenge of derivatives is to set a price for an asset that will mature in the future:

"The distinctive feature of all derivative structures [...] is that they are constructed and traded on the basis of price differential. [...] At the simplest level of price derivative construction, the delivery price of the forward contract (K) anticipates the future price of the underlying asset (S_t); [...] The primary question for derivative pricing, then, is how the delivery prices K are set for derivatives, given that they can

only be anticipations of future eventualities that must be unknown at the time the price is set but which, per the doctrine of market rationality, are nonetheless supposed to determine the asset price. The answer is straightforward but wholly counter conventional. It is not that markets set the delivery/excise price but [...] that the contract constitutes the price differential between delivery and strike prices at the specified future moment in time” (Malik, 2014, 689).

This deferring produces a temporalization of the vending of the asset and confers on the contract a status and weight that it would otherwise not have. Time constitutes the contract of sale. Into this period of maturation the contract can take on a sovereignty of its own, independent of the underlying asset. The contract, or the logic of the contract, ceases to stand in for a commodity or an asset. Rather, it becomes a privileged informatic entity with material effects.

Shaviro describes a displacement of this characteristic of derivative contracts in his series of essays, *Post Cinematic Affect* (Shaviro, 2010), suggesting that contemporary cinema expresses all relationships and exchanges as malleable contracts that can be renegotiated at any time according to the shifting requirements of the films’ protagonists. As a consequence, Shaviro helps us to draw parallels between the derivative’s conversion of all things into affective information with the ways in which the digital signal can be converted, for example, from one type of output into another – such as, from image into sound and back into image again. Cinema of this kind embodies and narrates both its underlying finance and its technology and we begin to understand its bodies as markers of these dispositions.

According to mainstream action narratives of contemporary cinema, the cashing out of the contract is always deferred through acts of negotiation and renegotiation, but the contract remains binding. In chapter two, I introduce Shaviro’s use of the film *Boarding Gate* (Assayas, 2007) as an example of contemporary action thriller that makes us see and feel that, in the financialised extra spaces of global capital, everything becomes “[...] a potential medium of exchange, a mode of payment for something else” (Shaviro 2010, 46). Suitably transnational in its look, with the action taking place between Paris and Hong Kong, the film tracks the convoluted deals and counter deals between a criminal

entrepreneur, his previous associate and hitwoman, and a young couple who become her employers. Extortion, drug running, BDSM contracts, murder contracts and revenge plots run through a frenetic plot, characterised by a B-movie, hand-held camera aesthetic where reversals and counter deals become the disorientating norm. Similar dynamics occur in director Michael Mann's 1995 film *Heat*, where a complex bank heist beautifully describes the information networks and infrastructure spaces of Los Angeles as a hub within a globalised economy of container ports and electronic money. Deals and contracts are defaulted on and new ones forged in the transit spaces of what was beginning to be called a Pacific Rim City. A title that levered the city state away from the nation state. In the film, career criminals become meta-architects, able to acquire and read security schematics for banks and bonded warehouses, grabbed from the airwaves and spectral networks above Los Angeles. The final bank heist of the film sees crew boss Neil McCauley (Robert De Niro) lecture to the bank's customers that their money is insured by the government, underlining to his victims that even the heist is part of a series of contracts and that crime plays its part in that economy of contracts. Deals to fence bonds fail and contracts to provide new identities and lives abroad are altered or defaulted on. Both films reinforce the sense that all arrangements are mutable contracts. Whilst a final cashing out of a contract is always deferred, these films present regimes in which the act of deferral forces other ways and means of drawing down value in the present. This deferral becomes a crucial aspect of the derivative's make up, affording it, as a contract, the qualities of law that risks narratives of justice collapsing into that temporal gap.

Price arises from this deferral or 'interval', as Malik terms it: "[...] the 'interval itself' is the derivative qua pricing contract: the becoming-price of time or the becoming-time of price" (Malik, 2014, 691). In this way, price comes to stand in for a present by virtue of what it is not, in terms of a future or a past. Price can (according to Malik) come to be seen to matter in how its formulation constitutes our construction of a present. To reconfigure the method of this construction of a present is also to regain and engage with a futurity. The example Malik gives concentrates on the pricing mechanism for more straightforward derivatives,

but the complex instruments that do the bundling and unbundling, that is the other feature of derivatives, need illustrating. This will help to exemplify further how the derivative marks a radical shift from the commodity form and how a certain weight is conferred onto the contract, which is normally associated with the commodity or asset.

Financial journalist and son of singer Marianne Faithfull, Nick Dunbar, writes in his book *The Devil's Derivatives* (2011, 14) of derivatives that hedge and displace risk in complex ways. Dunbar describes how, in the early '90s, a clear split began to form in the cultures of finance: on the one hand, there existed the long-term world of lending banks, insurers and pension funds and, on the other, the short-term world of trading firms and hedge funds. The long-term school of thought recorded the value of its loans as the amount originally lent out. The short-termists, the investment banks and hedge funds, used what is called 'fair value' accounting to record the value of loans and bonds on its books. This latter form of recording is, typically, the market price of the loan and, as a consequence, this figure can go either up or down, depending on how the market favours or disfavors the loan. Each culture has argued that the other party's approach poses risks that their own culture can detect and head off. However, in the early '90s, both cultures came under pressure to move risk off their books. Over the horizon came a radically new financial instrument that could help these two cultures divest themselves of that risk. This instrument was the credit derivative.

A bank looking to make corporate loans or to own bonds without the associated risk could think of the risk in two parts. One part could be, for example, a loan to a government (a bond) that will be paid back on time and, because of the low level of risk associated with this kind of loan, a low rate of interest is charged to the borrower. This loan is offset by the sale of an insurance policy or indemnity, for which a risky borrower pays a premium for the high level of associated risk. However, some collateral may also be earmarked to use as payment in the event of a default on this kind of loan. Bundled together the two instruments become a risky corporate bond or loan. The risky part of that package can be shed by unbundling the two parts and giving the risky part to someone who is able and

prepared to carry that degree of exposure. It was found that people could be found in both the cultures to buy those risky loans – those that worked according to the actuarial approach (that recorded the loan as the amount originally loaned) and those that recorded the loan according to its market valuation.

The first type of group would use a centuries tested method and sell the loan to a third party, issuing a traditional letter of credit. In the '90s, a number of these arrangements were sold to fund the production of Hollywood movies, including the *Truman Show* (1998). This included the Chase Manhattan's Global entertainment group, which was able to loan some \$600 million to produce films, by persuading an executive at French insurance giant AXA to write policies against poor box office results (Dunbar, 2011, 15). In this instance, the instrument was unbundled but the two parts were informally linked at a later stage. The risk remained the same but was devolved to another party, whilst the profit potential stayed in place.

For those that preferred the market approach to valuing a loan, ways and means were made available to detach completely the risk element of a package. The credit default swap (CDS) could do just this by relieving the insurance part of the package from of its original role of acting as a hedge against a risky loan, for example. These could, then, be used to place anonymous bets on disasters like the death of a company. Dunbar likens this to buying a life insurance policy on someone else's life. A financial double indemnity. These instruments could be bought in secret and in large volumes. The term 'swaps' kept these trades off the regulatory radar and what followed was a huge growth in the market for these instruments. This turned the market approach for valuing debt into the enormous force it became and contributed to building the bonfire that came alight and caused the financial crash of 2007/2008. I've used this example to demonstrate how mutable space and time become in the service of the derivative as it bundles and unbundles its parts, suspending causal relationships as it does so, but ensuring that profits are kept online, despite what happens to the market.

This constant spooling and unspooling, design and redesign of derivative instruments entails voraciously transgressing boundaries, but also transgressing the derivatives' own transgressions. The contract becomes, to all intents, a baroque frame folding previous boundaries in on itself. What remains constant is the market and profit. As a result, what appears as a permanent state of exception practices an absolutism bounded by the application of probability. The 'state of exception' that the market performs is its ideological function and its effects are material in the ways in which it installs and replicates practices.

The derivative's disorientating transgressions are experienced by the market's actors as autonomy, as being in the world and in the market. But, as Malik has underlined, the pricing of the derivative does not take place in the market. It takes place through a deferral. This is where time and the becoming of time enter the equation and constitute the price and the formation of our present. Into this temporal gap enters probability and its persuasive narratives of mastery. Whilst the contracts and promissory notes of *Barry Lyndon* begin as actual-paper-things, the contract's logic becomes atomised and dispersed into other fields and social relations, but remains binding and present. There is no locus of ideology for this contract, no urtext. The Schmittian politically romantic contract is written, not on parchment, but on the romantic experience of the poeticised subject. In this case, and in our present, this poeticised subject experiences the poetry of finance and its sublime amplification as data.

Probability, then, performs a similar function to the cinematic body of Clerici in *The Conformist*, in that it personalises the decision. What Clerici feels and wants to experience as action is, in fact, a romantic image of action. What the derivatives trader wants to experience as action is felt as action but is supplied by probability from a list of previous events and re-enacted. Clerici and the Black Scholes Merton formula are a romantic evocation of the decision and of a delimited concept. Probability has an ideological function within the markets to provide pattern and orientation that push and devolve risk away from its key objectives. Despite probability's role in providing pattern and orientation, it may, as we will find out in the following section, stand over an abyss of chaotic matter.

The work of financial technologist, former trader and writer Elie Ayache points to the possibility that probability stands in opposition to the materiality of markets – a materiality that is not commensurate with our past experiences of the world.

