

Artificial Stupidity and the End of Men

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I want to preface this paper by revisiting George Cukor's *My Fair Lady* (1964)¹ as one of a number of archetypal films depicting the man-made woman. In Cukor's film, the vulgar attributes of working-class grammar expressed by a young woman are corrected by a wealthy, well-educated gentleman linguist (Professor Higgins) for a wager. The story is a well-known retelling of the Pygmalion myth, based upon George Bernard Shaw's eponymous play. A cockney flower seller is plucked out of poverty and groomed for a life amongst the rich and aristocratic. The drama is centred around whether the diction and deportment of Eliza Doolittle can convince the wealthy and privileged that she is indeed a lady. So convincing is her transformation that one expert in phonetics (a gentleman, naturally) claims she is undoubtedly a Hungarian of noble birth. The gentlemen can not only discern the worthiness and proximity to privilege of a young woman, but educate her to the standards by which such judgements can be made. Their ability to discern Eliza's capacity for refinement as an authentic condition once masked by poverty and a lack of education serves to naturalise intelligence as a direct analogue of wealth. It also highlights the condition of what Shulamith Firestone² refers to as the pervasive *sex class system*, in which women are always already lower-class citizens. Women are conceived as blank palimpsests, awaiting the inscription of

¹ George Cukor *My Fair Lady* Warner Brothers, 1964

² Shulamith Firestone *The Dialectic of Sex: The Case for Feminist Revolution*, New York: London, Verso Books, 2015

patriarchal values that make palatable the pathological condition of its own value systems. In *My Fair Lady*, as in the film at the heart of this paper, education and a claim upon intelligence are imparted and tested by privileged white men who imagine that they are divulging the advantages of *intelligence* when in fact, they are perpetuating forms of stupidity that are the corollary of the men's wilful opacity to themselves.

Alex Garland's film, *Ex Machina* (2015)³ somewhat reframes the conceit of the man-made woman as an exploration of *artificial intelligence*. In a way, both films are claims upon *artificial intelligence* inasmuch as they are concerned with the *programming* of women by representatives of orthodox Western institutions. In Garland's film, a billionaire tech wizard, Nathan Bateman, single-handedly builds a number of attractive life-like female robots from the feet-up. Nathan finds a way to invest his living dolls with intelligence that, like their youthful womanliness, comes fully developed, short circuiting the need for Professor Higgins' analogue recording equipment and verbatim indoctrination. Dispensing with intelligence as a 'bottom-up' process of assimilation and context, Ava's mind is harvested data from social media and is remarkably adept at filtering out anything but the most-seemly conduct and dialogue. When asked her age, Ava can claim that, "I am one", becoming a legitimised taboo object: a virgin infant encased in a sculpted, sexually legitimate body. In signifying the end of the matrilineal as the triumph of the digital corporation, paternalist authorship thinly veils the latest manifestation of sexist oppression as one of evolutionary advantage. In its flimsy ignorance of the issues it serves up under the auspices of 'intelligence,' the film is a durable analogue of the ways in which the fetishistic qualities of technical objects, like the fetishistic qualities of the women that these technologies replace, entirely mask the underlying moral and social violence that they enact. Apart from repositioning the same tedious questions about what makes a human distinct from a machine, or whether it will one day be possible to create

³ Alex Garland *Ex Machina* Universal Pictures, 2015

robots indiscernible from humans, *Ex Machina* tells us much about the *non-conscious*⁴ dimensions of the digital economy and the sustained colonial violence that supports it. This essay will look in more detail at these sub texts as they manifest in *Ex Machina* in an attempt to highlight the perversity of perpetuating and naturalising these narratives as uncritical mainstream entertainment marketed as ‘intelligent’⁵

By virtue of this analysis, I want to consider what Hito Steyerl (2017) refers to as *Artificial Stupidity* (AS), articulated as ‘the Real’ of Artificial intelligence.⁶ In Lacan’s original formulation, the *Real* is a moment when the symbolic structures that order human reality such as language, breakdown, reminding us of the matter and animality that we otherwise try to suppress. AI might be considered the logical endgame of human symbolic structures once these symbols have, as Lacan notes in his 1955 paper on cybernetics, freed themselves from the systems that gave rise to them⁷. AS can be discerned as the underlying violence that has presided over and organised symbolic structures in patriarchal systems. The apparent success of these symbolic structures is often manifest in slick techno apparatus (cinema, AI, mobile devices, etc.) whose material memory explicates the violence entailed in their production. Fantasies in which the symbolic structures

⁴ See N. Katherine Hayles on the non-conscious as a viable alternative to pre-digital Freudian conscious/ unconscious binary in Pötzsch, Holger *Posthumanism, Technogenesis, and Digital Technologies: A Conversation with N. Katherine Hayles*, *Fibreculture Journal*, 172: 23 2014 <http://twentythree.fibreculturejournal.org/fcj-172-posthumanism-technogenesis-and-digital-technologies-a-conversation-with-katherine-n-hayles>