4.4 Narratives of Mastery versus Chaotic Materials

In Ayache's book *Blank Swan* (2010), and in an interview carried out for this text, he claims that probability is used in derivatives trading in such a way that obscures the true materialism of the markets – a materialism that is far more contingent and chaotic than we can think. Ayache uses philosophy and, in particular, aspects of Speculative Realism (SR) including philosopher Quentin Meillassoux's work, to reframe the market as an ontology, in contrast to thinking of it in purely epistemological terms. Put another way, he argues that we cannot think of the market only in terms of a linguistic or social construction, and that probability causes us to think of it in this way. Like Suhail Malik, he agrees that the pricing of derivatives under the current regime of probability does not take place in the market. Instead, it takes place through a reversal of probability's logic and, so, converts our perception of the market into a mainly epistemological entity. Probability allows previous states of the world to constitute the price. Normally, he suggests one would think of probability as coming out of events. Instead, and as a result of the introduction of the Black Scholes Merton formula, this process is run backwards. Probability is used to produce events, prices and calculate risk. The processes used to encounter and think the materiality of the market, become the thing we mistake for the market.

Ayache infers that the reality and materiality of the market is far weirder and less anthropocentric than we can imagine. His approach to the markets, therefore, counters conventions with regard to what speculation means in each field. To reemphasise: “[financial speculation] rests on the unquestioned assumption that the future will be commensurate with the present. In contrast metaphysical [philosophical] speculation confronts not risk but irreducible uncertainty” (Shaviro, 2014, 45). A common thread, within the loose knit

association of philosophers identified with SR, is an attack on what is termed as correlationism. In brief, the Copernican Revolution that renders the human not at the centre of the universe is replaced with Kant's placing of the human thinking-that-thought at the centre of that universe – so that correlationism becomes the new cosmology. Ayache's work takes up a common thread between the SR thinkers in that it rejects the assumption of a correlation between mind and world. Before briefly describing a counter position to correlationism we need to unpack the the term itself. Meillassoux defines correlation as: “[...] the idea according to which we only ever have access to the correlation between thinking and being, and never to either term considered apart from the other” (Meillassoux, 2008, 5). Knowledge, according to the rubric of correlationism, is, therefore, restricted to appearances, as we lack the capacity to assume a third person perspective that would allow us to contrast things as they appear to us and things as they are. This latter diagram of correlationism is summed up in the following quote by Meillassoux, who begins from an image of correlationism as an object that occludes the world:

“Correlationism rests on an argument as simple as it is powerful, and which can be formulated in the following way: No X without givenness of X, and no theory about X without a positing of X. If you speak about something, you speak about something that is given to you, and posited by you. Consequently, the sentence: ‘X is’, means: ‘X is the correlate of thinking’ in a Cartesian sense. That is: X is the correlate of an affection, or a perception, or a conception, or of any subjective act. To be is to be a correlate, a term of a correlation . . . That is why it is impossible to conceive an absolute X, i.e., an X which would be essentially separate from a subject. We can't know what the reality of the object in itself is because we can't distinguish between properties which are supposed to belong to the object and properties belonging to the subjective access to the object” (Meillassoux, 2012, 409. My emphasis).

Meillassoux argues that correlationism has been the central tenet of philosophy ever since Kant. This claim arises from Kant's thesis that installs an image of objects conforming to the mind as opposed to the mind conforming to objects. As a consequence the mind is understood to be actively structuring reality, rather than simply reflecting it. Kant concludes, therefore, that we cannot really know reality, as it is separate from us. We can only really know reality as it appears to us. Our inability to detach ourselves from this correlate makes it difficult to

distinguish between what is a product of our own minds and what is a quality of something as it really is. This mind/world rubric denies us a perspective that would allow us to think of things as they are, without us. Whilst Meillassoux maintains that correlationism is embedded in philosophy since Kant, not all philosophy since Kant can be said to be Kantian. Put differently, not all philosophy is focussed on a relation between mind and being. For example, in Derrida and Lacan, philosophy would be a relation between language and being and, in Foucault, it would be a relation between power and knowledge and being. Being, however, cannot be thought of as apart from language or power in each of these claims. A point that makes correlationism a ground for philosophy post-Kant, but variegated.

Various strains of anti-correlationism are developed by thinkers loosely grouped under the SR banner who seek to unseat epistemology's historical privilege of coming before questions of ontology. Ayache's text implies an alignment with an anti-correlationist position by inferring that probability becomes, in the cosmology of the financial markets, the object of human thought that obscures the materiality of the market. For Ayache, the markets are a contingent medium of practices and things, the nature of which can change without us knowing why they change. Steven Shaviro, quoting Maynard Keynes in his *Speculative Realism – A Primer* (2014), points to a pre 1970's view of the markets that chimes with Ayache's own:

"But uncertainty cannot be quantified in probabilistic terms. We have no way of knowing which outcomes are possible let alone how many of them there are and how likely any of them is" (Keynes via Shaviro, 2014, 46)

This quote and framing of the market is, says Shaviro, largely forgotten or ignored by contemporary economists and derivatives traders. The work of Meillassoux demands, instead, a radical contingency that asks us to think of things prior to humanity before they could be thought and: "[...] have that thought installed in them" (Shaviro, 2014, 46). Meillassoux reverses Kant by suggesting that the unknowability of things is a positive characteristic of things.

This approach does not evacuate thought but asserts: “[...] that thought can think what there must be when there is no thought” (Meillassoux, 2008, 36).

Markets, according to Ayache, can only be truly material if the process of pricing takes place in the contingent space and time of the markets. This is a space and time, which, for Ayache, is not knowable.

The political economy of Ayache’s work is unclear and, to be explicit, I am not aligning this text with the aims of Speculative Realism or of Ayache’s project, but there exist productive contradictions in Ayache’s project that motion towards a politic. He talks of writing, and the writing of the book *Blank Swan*, as a form of materiality in ways that are reminiscent of Althusser’s ideological materialism – as sets of practices that are material. However, this account of writing as material is also reminiscent of information theory and a post-human view that thinks of human/technology interfaces as emergent structures. Form arrives from out of these structures through a correspondence between human and non-human actors, both of which, according to Hayles (with reference to Latour), are required to think. This conception of materiality would seem to be completely at odds with Ayache’s materiality that is relieved of a correlation between mind and world. Writing is not termed by Ayache as informatics, but the text thinks of writing as material and we can’t help but understand that as an informatic conception of information – as an embodying of information that gives it form, so that that information can travel from one place to another.

In the same breath, writing is considered by Ayache as a material constituted by unknowable forces. This claim has parallels with Claude Shannon’s theory of information that features in the first chapter. Shannon talks of a signal having within it both patterned and random information. To recap: pattern exists in “[...] dynamic tension with random intrusions of noise” (Hayles, 1999, 32). Uncertainty enters this set of relationships such that, whilst information is defined by reducing uncertainty, it also depends on it. Randomness is that which makes it possible to recognise pattern. To put it yet another way, writing is also constituted by noise in its signal that has yet to be categorised, or patterns of

organisation to be found in it. The generative contradictions of *Blank Swan* and the displacement of the work into theories of information attest to probability's function within the markets and in the engineering of information as occupying a position of mastery. Hayles posits that there exist in feminist critiques of science (including Donna Haraway) that cite a relationship between a desire for mastery, an objectivist account of science and the imperialist project of subduing nature, opportunities for the post-human to offer other accounts of science. In this account:

“[...] emergence replaces teleology; reflexive epistemology replaces objectivism; distributed cognition replaces autonomous will; embodiment replaces a body seen as support system for the mind; and a dynamic partnership between humans and intelligent machines replaces the liberal humanist subject's manifest destiny to dominate and control nature” (Hayles, 1999, 288).

Whilst the logic of the derivative under the sign of probability creates distributed versions of ourselves and of the materials and objects that constitute our informatic space, this does not need to be seen as a relinquishing of human capacities. Distributed cognitive systems made up of informatic entities, of which we are but one variety, are capable of effecting our full capability. To remove systems of control and mastery is to acknowledge the splice that makes this possible and evacuates the story: “[...] that consciousness tells itself to explain results that actually come through chaotic dynamics and emergent structures” (Hayles, 1999, 288). If we accept that these information environments are what our subjectivities emerge from, then cutting our connection with a narrative of mastery is what we depend upon to move forward.

Some of art and culture's objects and distributed informatic bodies shake and fray with random materials that are less governed by a mastery that privileges form with a sovereign power. It is in these objects that a truly delimited state of exception exists and which offers subjectivities that are emergent, chaotic but that may also serve to ensure our survival. It is these materials that have the potential to short-circuit a decisionism, which, in turn, threatens a mythical and literal violence. To locate and foreground these random and, as yet,

uncategorised informatics, is to hold out for another kind of justice that leaves behind a literal and structural violence. These materials may offer the violent 'split' (Hayles) or edit that stems the systemic violence and logic of the derivative. This split may evacuate the romantic ground of a mythical violence and, in the process, eliminate life for the sake of the living.

Conclusion

The written aspect of this submission is understood as both an interrogation of an impasse in my artistic methods but also a means of aggregating materials that will become new works that in the main employ video. These works will explore the core concerns of the research, building on developments in the practice that have been made over the course of the project. As a result, the text aspect of this submission is not intended expressly for publication but as preparation for audio visual, sculptural and affective manifestations of this research. These new artworks will act as visual, audio and sculptural mobile assemblages where conflicting ideologies become more concentrated, more viscous and intensely felt to the point of ambiguity.

There are several strands of this new work arising from the research. The first seeks to challenge contemporary-art genres of the video essay, psychogeographical cinema and artist's video tackling financialisation for example. The second strand of developing work uses the visual and auditory 'noise' found in the examples of cinema that I appropriate to amplify the less embodied information in that material and foreground that cultural object's thinking. The third strand of work continues my own obsession with the spatio-temporal torsioning of the film *Performance* (Roeg, Cammel 1970) and its interior spaces through a remaking of the film's rooms in model form, in CGI and as sets. The final strand of work stemming from this research has led to my working with literary critic and feminist writer on technology Katherine N Hayles towards a lecture and event at the *Institute of Contemporary Art*, London. This last initiative will use artworks as well as lectures to consider the implications of Hayle's notions of distributed cognition for art's objects and practices. The event will also attempt to think these questions in the light of the derivative's informatic regime and the opaque complexities that the derivative's logic seeds in cultural production.

The first strand of developing work that speculates with the phenomenon of the video essay, psychogeographical cinema and artists video tackling

financialisation has taken hold in galleries, museums and on broadcast television over the last twenty years. Examples of these phenomenon might include Patrick Keiller's psychogeographic study of what the protagonist of his 1994 film *London* (1994) calls the 'problem of London'; Mark Leckey's collaging of what he terms 'found online memories' in his account of post war British culture, *Dream English Kid, 1964-1999 AD* (2015); Elizabeth Price's account of consumption and desire in her video study of the 60's designed house of a cosmetics magnet, *At the House of Mr X* (2007); The sub temporal and romantic evocations of Britain in Ben Rivers' *I Know Where I'm Going* (2009); the paranoid circuitry and conspiracy narratives of Adam Curtis' *The Mayfair Set* (1999) that seek to uncover elusive centres of political, ideological and economic power; finally artist Melanie Gilligan's dramatization of financialisation in her video *Crisis in the Credit System* (2008). The new work draws on some of these developments in artist's video and film-makers approaches to the visual essay in addition to key developments in my own work that include the installation for Cubitt Gallery, *Designs Towards a Meeting Place for Future Events of Universal Truth* and the work *Dead Stock*. The newly evolving work will seek to overcome some of the politically romantic tendencies of the above-mentioned works that are characterised by for example:

- a tendency to think of objects within object orientated ontologies (OOO) as having to have anthropomorphic characteristics if we are to collaborate with them (Leckey).
- that the usually opaque origins of extra-statecraft can be tracked down to centres of power formed by small groups of thinkers and policy makers and their truth revealed to us. As opposed to these powers existing within more quotidian, atomised legalistic and informational assemblages (Curtis).
- that the stories of financialisation and the markets can be depicted using a media (video) that has the same internal logic of financialisation without addressing the form of that media (Gilligan).
- that throw into question the authorship and humanness of the voice narrating the video but simultaneously allow a sense of human agency to

remain the dominant ground of an exploration of material and technological histories (Price).

- that there exists places outside the entanglement of financialisation, places unaccounted for by the information logic of the derivative and its temporality and that art can present these romantic exceptions without being captured by that logic (Rivers).

The perceived tendencies I point out are made to underscore an ontology of cultural production that this research addresses and not to find deficit in significant artworks. *My* concerns may be less urgent for these practices or of no relevance to the key objectives of those artworks. However, my research and developing artworks anticipate challenging the politically romantic subjectivities that persist in contemporary art practices more generally and sit in the background of these artworks. In addition my approach looks to nuance the tempting but typically unsubtle modes of challenging a human orientated ontology for cultural production. By this I mean a Politically Romantic (Schmitt) ground for art is oft challenged using a falsely binary counter argument that pits the machinic and the computational against the human. This repeatedly comes in the guise for example of a call for alienation and the posthuman framed as a corrective to the excesses of a human centred ontology for art. Examples of this might include aspects of left-accelerationism (Srnicsek) and the Laboria Cuboniks collective *Xeno Manifesto*²⁵. This, I believe inadvertently reinstates the human (establishes a connection as it attempts to disconnect) and instead my own developing work seeks to frame cultural-production's-thinking along the lines of Katherine Hayles' concept of distributed cognition.

Hayles' claims that human potential is only realised when we understand it to be in collaboration with machinic, computational (and I might add legalistic) forms of cognition within distributed and mobile assemblages of thought. She is quick to add that these assemblages neither evacuate human agency or demand its primacy in the face of complex machinic intelligence but that the interface is always in flux. In addition and most importantly in terms of my own work's politic this approach acknowledges that this distributed thinking is less reliant

on patterned and embodied information than we might think, with its potential resting more on the chaotic elements or 'noise' coursing through the materials I'm appropriating. In this sense the developing work is seen as both a mapping and thinking of technologies of power but also a liberating of energies and logics that we have yet to enter into a relationship with. These emerging energies and logics are persistently obscured by narratives of embodied consciousness with their accompanying and powerful stories of will and dominance that deny the chaotic and material reality of those interfaces. Fundamentally this 'noise' exists not just in the visual or the auditory or just as a product of technical devices but also in the hard material things (buildings, urban spaces, artworks, manufactured objects) that form the mobile informatic assemblages which constitute the fabric of our surroundings and the objects we touch and view.

We could on the one hand assume that these info-architectures, like those that Keller Easterling describes in her book *Extrastatecraft* (Easterling, 2014) are riven with the logic and extra-law of the derivative's regime. On the other hand we should also consider that not all parts of these info-architectures are as riven and saturated with that logic as her book suggests. If these architectures and objects mirror the material practices of information then they to reverberate with the noise as well as the patterns on which information depends for its efficacy. For these reasons video is understood as only a component of the developing art works that will also comprise of elements that make up an informatic assemblage as opposed to discrete visual, auditory or sculptural works that could be seen as un-entangled with informatics and the derivative's regime. The work *DEAD STOCK* is to date the clearest expression of this development whilst the earlier work *Designs Towards a Meeting Place for Future Events of Universal Truth* is considered a speculative but less informed approach to the questions in hand. Both, however attempt in a usefully clumsy and then less clumsy form to think of the artwork as a mobile assemblage.

Returning to the first strand of developing work: two mainly video works are currently being worked on that use as their starting form the video essay. The first seeks to fully explore the themes of the Harlow project but understands the

syndrome of Harlow as one that persists in the fabric of contemporary Britain. By syndrome I mean how the technologies of political theology and power that the town's original post war statecraft performed are now achieved through finance and informatics. This first work will employ the original title of the Harlow project *Let Us Pray for Those Now Residing in the Designated Area* but use the lense of Harlow to consider the problem of England in the post-Brexit and post Grenfell Tower²⁶ era. By the problem of England I refer to the ways in which Harlow's master planner Frederick Gibberd conducted an affective collaging of architectural and artistic elements in order to invoke an extra-law and how this has persisted but in a diffuse fashion. I parallel Gibberd's mapping and speculating with an extra law with *A Clockwork Orange* Alex's collaging of theological and romantic elements in his bedroom that also acts as his laboratory of affect and signals a democratisation of Gibberd's class ridden entitlement to call on an extra law. The work will use CGI animation developed over the course of the PhD research depicting Herman Makkink's figurines pictured in Alex's bedroom in *A Clockwork Orange* (1971). The sculpture, *Christ Unlimited* (Makkink, 1970) that depicts three interlinked figures of Christ striking a pose from Stravinsky's *Rite of Spring* (Stravinsky, 1913). The ongoing work is a divination of the problem of England, its politically romantic statecraft, economy and technologies of power. Other elements include for example a reworking of the recording of the anthem to Elizabeth II's coronation by composer Sir Charles Hubert Hastings Parry's *I Was Glad When They Said Unto Me* (1902) and its acclamation *Vivat Regina* that employs Ecclesiastical Latin to powerfully chorus the coronation of the monarch. The ceremony, its ritual and music is alluded to as something constructed handmade, standing in between Gibberd's official statecraft and Alex's laboratory of effect. But also a ritual filled with hubris that invokes an aesthetic and affective force in order to instate and keep reinstating its claim on power and to act as the law.

The second mainly video work will use the title of this PhD text: *I Am the Sun and Cannot be Gazed Upon Fixedly*. The work will appropriate examples of cinema that are cited in this text. The video will simultaneously explore how these cultural objects think the emergence of the derivative's information logic whilst

also seeking the materials within those objects that we perceive as noise but are less saturated by the derivative's performance of power. This process of drawing out these chaotic and less embodied materials will reconfigure the films, architectures and theory that I have cited. This re-forming will expose embedded narratives of will and dominance whilst entering into a dialogue with the moments of violence in those materials that think the 'splice' (Hayles) or edit that evacuates the story: "[...] that consciousness tells itself to explain results that actually come through chaotic dynamics and emergent structures" (Hayles, 1999, 288). These violent splices or edits will instead be intensified in my own work as a means of entering into a correspondence with the chaotic materials within each of these films in such a way that rethinks the calibration between human and informatic agency.

The second strain of work will take examples of the cinema cited in the text and use both the scoring principles of Tony Conrad's film *Flicker* (1966) and artist and feminist film maker Lis Rhodes' *Light Music* (1975)²⁷ to rearrange the often violent, visual and auditory noise that weaves through these films. It is envisaged that these works will become multi-channel abstract video installations that rework each film and amplify the thinking I believe them to be doing but which are obscured by the dominant narratives of (often male) embodied violence. In this way the reworked films will draw out the ways in which each film I believe is in dialogue with emerging technological and economic ontologies and the material as well as ideological aspects of those ontological convulsions.

A third strain of work is a conceptual unpacking of the installation for Cubitt Gallery, *Designs Towards...* This work continues the fascination with the fictive interior spaces of *Performance (Cammel, Roeg, 1970)* as a laboratory for living and experimenting with affect and technologies of power. As well as this film's torsioning of time and space as an divination of the derivative's oncoming logic. For this work I concentrate on the main salon of Turner's house portrayed by the film as being the interiors to 25 Powis Square but was in fact filmed inside 15 Lowndes Square, Knightsbridge. The cinematic spaces have been studied, mapped and remade as a CGI animation but also as an architectural model that

adds to a seemingly endless series of iterations of this skewed cinematic space. These elements will be combined in a single channel video work and the model displayed alongside that video. The developing work seeks to immerse and dirty itself with the spatio-temporal logic of the derivative and also the ways in which *Performance (Cammel, Roeg, 1970)* speculated and played with its emerging metaphysics. My processes of immersion seek to find the limits of this logic and its mode of thinking and knowledge. A further more ambitious iteration of the work is planned that develops the set like elements featured in the installation at Cubitt Gallery. A film-set-like appropriation of the interior spaces will be installed in a sealed gallery with the audience only able to view the installation by closed circuit television in a neighbouring space. The continual deferment of a direct encounter with the space suggests both that it exists as the potential locus of power, the nature of which might be revealed to us were we to directly encounter it but that it also exists as a black box that signals the limits of the mode of thinking being performed.