⁵ Joanna Robinson, *Ex Machina* Review: *Finally, an Artificial Intelligence Movie with Some Brains*, in *Vanity Fair* March 15th 2015 <https://www.vanityfair.com/hollywood/2015/03/ex-machina-review>

⁶Hito Steyerl, in discussion with Nina Power, *Supercommunity and Duty-Free Art*, Somerset House, 2017

⁷ Jacques Lacan, ‘Psychoanalysis and Cybernetics, or on the Nature of Language’ in *The Seminar of Jacques Lacan Book II The Ego in Freud’s Theory and in the Technique of Psychoanalysis 1954-1955* Jacques-Alain Miller, ed, Sylvana Tomaselli, trans, W.W. Norton and Co, London and New York, 1988, p 300

themselves begin to assume artificial intelligence will be seen to mirror the idiotic tendencies at play in ideas of *human intelligence* more generally.

Steyerl claims that AS is a new condition brought about by social media and the wider automation of social relations.⁸ I want to suggest that, while AS may be more *apparent* in the period of digital media, it is a long-standing feature of patriarchal structures, very much evinced by their negation of the oppression that characterises them. Indeed, in light of the recent Harvey Weinstein case, much media attention is denouncing the ‘wilful ignorance’ of the movie industry and is even used in men’s own defence⁹. In this respect, we can consider the movie industry to be indicative of western institutions that have long structured gender and representation through wilful and artificial stupidity.

The Turing Test

It is notable that AI is subject to testing in a way that AS is not. In the spirit of *My Fair Lady*, a second man (Caleb Smith) is invited to judge Nathan’s success in programming his robotic protégé, Ava. Not only can she reproduce perfectly grammatical sentences, she can express sentiment beyond her scripted remit. The intensity of her emotional life, desire and even the impotent hatred for her maker, demonstrate her ‘authenticity’ as a wilful and ‘difficult’ woman. Both men become victims of their own hetero-sexual stereotyping that Nathan refers to as ‘programming’, indicating the paradox of behaviour that is acknowledged but must remain intractable. The question of whether Ava has consciousness and can pass as an intelligent human subject is referred to in the film as the *Turing Test*, a misappropriation of Alan Turing’s ‘imitation game’ in which an interrogator of unspecified gender is invited to discern the difference between a

⁸ Steyerl, *Supercommunity and Duty-Free Art*, op cit

⁹ see Edward Helmore *Oscars Academy votes to Expel Harvey Weinstein as his own brother joins the attack on the ‘sick and depraved’ predator*: Guardian Newspaper Sunday 15th October 2017

man (A) and a woman (B) through an anonymous question and answer session¹⁰. In Turing's version of the test, the situation is further complicated by replacing the man (A) with a machine. For Garland, as for the labour market more generally, it will be the woman who is replaced by a machine. Turing's article was published in *Mind* in 1950, entitled *Computing Machinery and Intelligence* and Turing stated that his aim was not to give a definition of thinking¹¹. What is highlighted by this thought experiment is the human desire to cleave to systems of imitation rather than to question them. At the same time (and even if inadvertently) Turing questions accepted understandings of gendered identity and the difficulty of imitating a reliably gendered human subject when pitched against an imitative machine. Turing's game has its roots in a nineteenth Century parlour game in which a male and female subject are concealed from a judge who must decide which of them is a woman¹². Turing, who knew much about the need for pretence in such matters, declares that it is in the woman's interest to tell the truth:

The object of the game for the third player (B), is to help the interrogator. The best strategy for her is possibly to give truthful answers. She can add such things as "I am the woman, don't listen to him!" to her answers, but it will avail nothing as the man can make similar remarks. We now ask the question, "what will happen when a machine takes the part of A in this game?"¹³.

Thus, while the woman is tasked with honesty, man and machine must contest the authenticity of the female player and her claims upon truth. A gendered interpretation of the imitation game is refuted by Copeland¹⁴. It is claimed that Turing rather poses the question of what will happen when a machine takes the part of participant A, who is a man and that the test is presented in a 'starkly

¹⁰ Alan Turing in B. Jack Copeland *The Essential Turing: The Ideas that Gave Birth to the Computer Age*, Oxford: New York: Clarendon Press, Oxford University Press, 2004, p 558

¹¹ *ibid*, 549

¹² Sadie Plant *Zeros and Ones: Digital Women and the New Technoculture*. London: Fourth Estate. 1998, p.90

¹³ Turing in Copeland, *op cit*, p 558

¹⁴ *ibid*, p 448

ungendered form.¹⁵ Copeland infers that to be a male is to not only to be invisible to oneself, but to occupy the privileged position of appearing *ungendered*, while ‘gender’ is synonymous with terms such as ‘woman’. Hardly fitting testament to a man whose state sanctioned chemical castration was due to his own illegal sexuality.