Lastly I am currently in discussions with Katherine N Hayles having invited her to deliver a lecture for Kingston School of Arts *Stanley Picker Public Lecture Series* at the Institute of Contemporary Art (ICA) in the spring of 2019. We are discussing how her most recent book *Unthought -The Power Of The Cognitive Unconscious* (Hayles, 2017) can become the basis of a lecture and series of ancillary events that considers how the humanities can elucidate complex, sometimes opaque forms of cognition on which we rely as a species and what the ramifications of this are for art's objects. Of particular relevance is a chapter of Hayle's book that scrutinises the temporal 'fold' that derivatives practice and which is then made further complex by the use of high frequency trading (HFT) algorithms which in Hayle's words creates 'infinite micro temporalities' (Hayles, 2017, 144) which are increasingly inaccessible to human cognition. As part of this inquiry the chapter also provides a short but urgent analyses of Elie Ayache's work on derivatives and the contingency of markets; *Blank Swan: The End of Probability* (2010). I examined some of the claims of this book earlier in this thesis and the book has of late become of increasing interest to a number of artist researchers. The event and materialist slant of Hayle's work will help

polarise the significance of this work on derivatives and probability for contemporary art without it running the often reoccurring risk in contemporary art of fetishizing the opaque complexity of derivatives. The event will instead frame the questions that derivatives pose for cultural production as ones of cognition and more precisely distributed cognition and as ones that culture is already thinking. In this sense Hayles recent work substantiates my own claims that certain cultural objects (films and novels for example) can intuit and divine seemingly opaque informatic, economic and powerful forms of distributed thinking such as the derivative. I believe this work with Hayles will help critical practices in the contemporary arts come to a more nuanced understanding of human-to-machine and machine-to-machine interfaces and conceptions of what cultural production does when it thinks these interfaces. In order to *do* and *think* the forms of cognition Hayle's claims the humanities performs in relation to complex technological systems I will be discussing with Kingston PhD candidates and invited contributors (for whom Hayle's thinking has had an impact) about how to make works in response to her recent writing. The intention is that these will be shown in advance of the talk and in a plenary session planned for the same day. We anticipate that the argument that Hayle's makes for the humanities intuitive capacities can be embodied in these responses and then exist online at the Kingston School of Art, Contemporary Art Research Centre website: The Centre for Useless Splendour (<https://uselessplendour.wordpress.com/>). I also plan to contribute to these responses both through showing versions of the artworks I describe above and also delivering a lecture framing the event, Hayle's talk and those of other guest contributors.

I believe I have laid out for the reader a sense of how the artworks completed during the course of this research and the newly developing works build on developments in contemporary art that seek to engage with and frame ontological shifts in economics, culture and technology. However, I also trace-out how my own artworks begin to critically address the politically romantic ground on which other contemporary arts practices often rest. And in addition how contemporary art can repeatedly risk replicating the 'subjective occasionalism' (Schmitt) of the derivative's logic and the conceptions of embodiment and will

that pursue contemporary art's objects and actions so that they remain pursued by a romantic spirit and Schmitt's "[...] colourful shadow of revolution" (Schmitt, 1991, 160). This romantic spirit in contemporary art and in finance, constantly reinstates an a-symmetry in favour of the human, obfuscating the actual mechanics of power at work in each of these activities. The objects and sites that I choose as the materials for the work instead act as nodes or concentrations of otherwise atomised and hard to visualise assemblages of cognition and power. Within the objects and sites I nominate, differing economic and cultural ontologies collide and polarise one another. The work seeks an oscillating asymmetry that neither favours the machinic, the legal or the human but shows these arrangements to be in flux with the result being that art's objects act like a strobe, capturing and showing us an intense moment in otherwise large, dynamic and dispersed systems of cognition where human thought is not sovereign.

Although some of the methodologies and forms I'm utilising bear a strong resemblance to previous arts practices (appropriation, post structuralist film/video, re-enactment, the video essay, curation as arts practice) these approaches are combined and act as mobile assemblages that 'think' and foreground the modes of thinking they assemble. To put it yet another way these methodologies intuit and think complex forms of distributed cognition and these forms of intuiting can be thrown into relief through their juxtaposition. This approach not only frames and brings into collision differing ontologies of cultural production but also seeks to overcome the sense of a linear, empty, homogenous time that the derivative regime instates. Instead the work does something of Benjamin's *jetztzeit*²⁸ or reconfiguring of revolutionary time. It does so by detaching certain images, artistic methodologies, words and objects from the dominating but also disorientating temporality of the derivative and seeking instead to genuinely free those things from a bracketed freedom and logic mistakenly experienced as autonomy, first in financialisation and then in cultural production. Seemingly faint informational noise in the appropriated materials is amplified by the work so that we might recognise and begin to collaborate with sub temporal energies that lie embedded in the informatic code,

that we can then use to overcome the derivative's temporality and spectral power.

I believe the event being planned for and with Katherine N. Hayles signals an initiative on my part to nuance how the contemporary arts address the derivative regime and financialisation more generally. The event being planned asks how culture presently thinks and might think in the future, increasingly complex systems and urgently address the forms of power arising from those systems without reverting to human-machine binaries. The strongly materialist approach that Hayles brings to discussions regarding cognition, derivatives and human-to-machine interfaces offers a specificity that is attractive to artists wanting to enter into a dialogue with theory around these topics but through the empiricism of their own material practices and not exclusively through conventional academic approaches. To this end Hayles recent book, *Unthought – The Power of the Cognitive Nonconscious* (Hayles, 2017) provides in itself an argument for what the arts previously framed as intuition as in fact a way of mapping complex forms of distributed cognition. There is a growing sense amongst communities of artist researchers that current practices in both museums and galleries do not fully comprehend how the effect of informatics accelerated, been disseminated by the pervasive logic of derivatives for example and altered the sense of art's objects in subtle but powerful ways. Instead there exists a burgeoning realisation that art and culture's objects exist as concentrated nodes of otherwise distributed forms of thinking that are not constituted entirely by humans. This challenges the spatio-temporal conditions for making and showing art and the nature of the institutions formatted along the lines of these spatio-temporal arrangements. The planned event with Hayles at the ICA, London will in a multidisciplinary and speculative and playful way platform these challenges for contemporary art.

As an important aside, I am intending that the planned event underscores the importance of feminist writing on technology for contemporary arts practices concerned with informatics and the forms of subtle but impactful power and extra law it conducts. Feminist theory (Donna Haraway, Katherine Hayles, Sadie Plant, Esther Leslie) and feminist writing on information technology's material

histories is able to address the questions of embodiment and decisionism that have pursued the question of how informatics does power and how we imagine it having power that have pursued this research and its ramifications for arts practices. This work runs through my own and the debt owed to these insights is immeasurable in terms of breaking the formal stranglehold that Schmitt and Benjamin's work on decisionism created in my own understanding of the spectral info power of derivatives.

I believe that the above outline of the developments in my artworks and research captures how the combined research has travelled from a question regarding art and urban planning to one of informatics and how informatics has changed conceptions of space, time and of course art's contingent objects and practices. I believe that have sketched out and captured how the research-as-art has engaged with the info-power of the derivative and located the work in relation to other practices in the contemporary arts also concerned with financialisation, the posthuman, statecraft and informatics. But also how the practice differs to these approaches and nuances contemporary arts responses to the challenges posed by the info-regime of the derivative and in the course of that journey recuperating a viable aesthetic strategy for confronting its power.

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I began this thesis and its exploration of the spectral power of the derivative by referencing the project that I devised for a post-war British new town, Harlow that used, as its overarching title, a text I appropriated from the town's 1948 prayer of dedication: *Let Us Pray for Those Now Residing in the Designated Area*. The prayer alluded to the collapsing together of theology and a technocratic polity that was characteristic of post-war and Festival of Britain projects, of which Harlow was one example. What was then called the new Elizabethan age sought to combine the image of Shakespeare's scepter'd Isle with a quasi-mystical conception of technology, reminiscent of Prospero's controlling sorcery in Shakespeare's *The Tempest*.²⁹ Commissioned to provide an artist's reading of the town's original post-war vision, create and commission temporary artworks and advise on revisions to its master plan, I found myself embedded in the governmental and private-sector processes that were attempting a

contemporary statecraft in the period up to and including the financial crash of 2008. This experience threw into relief how space, objects and living substances have been changed by that which has come after capital – the derivative and the amplification of its effects by informatics. Capital's transformation after 1971 into something more fundamentally experienced as ideological, material and, most importantly, as information continues to produce a spectral statecraft and polity. Government had become infrastructure and money an energy.

What I have called in this text the spectral power of the derivative was experienced as an ungraspable, diffuse, immense but forceful polity that contemporary art's political romanticism served only to occlude. The period of the town's inception meant its original design was intended for a Fordist conception of life and work but the town had matured in the period when the logic of financialisation and informatics had become, and continues to be, a final and sovereign power. The departure of capital from the commodity form and its subsequent journey into the logic of the derivative had altered conceptions of space, time, the future, ideas of embodiment and power for this community. Put another way, whilst: "Commodities could be thought as particular parts of an abstract whole; derivatives are further subdivisions of those parts which can be further abstracted into many possible totalities" (Wark, 2017). The polity that now configured the town, and Britain as a whole, was phantasmatic but forceful and was veiled by the rituals of democracy in which art partook and had a vested interest in perpetuating.

In real terms, for example, the component qualities of land and buildings were divided and apportioned to different partners with differing objectives and agendas. The pavement was owned and managed by the town whilst the subsoil was owned and managed by the County. In the '80s, key assets of English new towns were given over to central government agencies, making many new towns economically unviable, having previously been net contributors to the national exchequer. Vacant buildings and shop fronts were owned by international banks and businesses that traded these assets as securities on markets far away. Meanwhile, sculptures were owned and managed by a trust,

governed, in part, by members that still held dear the values of the town's original vision. Fordist and neoliberal visions of state and community tussled for supremacy, each throwing the other into relief.

Regardless of the appeals of the town's citizens, the diffuse but forceful polity of the derivative continued to unbundle the component qualities of the town's master plan, violently altering its spaces and futurity without presenting a centre to its power that could be addressed and paused. Buildings and spaces had been converted into information that could be traded as securities on global markets. Technocratic and financialised imperatives acted as a phantasmatic deluge of quotidian power, whilst conventional processes of government acted as minor ornamentation to these unstinting processes. These dynamics weren't unique to this post-war urban experiment but were a polarisation and localisation of an international phenomenon of extra-statecraft that the derivative and its logic perform. Along the way, this logic has produced 'spatial products' (Easterling) and a triangulation of power through encampments of extra-law and extra-space that include free-trade zones and tax-exempt developments, for example. Both the original post-war vision of the town and its contemporary reinterpretation were ideological and material, but the materiality and power of the present statecraft was harder to ascertain, represent and address. Evidence, however, existed of attempts to encapsulate and speculate with the town's original phantasmatic power and authority. These attempts would provide clues for how to engage with derivative's logic and apparitional power. I will come to these examples shortly.

The new town's original master plan was characterised by a centralised architecture of power that could be likened to the topology of polity sketched out in Franz Kafka's village in his novel *The Castle* (1926). James R. Martel, in his book *The One and Only Law: Walter Benjamin and the Second Commandment* (2014), beautifully describes this topology in which the village that lives its life at the foot of a hill on which a castle is built exists: "[...] on the circumference of a phantasm (the phantasm is the castle itself with all its imagined lords and majesty)" (Martel, 2014, 19). The inhabitants of the castle are only rarely seen

and yet the knowledge of their existence: “[...] animates and manages the life of the villagers” (Martel, 2014, 19). Whilst no castle was built in the new town of Harlow, green swards and neighbourhoods radiate out from a ring-road town centre, the design of which draws on Italian medieval and renaissance hill towns, with the stipulation by its master planner that building materials be pale in colour; mimicking the gleaming stone of Italian city states and the Athenian polis. The town centre occupies the highest geographical point and includes the town’s administrative buildings, central church and master planner’s offices. Both the town centre and the outlying quasi-pastoral neighbourhoods were originally scattered with Italianate piazzas populated by sculptures on plinths. Sculptures by Moore, Hepworth and Chadwick, for example, acted as sovereign actors of a phantasmatic power that was situated in the raised, castellated core of the town’s design. In these objects could be felt the otherwise metaphysical and disembodied power of the state.

However spectral this model of power seemed in its time, visible and stable signs of its operations could be identified and addressed. Architectures of power, like architectures of finance in this period, were centralised and tangible. The phantasmatic power of the derivative and informatics that has superseded these aforementioned topologies of power is, and continues to be, ever more apparitional. This mercurial-like authority, rather than dissolving power, has animated and managed the lives of its subjects with an even greater effect and force than the centralised state. Knowledge of the existence of the derivative is not explicit but the force of its logic is felt in myriad but phantasmatic ways – animating and managing the lives of its citizens. At another level, this spectral power is detected and transmitted by media (film, television, art and the internet). Individuals find themselves no longer live on the circumference of spectral power but within its flows.

The sculpture of the new town, which acted as the sovereign actors of a previously centralised power, provided markers of this power’s less visible dispositions. Finding explicit markers of the dispositions of power of the derivative and its extrastatecraft require a methodology that can capture its

spatial and temporal distortions. This methodology would have to embody the processes by which government has become opaque infrastructure, whilst money, art and assets have become information experienced as energy. Contemporary art's practices, including institutional critique and post-conceptual practices, for example, appear to readily lend their energies to a conception of democracy that is politically romantic. Sites, politics, minor and obscured histories become merely opportunities for the subjective occasionalist to indulge their romantic productivity. The discrete objects of post-war art previously embodied a former spectral power and gave it representation but now stand like Niobe's weeping rock as a fossilised, material testament to a previous mythic law. Contemporary art and its energies appeared, at the time of the project, to perpetuate a political romanticism that enabled the forceful underlying deterritorializing actions of the derivative. The noise of art's proliferating stories belied the proliferation of an underlying logic that privileged apparatuses of investment and divestment over art's objects. Nonetheless, in amongst the speculative projects I commissioned for *Let Us Pray...*, there existed evidence of untheorised and productively clumsy ways and means of detecting this apparitional authority.

Martel suggests that the 'villagers' of Kafka's book *The Castle* live in the spectral presence of a mythical law but are also free to play and speculate with the law. The inhabitants of the village are able even to deactivate the law through their individually developed strategies. This capacity for speculation and play with a mythic and phantasmatic law came into view when I devised an event for the town that focussed on the part the town had played in the making of cinema. I discovered that the town had been scouted by film director Stanley Kubrick's production team for sites that could act as locations for the film *A Clockwork Orange* (1972). Kubrick lived in nearby Hertfordshire. Scenes were later filmed in the town and the location scout's photographs of the town are lodged in the Kubrick archives at the London College of Communication. As one small aspect of the project *Let Us Pray...* I initiated an event and screening of *A Clockwork Orange* in the town's theatre that brought together residents wanting to reminisce about the filming that Kubrick carried out in Harlow. It became apparent that cinema,

and cinema's affective thinking of ideology, was a medium that provided the vicarious means by which to speculate with the town's invoking of mythic law that its liberalism obscured. Most importantly, the film's temporal and spatial plasticity acted for the viewers as a refraction of the grafted together ideologies of the town's statecraft. The film served as an affective site where those ideologies could become more concentrated and viscous, and felt intensely and to the point of ambiguity. Through this object could be felt the concentrated network of forces that made up the 'vision' of its master plan.

The filmic violence of *A Clockwork Orange* intimated ways and means of thinking and playing with the underlying violence of mythic law that the town's design invoked in its efforts to convey its own statecraft as an historical continuum. Remember that mythic law or man-made law, according to Benjamin, attempts to possess the force and authority of God's law but is always in danger of literalising the violence of founding law, in order constantly to reaffirm its vulnerable and shaky claims on truth and authority. The film affectively explores liberalism's contradictions and holds a particular redolence for those that remember aspects of the film being shot in the town. The film provided both a means of giving the violence of mythic law representation and of speculating with its affective qualities. I later commissioned the artist Wayne Lloyd to perform in the town centre church an oral retelling of the films *A Clockwork Orange*, *Mon Oncle* (Jacques Tati, 1958) and *The Fountainhead* (King Vidor, 1959) that explore the speculative way in which these films are received and deployed to think architecture, power and mythical violence and law.

Featuring other new-town interiors and exteriors, new university and social housing architecture from across southern England, *A Clockwork Orange* shows cinema thinking how architecture thinks power, community and law, for example. It is able to represent a post-war statecraft that collages together architectural and artistic signs and signifiers in order to create a town with all the legitimacy of previous more organically formed communities. The film and its divinations, however, travel in two directions at once. In the first instance, it affectively maps a post-war Britain, as Benjamin's Angel of History. An angel

with its face turned towards the past being propelled into the future, wings kept spread open by a violent wind, watching a receding past, face aghast as the debris of that past grows skyward. This post-war Britain was invested in a futurity but guarded against the storm of progress by making claims of continuity with a previous Elizabethan age and images of a Shakespearean Britain. In the second instance, the film detects (like other examples of cinema from the same period) and transmits, through its graphic violence, an emerging economy of affective media and information. Violence most immediately conveys that affect. The film appears to show in its ultra-violence how the mythic law of the state can become mirrored by the individual, but also how that mirroring must be apprehended by the state because of the threat this exposure of its own monopoly on violence poses to its authority. This narrative, however, because it is done through the technological platform of film, also detects the ways in which the mythic law of the state is being devolved down into informatics. This cinema appears to talk of the advent of a reign of affect in an age of intensified and growingly computational informatics.

The town's original master plan was stunted by its inability to see the oncoming importance of information networks and personal mobility that later iterations of the British new town would anticipate. This included the design of the new town Milton Keynes (1967), for example that thinks of "community without propinquity" (Melvin N. Webber) or, put another way, community without the need for close physical proximity.³⁰ Technology would dampen down this prerequisite for community and partially convert bodies into a warranty for informatic prosthesis. These iterations of urban planning and statecraft that came after Harlow (1947) awarded information-technology a power that, combined with financialisation, would become both quotidian and absolute. Whilst these ideas looked to the future, what became lodged in them were older technologies of power.

The circumstances of the project *Let Us Pray...* provided a highly polarised microcosm of the changed nature of power, space, time and materiality in the reign of the derivative and informatics. The town's dilemmas and liquified

architectures spoke of wider implications for art and its capacity or incapacity to address this new reality and world born out of financialised informatics. Simultaneously, this polarised living laboratory of power and statecraft demonstrated how older forms of power and theologically framed concepts of the political persist and become embedded within informatics. Put another way, the objects of a pre-digital statecraft thought of its buildings and art as prostheses of a sovereign power. To paraphrase medievalist Ruth Evans, and frame this analogy through a theological conception of a technological prosthesis, these sovereign actors functioned like the body of Christ, going out in the world to do the work of an otherwise spectral God or power: “[...] using not the products of scientific discovery, but Christ” (Evans, 2010).