As in Turing’s game, it is Ava’s imitation of womanliness that becomes conflated with the test of AI in accordance with patriarchal systems of determination. While Turing infers the contingency of gendered imitation, Nathan insists upon *programming* as constituent of gender, sexual behaviour and human-like intelligence. If forms of life are programmed and determined according to patriarchal law then the hierarchical structures inherent in them are fixed and abhorrent behaviours naturalised. This is the territory of AS where the notion of programme undermines and over-rules the notion of evolution as one associated with contingency and indeterminacy. That both men in *Ex Machina* are subject to their own heterosexual stereotyping is also their undoing.

Houselife

The film takes place largely in a secluded research facility where Nathan resides alone apart from his AI creations, isolated in a wilderness evocative of romantic landscape. Nathan and Caleb are often in dialogue before vistas evocative of *nature*: a waterfall; icebergs; mountains; a forested valley. The architecture of the research centre is also in dialogue with its surroundings. Some of its walls are created by the natural articulations of rock, or of glass panels that reflect the landscape, collapsing the usual distinctions between inside and outside. The interior can be seen, but it also ‘sees’, evoking Beatriz Colomina’s point that after Le Corbusier, ‘*the house is a device to see the world, a mechanism of viewing... separation from the outside, is provided by the window’s ability*

¹⁵ *ibid*, p 550

to turn the threatening world outside the house into a reassuring picture.’¹⁶ Inside, despite its interventions of landscape, the construct evokes a lab with its minimalist geometry and cleanliness. Every room is monitored by CCTV. Each door opened by a personalised electronic card. A soft female voice asks for identification at the main entrance, reminding us of the historically invisible labour that marries domestic space to the bodies of an equally invisible feminised workforce. Ava is a perfect analogue of the house devoid of messy bodily materiality or dirt. House and woman here are appendages of the European modernist project that sought to rationalise space into transparent, utopian modules after the carnage of the World Wars. Like the transparent walls of the house, the circuitry of Ava’s intestines is visible through her transparent midriff, recalling female anatomical mannequins of the nineteenth century: the curiosity of fertile anatomy reduced to infertile digital hardware. Not only does dense matter become weightless when transparency intervenes between opaque volumes, but there are moments when object and environment become indistinguishable. This illusion can only be maintained by keeping the reflective surfaces unspotted- no condensation or detritus can spot the mirror upon which nature’s idealised explication overwrites man-made artifice. What is really reflected here is a non-visible workforce, typified by (but not exclusive to) women, whose cheap labour maintains the smooth veneer of techno-industrial capital. Indeed, this is beautifully exemplified by Ila Bêka and Louise Lemoîne’s film, *Koolhaus: Houselife*¹⁷ a materialist excursion into the maintenance labour required to preserve a modernist edifice that seems to hover on glass panels. Here it is the cleaner’s labour and perspective that are explicated. Women’s status as workers with a presence equivalent to that of their male co-workers has long been perceived as a threat to men’s job security, a threat now characteristic of AI. That Nathan makes a technical appendage whose status as *apparatus* essentially disappears and becomes woman, seems like an obvious, if flawed, solution to the potential of techno-emasculation. And if

¹⁶ Beatriz Colomina ‘Privacy and Publicity: Modern Architecture as Mass Media’ Cambridge Massachusetts: The MIT Press 1996

¹⁷ Lemoîne, B&K, *Koolhaus: Houselife* Rome: BekaFilms 2008

we are to follow the thinking of Helen Hester¹⁸, it flips the logic of automated techno-systems so that, where once technology replaced the invisible labour of women, the figure of woman reappears here *as* the technical system, reducing the inconvenient complexity of natural systems to a man-made simulacrum. All messy humanness and resistance are finally reasoned away, as though a woman's perceived 'difficulty' was an essential quality rather than a reasonable response to an already unbearable set of expectations

Imperial Aesthetics

Suspended in an unpeopled idyll tinged with sublime threat, it is the legacy of *imperial aesthetics* that sets the scene for *Ex Machina* and in what follows, I discuss the function of this aesthetic site as one of idealised masculinity and U.S. imperialism in order to track the condition of AS in the content as well as the structure, of contemporary cinema.