The bumping together and sometimes melding of theological conceptions of the political and of informatics suggests that the spaces of statecraft old and new have, in some respect, always been informatic, without having to be electrical. Or, rather, information-rich environments where, as urbanist Keller Easterling points out, seemingly static objects become active forms that possess an immanent disposition. To clarify this point: the presence of particular typologies of building, electrical grid or even artworks, for example, produces effects, spaces and things by their presence alone. Like a ball at the top of a ramp whose potential agency causes effects elsewhere in anticipation of it moving, these objects can produce both real effects and a build up of information in expectation of its effects. Looked at conversely, these objects or active forms act as nodes or markers of networks of dispositions and power that remain hidden in plain sight. Certain examples of these objects (or even towns, in the case of Harlow), because of their embeddedness within networks of disposition, reveal more distributed forms of cognition that threaten notions of embodiment, will and consciousness. It is these objects that risk a ‘split’ (Hayles) or edit that recomposes the relation between the liberal human subject and these distributed cognitive assemblages, which offer art practices a way forward. This way forward potentially dynamites the often-concretised political romanticism of critical contemporary art practices that look to locate and formulate idealised centres of power to attack. These politically romantic tendencies, more often than not, assume the habit of

installing human stories with the intention of countering the alienation of contemporary capital. However, they do so without considering more technically formed subjectivities as phenomena that existed before capital, and which may be less saturated by capital than we might always assume. Having said this, the methodology that I outline in this thesis gives a role to the artist that could be considered romantic, by asking that they stand, like Caspar David Friedrich's *Wanderer* (1818), in the flows of affective power and informatics, and that they actively enjoy the ideological effects of those flows and are dirtied by these currents of power. This immersion, however, differs from a romantic productivity in that it potentially induces a 'split' that, instead of privileging the primacy of human functionality and of the artist's subjectivity, it sees: "[...] human functionality expan[d] because the parameters of the cognitive system it inhabits expand" (Hayles, 1999, 291). Only this type of immersion will acquire the traction needed on an otherwise mercury like technological power whose informatics we are implicated in.

I remind the reader that informatics, according to Haraway, assumes a flattening of human and non-human distinctions, and is taken "[...] to mean the technologies of information as well as the biological, social linguistic and cultural changes that initiate, accompany and complicate their development" (Hayles, 1999, 29). This 'split', therefore, doesn't intend an apocalyptic Nick Landian annihilation of the human, but a flattened ontology of cognitive systems, of which the human is just one of those systems. Instead, and under these circumstances, art's formerly discrete objects become akin to a slice of action perceived in the flash of a strobe light that allows us to sense a network of expanded cognitive relationships and our place within those networks. Or, can be likened to a geological core sample that allows us to see the thermodynamics of an immense, slow moving network. These objects are no longer discrete but nodal.

Cinema and its clumsy but generative thinking of ideology has, therefore, provided for this thesis a means of standing in these flows of affect and of obliquely reassessing the terms associated with my practice and the practices of contemporary art to which this PhD is most directed. These terms include the

categories of post-conceptual practices, institutional critique and the phenomenon of the artist as curator, who thinks of the exhibition as a critical medium. Cinema has also provided the source material for ongoing and future artwork that oscillates between moving image, made objects and text as it attempts to locate and give a grain and weight to sites of power that have proved elusive to those practices.

Whilst I don't make or aspire to make cinema of the kind that I cite in this thesis, these examples of cinema and moving-image making provide meta-sites in which the viscous ideology, economics and technologies of a place and time can be felt and speculated with. These meta-sites are simultaneously informational, ideological and material, existing as a thin but intense space in which to speculate and draw out chaotic matter and emergent structures of information that threaten to annul the deafening 'stories' (Easterling) of human will and consciousness, likely to be valorised by the derivative's logic. It is to these thin, interstitial but intense and viscous sites that these practices need to turn, in order to address the currents of power that have evaded them and in which probability has played its role.

In the early parts of the text, I attempt to locate and give form to the sovereign power of derivatives, initially using the film *Performance* (1970) to affectively map the emergence of that power and its amplification by informatics. I sketch out how the derivative's capacity to bundle and unbundle the attributes of a commodity has produced a crisis of embodiment and afforded power to information. The evolution of an economy of affective media and information is expanded on in the following section, *No Finance Without Romance*, that frames derivatives and finance as what Schmitt calls political romanticism. Carl Schmitt's critique of liberalism frames the reign of affect as the re-emergence of a romantic spirit and paradigm where economics, the law and government takes on the spirit of a revolution and where every event and object becomes the opportunity for individuals to indulge their 'subjective occasionalism'. An exposition of political romanticism introduces the role that probability serves in deepening a romantic productivity, whilst installing an underlying control. I

employ Schmitt's concept of sovereignty in order to better understand the sovereign power and state of exception that this data tsunami and probability has instated. I follow the exploration of Schmitt's political romanticism with his concept of sovereign or final power, and the image of Thomas Hobbes' Leviathan, from which the concept arose. This exposition of a theological framing of conceptions of power ballasts the claim, later in the text, that the derivative, as an entity that mines out information, conveys a sovereign power – due, in part, to the immensity of it as a trading activity that is beyond cognition and, like the Leviathan, remains spectral but terrifying in its immensity. I then consider how this new iteration of capital supersedes the commodity form, and the theory of the commodity form that Walter Benjamin generates out of Schmitt's theory of sovereignty. In the last part of the chapter, I claim that this caused a crisis of embodiment for art looking for a critical purchase on capital that has now left the commodity form behind. This is followed by an introduction to information theory and its reliance on probability. I describe the sense of agency that is afforded patterned information, in contrast to the chaotic parts of signal, in order to frame the way in which information is imagined as a spectral and mythic power.

In order to think the ideological effects that this conception of information has produced and which have augmented the power of the derivative, I then dedicate a chapter to how film operates for the thesis, entitled *How Cinema Thinks the Derivative*. I explore the ways in which films of the same economic-cusp period as *Performance* (1970) detect the logic of the derivative, but also how subsequent films continue to map its effects and think the ideology and materialism of the derivative. In addition, the films of Michael Fassbinder, for example, aid an exposition of how cinema thinks political romanticism and of the liberal human subject as ideological excess and as the ground of a romantic productivity. I suggest, instead, that cinema's bodies are being used to think the sovereign power of the derivative and its reliance on a patterned information that is always in flux. I liken these bodies to the baroque emphasis on the frame, and further explore *Performance's* bodies and method through this metaphor. The question begins to arise in the text of what these bodies are, if they are not

presence, but instead exist as a force. This leads to the question of, what is the materialism that arises out of the forceful ideology of the derivative? François Truffaut's 1973 film about film *Day for Night* provides an exposition of ideology's materialism that is then followed by the section on the bodies of Stanley Kubrick's films, in particular, that of *Barry Lyndon* (1975). I describe these bodies as points of convergence in a schema of debt, underscoring how they act as a refraction of an ideological apparatus of debt and contracts in the 18th century that forecasts the age of the derivative. This ability of cinema to think the economic ontology of the times of its production through a pastiche of history is then explored in the last section of the chapter, *Cinema as the Marshalling of the Sedimented Forces of the Cosmos*. This section begins to bring notions of violence to bare on an understanding of the derivative. Through another of Nic Roeg's films *Eureka* (1983), I alight on an example of cinema that affectively maps and allegorises the derivative's violent rending open of centralised architectures of value, in turn mobilising assets, subjectivities, space and time. This conversion of the attributes of commodities and assets into forceful information is expressed as violence in cinema and lays the ground for thinking in the subsequent chapter about how the derivative collapses together ideas of law with finance to produce a mythical power.

In chapter three, entitled *Cinema Thinks Violence as Form and Force*, I return to Schmitt's theory of sovereign power. I consider how a dematerialised notion of information performs Schmitt's 'state of exception' by appearing to scythe through material impediments. Bernardo Bertolucci's 1970 film *The Conformist* is deployed as an example of cinema that speculates with this imagining of informatics, but then points to the vulnerability of its forceful cinematic bodies and their claims on authority. The last section of this chapter uses the theological framework of Benjamin's concept of mythical violence and law to consider why cinematic violence becomes a means of expressing the derivative's hubristic and law-like claims of legitimacy and authority. I proffer that, because the derivative is a contract, it perpetually risks collapsing together qualities of the law with finance. In turn, this gives the derivative a forceful quality, even whilst it remains a mutable contract that is constantly negotiated and renegotiated. This, I suggest,

gives the derivative an authority that it needs to keep reaffirming in order to constantly re-establish its shaky claims on the truth. In the following chapter, I argue that probability and its function for derivatives and information engineering serves to reinforce this authority, but that contemporary examples of bodies in video threaten to intensify and short circuit this authority.

The fourth and final chapter, *Accelerating To A Standstill – Probability's Reign*, considers how the logic of the derivative and, in particular, its use of probability is displaced into the fields of video and contemporary art. I claim, with reference to Steven Shaviro's work, that this has led to bracketed and modulated forms of cultural production that we feel as intense, accelerated and delimited but, in fact, perform an underlying control. This underlying control is challenged and given representation through the intensification of its processes in Steven Shaviro's example of Grace Jones and Nick Hooker's music video for the song *Corporate Cannibal* (2008). This example of intensification is marked by a desire to travel in the same direction of the dehumanising aspects of the derivative. Whilst Jones's body becomes, for video, a visible node of the otherwise ungraspable forces of financialisation, I suggest, in the following section, that contemporary art's objects have assumed the dynamics of the derivative and act as what urbanist Keller Easterling calls the markers of the underlying polity and extra law of infrastructure space. In these objects or markers of disposition it is possible to witness an otherwise phantasmatic power. I argue that examples of sections of the contemporary art landscape have assumed a romantic productivity, akin to the inflation of the derivative's market, in a process that ensures that its objects become secondary to an otherwise more forceful but underlying polity and infrastructure of art.

I step back, in the section entitled *A Contract With All The Weight Of The Law*, to consider in more technical detail the defining characteristics of derivatives and the function of probability in pricing and ensuring profit, regardless of the market's material volatility. Financial technologist Elie Ayache's work on probability and derivatives serves as a useful guide, at this juncture, to ask how probability has obscured the chaotic and contingent materiality of the markets.

This conception of a chaotic materiality leads into the last section where I revisit Claude Shannon's theory of information in order to think of the random parts of a signal that the deployment of probability in information management suppresses. I speculate on whether some examples of cinema detect and think of these unpatterned parts of both its visual signal and information, more broadly. I end by claiming that it is in these chaotic materials that a productive 'split' can be detected, which annuls the ideology and mythic law of the informatic derivative. This 'split', I suggest, throws into relief a flattened ontology of distributed cognition of which the human is just one of many systems of cognition.

This thesis goes to some lengths to understand how probability has afforded the derivative and conceptions of information the properties of an absolute sovereign power with all the qualities of mythic law. I also explore how, at the same time as exacting this absolute power, probability has paradoxically induced a sense of intense freedom and romantic productivity that we feel as autonomy. I have appropriated particular examples of cinema and employed them as forms of divination to locate instances where this ideological power clashes most visibly and productively with the chaotic and actual properties of information. It is in these conflicted and unstable bodies of information, these Horos (Small, 1995) or boundary markers between information and hubris, these shuddering and trembling figures of horror (or in Latin *horrere*), in which the 'split' that we depend upon for our freedoms can be detected. It is in the moment of this 'split' and in the penumbra of its eclipsing of the hubris of probability that we see emergent structures of information that annul the mythic law of probability and its quotidian but absolute power. Here is a power that we cannot look upon directly but that we can locate and short circuit through its refracted bodies.

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Illustrations

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Figure. 1: <i>The Taking of Power by Louis XIV</i> (Rossellini, 1966). Produced by Office de Radiodiffusion Télévision Française (ORTF). Distributed by Brandon Films.....	6
Figure 2: Fig. 2 The Black-Scholes Merton pricing formula for call options (derivatives). http://www.investopedia.com/university/options-pricing/black-scholes-model.asp	6
Figure 3: <i>Performance</i> , (Cammell, D and Roeg, N., 1970). Produced by Goodtime Productions. Distributed by Warner Brothers.....	22/23
Figure 4: <i>Ibid</i>	37
Figure 5: <i>Ibid</i>	38
Figure 6: A Hell's Angel guard on stage during a Rolling Stones concert at Altamont Speedway Free Festival, 1969. Photo: Beth Bagby.....	40
Figure 7: <i>2001: A Space Odyssey</i> (Kubrick, 1968). Produced by Metro-Goldwyn-Mayer (MGM) and Stanley Kubrick Productions. Distributed by Metro-Goldwyn-Mayer.....	63
Figure 8: <i>Germany in Autumn</i> (Fassbinder, Brustellin, Cloos, <i>et al.</i> , 1978) Produced by ABS Filmproduktion, Tango Film, Kairos-Film, Hallelujah Film, Edgar Reitz Film (ERF), Pro-ject Filmproduktion and Filmverlag der Autoren. Distribution by New Line Cinema (US).....	72
Figure. 9. <i>Ibid</i>	73
Figure 10: <i>Performance</i> , Cammell, D and Roeg, N., 1970.. Produced by Goodtime Productions. Distributed by Warner Brothers	77/78
Figure 11: Bernini. <i>Altar of the Chair of St. Peter, Cathedra Petri</i> (1666).....	80
Figure 12: Solar Eclipse.....	80

Figure 13: <i>Performance</i> (Cammell, D and Roeg, N., 1970. Produced by Goodtime Productions. Distributed by Warner Brothers.	80
Figure: 14. <i>Day for Night</i> (Truffaut, 1973). Produced by Les Films du Carrosse, PEF and Produzione Intercontinentale Cinematografica (PIC). Distributed by Warner Columbia Film.....	82/83
Figure 15: <i>Barry Lyndon</i> (Kubrick, 1975). Produced by Peregrine, Hawk Films, Warner Bros.. Distributed by Warner Brothers.....	88
Figure 16: <i>Ibid</i>	89
Figure 17: <i>2001: A Space Odyssey</i> (Kubrick, 1968). Metro-Goldwyn-Mayer (MGM) (presents) / Stanley Kubrick Productions (A Stanley Kubrick Production). Distributed by Metro-Goldwyn-Mayer.....	89
Figure 18. <i>Barry Lyndon</i> (Kubrick, 1975). Produced by Peregrine, Hawk Films, Warner Bros. Distributed by Warner Brothers.....	91
Figure 19. <i>Ibid</i>	92
Figure 20. <i>Ibid</i>	92
Figure 21. <i>Eureka</i> (Roeg, 1983). Produced by JF Productions, Recorded Picture Company (RPC), Sunley Productions Ltd. Distributed by United International Pictures.....	97/98
Figure 22: <i>The Conformist</i> (Bertolucci, 1970). Produced by Mars Film, Marianne Productions, Maran Film. Distributed by Paramount Pictures and Curzon Film Distributors.....	101
Figure 23: <i>Ibid</i>	108
Figure 24: <i>Ibid</i>	111/112
Figure 25: Illustration of Analogue Sound Wave.....	122
Figure 26: Illustration of digital signal expressed as preset values. 0-5 volts.....	122
Figure 27: Digital Signal presented as a sound wave.....	123
Figure 28: <i>Corporate Cannibal</i> , music video (Jones, Hooker, 2008).....	125
Figure 29: <i>Zombie Formalism</i> . Top row, from left: <i>All You Hear Is Beads Rattling</i> (2012), by Leo Gabin; <i>Untitled #0904</i> (2009), by John Bauer; <i>Untitled</i> (JS06198) (2006), by Josh Smith. Bottom row: <i>ST-AA</i> (Transfer Series) (2013), by Angel Otero; <i>Big Squid Ink</i> (2014), by Jamie Sneider; <i>I</i> (2011), by Rosy Keyser	130

Figure 30: Contemporary Art Market Sales by revenue July 2014 – June 2015. SAGE Business Researcher.....	137
Figure 31: Early derivative. Globular clay envelope with a cluster of accounting tokens. Sumerian clay tokens and corresponding vessel. The derivative begins as an embossed clay informatic. (Mathers, William S, 2013).....	140
Figure 32: <i>Barry Lyndon</i> (Kubrick, 1975). Produced by Peregrine, Hawk Films, Warner Bros. Distributed by Warner Brothers.....	140
Figure 33: An online Black-Scholes Merton calculator. http://www.investopedia.com/university/options-pricing/black-scholes- model.asp	140

Notes

¹ Katherine Hayles uses Haraway's term *informatic* and is taken "[...] to mean the technologies of information as well as the biological, social linguistic and cultural

² François VI, Duc de La Rochefoucauld, Prince de Marcillac (1613 - 1680) was a noted French author of maxims and memoirs. Much cited by critics in the nineteenth-century for sayings as well as style. Born in Paris and a figure in the French Royal Courts when Royalty and aristocracy warred for influence against the backdrop of a feudal system.

³ The term *Fiat Money* comes from the Latin term *fiat* meaning 'let it become', 'it will become', used in the sense of an order or decree.

⁴ Hayles uses Haraway's term and is taken "[...] to mean the technologies of information as well as the biological, social linguistic and cultural changes that initiate, accompany and complicate their development" (Hayles, 1999, 29). Donna Haraway, *A Manifesto for Cyborgs: Science, Technology and Socialist Feminism in the 1980s*, *Socialist Review* 80 (1985): 65-108.

⁵ The original basis for the film at the time when Marlon Brando was to play the criminal Chas was Nabokov's book *Invitation to a Beheading* (1934). In the novel, the death of a detective is described as murder/suicide. He meets his double and solves the pattern of the crime at the moment the geometry of its plot is made clear to him and in the knowledge that his murder forms the final part of the equation. This later informed the making of *The Conformist* by Bertolucci. But perhaps the most important story for *Performance* is *Death and the Compass* (1942) by Borges, which is never directly mentioned. Here, the police inspector tries to decipher an oracular series of homicides whose locations describe a geometric puzzle, the final piece completed only when the inspector himself enters the murderer's carefully assembled lair. Here, the allegorical image's finitude is possible once the mechanism of its production becomes apparent to it. The difference between the tragic hero and tragedy is made apparent, in that the truly tragic sacrifices its own ground, its own faith to become heroic (*Fragile Geometry: The Films, Philosophy, and Misadventures of Nicolas Roeg*, Lanza, 1989, 96).

⁶ Brian Massumi translated Deleuze & Guattari's *A Thousand Plateaus* (Deleuze et al., 2011) and provides, in the introduction, a definition of Deleuze & Guattari's use of the term 'affect'.

⁷ This subtitle is a play on the title of Mark Fisher's essay *No Romance Without Finance*, which, in turn, cited lyrics from the 1986 dance anthem by Gwen Guthrie *No Man's Fit For Finance*.

⁸ Hans Kelsen (1881 – 1973) was an Austrian jurist, legal philosopher and political philosopher. Due to the rise of national-socialism in Germany and Austria, Kelsen left his university post because of his Jewish ancestry, and departed to Geneva in 1933, and then to the United States in 1940. In 1934, Roscoe Pound lauded Kelsen as being "undoubtedly the leading jurist of the time." While in Vienna, Kelsen was a young colleague of Sigmund Freud and wrote on the subject of social psychology and sociology.

⁹ Slavoj Žižek's commentary on Schmitt takes up a "position (individuals assume) towards the Event of Universal truth" (Žižek in Mouffe, 1999, 36). For Žižek, the

appearance of politics in a post-political age is the moment “[w]hen members of the Demos, those with no firmly determined place in the hierarchical social edifice, demanded a voice, to be heard and included in the public sphere – they represented themselves as the representatives, they stand in for the whole of society for the true universality” (1999, 27). This appeal to the universal is both the opportunity and dilemma of Schmitt’s work that Žižek identifies but, at the same time, fails to address its temporality and composition in such a way that the concept falls back into the trap of ‘subjective occasionalism’ or the exalted moment of emotions perceived as actions.

Žižek suggests that what separates Schmitt from Nazism is the desire to place the institution before the leader and the people. But, at the same time, his conception of sovereignty is stuck within a legal normative formalism that returns that institution to a somatic form, acting out an idealized sense of action loaded with symbolism. Instead, Žižek argues that the decision of the sovereign is better described as an operation akin to Lacan’s *objet petit ‘a’*. Žižek explains this *objet petit ‘a’* in relation to Alfred Hitchcock’s McGuffin, or the object that drives a film’s narrative: the suitcase on a train; the key to a safety deposit box; “[The] McGuffin is *objet petit ‘a’* pure and simple: the lack, the remainder of the Real that sets in motion the symbolic movement of interpretation, a hole at the centre of the symbolic order, the mere appearance of some secret to be explained, interpreted” (Žižek, 1996, 36).

¹⁰ Jacob Taube’s book *To Carl Schmitt: Letters and Reflections* (Taubes, 2013) is an account of Taube’s correspondence and meetings with Schmitt in the years up to his death in 1985 and the controversy following on from Taube’s contact with the legal theorist, called the Nazis’ arch jurist.

¹¹ The citation by Bredekamp for this letter is: Benjamin, letter to Schmitt, 9 Dec. 1930, *Gesammelte Schriften*, 1:3:887, and Benjamin, letter to Schmitt, 9 Dec. 1930, *Gesammelte Briefe*, ed. Christoph Gödde and Henri Lonitz, 4 vols. (Frankfurt am Main, 1997), 3:558; trans. Samuel Weber, in Weber, ‘Taking Exception to Decision: Walter Benjamin and Carl Schmitt,’ *Diacritics* 22 (Fall-Winter 1992): 5 (Bredekamp, 1999, 250).

¹² The quote from Benjamin’s *Theses on the Philosophy of History*, which this sentence paraphrases, is: “A historian who takes this as his point of departure stops telling the sequence of events like the beads of a rosary. Instead, he grasps the constellation, which his own era has formed with a definite earlier one. Thus he establishes a conception of the present as the ‘time of the now’, which is shot through with chips of Messianic time.” For Benjamin, messianic time represents a reconfiguration of the present that does not conform to a teleological and causal schema of history and which, he argues, is the futurity of a ruling class that flattens the present out into a form of homogenous, empty time or never ending present that annuls all struggles, past and present. Every moment for Benjamin is a “*straight gate through which the Messiah might enter*” and only the figure of the messiah can complete history (Benjamin, 1999, 255.). The messiah appears in Benjamin’s schema as figure of salvation or contract between the past and present but also as form of time in itself. The past is what mediates the messianic promise itself, offering an exit from that form of time, which, for Benjamin, is employed by both Fascism and Social Democracy, but could be countered by a temporality marked by festivals and memorials as opposed to machine time that converts units of time into equivalent units of value. Benjamin is employing the Judaic notion of the messiah who has not yet arrived with us, in order to think of both a continuity of struggle that is intergenerational, and is derived from revolutionizing the past not the future. In this way, the past offers redemption and change doesn’t need to be read or experienced as teleological progress (Benjamin, 1999, 263, 264).

¹³ Classicism was the then dominant academic school of thought in German universities.

¹⁴ In addition, Benjamin understood that allegory's capacity to produce statements that act as propaganda would make it available to fascists as well utopianists.

¹⁵ Named after the place in Switzerland where a group of economists met in 1947, including Milton Friedman, Karl Popper and, principally, Theodore Hayek, the group advocated free markets and freedom of expression and were classed classical liberals but have been credited by David Harvey as the architects of neoliberalism.

¹⁶ Direct Cinema is a documentary genre that originated between 1958 and 1962 in North America, principally in the Canadian province of Quebec and the United States, and developed by Jean Rouch in France. Similar in many respects to the *cinéma vérité* genre, it was characterized initially by filmmakers' desire to directly capture reality and represent it truthfully, and to question the relationship of reality with cinema.

¹⁷ The term 'supply side economics' first came into common usage during the Nixon period and was associated with the journalist Jude Wanniski and the economist Art Laffer, who was responsible for the *eponymously named* Laffer Curve: a diagram that illustrates an argument for low taxation, which, in theory, would provide potential investors with capital to invest, which, along with less government regulation, would stimulate economic growth. According to these and earlier developments in economic theory, including Say's Law in economics, rather than demand creating supply, supply would create demand. This is different from Classic Liberalism's demand for the banning of tax on the grounds that it is immoral and possibly illegal and that each man should be the person to decide what to do with his own money. Instead, supply side economics sees it as the collective duty of citizens to pay less tax as they, and not government, will decide the social good and express it through their expenditure.

¹⁸ A French term derived from heraldry, and literally means 'placed into abyss'. The term has developed a number of particular senses in modern criticism since it was picked up from heraldry by the French author André Gide. *Mise-en-abîme* occurs within a text when there is a reduplication of images or concepts referring to the textual whole. *Mise-en-abîme* is a play of signifiers within a text, of sub-texts mirroring each other. This mirroring can get to the point where meaning may be rendered unstable and, in this respect, may be seen as part of the process of deconstruction.

¹⁹ The principal thesis of Althusser's last philosophical writings is that there exists an 'underground' or little recognized tradition in the history of philosophy. Various labels such as 'materialism of the encounter' or 'aleatory materialism,' the method which he uses to articulate this philosophy is to simply comment upon works by philosophers who exemplify this current and to point out where, how, and to what extent they do so. In addition to Marx, the philosophers that he cites as being part of this underground tradition include Democritus, Epicurus, Lucretius, Machiavelli, Spinoza, Hobbes, Rousseau, Montesquieu, Heidegger, and Wittgenstein. From these readings in the history of philosophy, Althusser aims to suggest that this tradition exists and that it is both philosophically fecund and viable. He also wishes to return to and bolster the thesis he first ventured in the late 1960s that there are really only two positions in philosophy: materialism and idealism. This work has been picked up on by Speculative Materialists and is cited most notably in *The Speculative Turn: Continental Materialism and Realism* (ed. Levi Bryant, Nick Srnicek and Graham Harman). Quentin Meillassoux's work *Beyond*

Finitude also features heavily in the same volume of essays and there appear to be parallels being drawn between the two men's work.

²⁰ The war (1756–63) of Britain and Prussia, which emerged in the ascendant, against France and Austria, resulting from commercial and colonial rivalry between Britain and France and from the conflict in Germany between Prussia and Austria.

²¹ The South Sea Bubble was the name given to the events that followed the formation of a British joint-stock company, the South Sea Company, founded in 1711 that was created as a public-private partnership to consolidate and reduce the cost of national debt. The company was also granted a monopoly to trade with South America, hence its name. Created to entice investors into the potentially lucrative markets of South America, should those regions have been released from Spanish rule after the War of Spanish Succession, the company never made a profit or traded a great deal but attracted huge amounts of investment, which then caused the company to collapse in 1720 producing enormous losses and affecting the national economy. Schemes for extracting sunshine from vegetables was one of the many ventures advertised by the company to attract investors.

²² I am referring here to the experiment of Chile and the introduction of Chicago School Economics to Chile by students of the economist Milton Friedman following the ousting of President Salvador Allende by an American backed Military coup.

²³ As a partial aside, Shaviro talks of Afrofuturism's interpretation of the legacy of slavery, experienced by Africans as a form of 'alien abduction' which results in afrofuturists equating the human *per se* with white supremacy and with normative subjective positions. Therefore, humanity is not something to be attained but overcome. Therefore, a claim is made from the future (the voice being that of Afrofuturism) that expresses an extreme indifference to blackness, understood in humanistic terms.

²⁴ In *Pornotopia*, Beatriz Preciado examines popular culture and pornographic spaces as sites of architectural production. Her study of Hugh Hefner's development of his own living spaces as the template for the Playboy club are, for Preciado, biopolitical techniques for governing sexual reproduction and the production of gender in modernity. The Playboy club is, for Preciado, strategically situated in relation to the American City as an "interior exteriority", behaving as an archipelago for white male heterosexual sovereignty, escaping the biopolitical disciplinary norm that equated heterosexuality with family and reproduction.

²⁵ *The Xenofeminist Manifesto* written by the Laboria Cuboniks collective is an attempt to articulate a feminism fit that embraces alienation as an emancipatory force that sidesteps notions of biology in order to see technology as liberatory once again. The manifesto was published in June 2015 and the members of the collective are international.

²⁶ The Grenfell Tower fire happened on the 14 June 2017 at a residential, council owned tower block in West London causing 72 deaths and was the result of the mis-managed regeneration of estates in Britain that stemmed from long running government policy that had abandoned a vision of social housing for the ideology of the free market and private provision of public contracts. The event and burnt out building stood as a material and highly visual manifestation of a complex class politics that was otherwise obscured by narratives of the free market and individualism.

²⁷ Both Conrad and Rhodes' films use a method of 'scoring' the edit like musical notation to produce an effect on the overall form of the film.

²⁸ Walter Benjamin uses this term in his 'Theses on the Philosophy of History' to describe a notion of time that is ripe with revolutionary possibility, time that has been detached from the continuum of history. It is time at a standstill, poised, filled with energy, and ready to take what Benjamin called the 'tiger's leap' into the future. It isn't naturally occurring, however, and takes the intervention of the artist or revolutionary to produce it by 'blasting' it free from the ceaseless flow in which it would otherwise be trapped. Benjamin contrasts *jetztzeit* with the 'homogeneous empty time' of the ruling class, which is history written from the perspective of the victors (as Benedict Anderson shows in his account of nation as imagined community (A Dictionary of Critical Theory, Buchanan, 2010,262)

²⁹ Clement Atlee, Leader of the Labour Party in 1953 "Let us Hope that we are witnessing the beginning of a new Elizabethan Age no less renowned than the first."

Prospero learns a sorcery that allows him to remotely control spirits, the weather and even raise the dead. Ariel, a spirit whom he frees, acts as his remote eyes and ears. The play suggests an Elizabethan concern with disembodied and embodied forms of technology and information technology that is mirrored for example in portraits of Queen Elizabeth I that show her garments covered either in jewel like eyes or a mixture of eyes and ears that suggest an all seeing and hearing monarch but also indicate the development of an intelligence and secret service network under Elizabeth I. See Isaac Oliver's 1600-1602 Rainbow portrait of Elizabeth I on display at Hatfield House, Hertfordshire, United Kingdom.

³⁰ Urban designer and theorist Melvin M. Webber was considered by the Chief Architect of Milton Keynes Derek Walker as the 'father of the city'.