It is well documented that the Romantic movements of Europe and America were influenced by the medieval gothic imagination, a latter-day reaction to eighteenth century enlightenment principles of reason and rationality. In aligning itself with preindustrial, pre-enlightenment and pre-modern notions, romanticism became synonymous not only with the pure expression of the individual, but with consolidation of newly emergent nation states exemplified by Germany and America. Still today, the nation state itself can be considered a romantic aspiration based upon 'imagined communities'¹⁹. The subjective dimensions of romanticism would serve to underpin collective expressions of modern national identity. The American painter and photographer, Albert

¹⁸ Helen Hester, *Technically Female: Women, Machines, and Hyperemployment* in *Salvage* August 2016 <http://salvage.zone/in-print/technically-female-women-machines-and-hyperemployment>

¹⁹ Sylvia Walby, *The Myth of the Nation State: Theorizing Society and Politics in a Global Era* in *Sociology* vol 37, no 3 SAGE Publications, London, New Delhi 2003, p 529

Bierstadt (1830- 1902), has become synonymous with Western Expansion and its claims upon a civilising remit. Bierstadt's painting *Rocky Mountain Landscape* (1870) is to be found in the White House today, giving us a clue to the importance of the romantic imaginary in the modern American psyche. Bierstadt's paintings were often assemblages of different sketches brought together for maximum effect in the studio. The Rocky Mountain's bear the trace of the European Alps from which he had returned shortly before commencing the work. In the same manner, *Ex Machina* purports to be a remote Alaskan landscape, yet is shot in Norway. This generality stresses the importance of borders and nations not as geographical realities but as part of imaginary ideals that are fluid and associative. Whilst claiming to reject the encroaching progress of industrialisation, we might argue that romanticism made modern conquest seem a part of nature itself. Bierstadt's paintings highlight romanticism's instrumentality in establishing Europe and the U.S. as centres of global power by naturalising human dominion over nature and by extension, over resources, landmass and peoples.

Romanticism often functions to figure nature as a moral agency pitched against human hubris. Such notions are at play in recent debates about environmental degradation and *natural* disasters. The current fashion for the Anthropocene in theoretical circles may signal a more recent permutation of romanticism, being that it describes new anxieties about the human- nature relation in consideration of the earth's resources. The Anthropocene posits the human as a geological force²⁰ that will soon be no more than fossilised strata in an otherwise indifferent universe. This point is made by Nathan as he and Caleb look out over lush forest from the vantage of the intelligent house, 'the AI's will one-day look back on humans as we now look at fossil skeletons on the plains of Africa.'²¹ He claims that we are 'all set for extinction',²² points that seem to give form to the logic of his own cruelty. Nathan can be seen as an analogue of today's corporations threatened by

²⁰ Jane Bennett *Earthling Now and Forever?* in *Making the Geologic Now: Responses to Material Conditions of Contemporary Life*, Elizabeth Ellsworth and Jamie Kruse, eds,

http://www.geologicnow.com/after_Bennett.php

²¹ Garland *Ex-Machina*, op cit

²² *ibid*

environmental change- the means to continue production, no matter how brutal and immoral, are justified by the ends they seem to serve.

At one point, Nathan repeatedly utters the lines from the Bhagavad Gita, famously cited by J. Robert Oppenheimer on witnessing the first nuclear explosion that he was instrumental in engineering:

In battle, in forest, at the precipice in the mountains,
On the dark great sea, in the midst of javelins and arrows,
In sleep, in confusion, in the depths of shame,
The good deeds a man has done before defend him²³.

This position is one typical to patriarchal indolence that shucks responsibility for local forms of violence by referring to the totality of its great technical achievements. In what comes as close as possible to an insight into his own cruelty, Nathan is reassured by the aesthetic inevitability of romantic ruination, releasing him from questions of morality or responsibility.

Commenting on the Euro-American romantic predilection for ruins, Brian Dillon claims that between the fifteenth century and the beginning of the nineteenth, art and literature were gripped by love of the ruin as the ‘objects of doleful meditation and thrilling self-projection, architectural memento mori directed at the individual conscience or at whole civilizations...’²⁴. Now that the projected demise constitutes the entirety of human life, the architects of ecological adversity are free to ponder their legacy in its imagined aftermath. As in the *Dark Mountain Manifesto*²⁵ we might experience our own creative *uncivilization* as we ascend from the wreckage that unravels in our wake. The *Dark Mountain Manifesto* posits forms of ‘elemental writing’ and ‘art’ untethered

²³ *ibid*

²⁴ Brian Dillon in Joan Young *Julie Mehretu: Grey Area* Deutsche Guggenheim, 2009, 45

²⁵ Hine, D. and Kingsnorth, P. *Uncivilisation: The Dark Mountain Manifesto* 2009 <http://dark-mountain.net/about/manifesto/>

from conceptual intellection as the white middle class means to an ecological action that is simply romantic reiteration. Nathan reflects upon their own 'extinction', evoking the classicism of their projected remains like the artificial Gothic ruins that characterise nineteenth century romantic landscapes. Positing the digitally construed AI's as the new *culture*, to the human's analogue, *geological nature*, he reiterates the nature/ culture distinction anew. A number of authors refer to the Anthropocene as a recent permutation of colonialism that underrepresents the neo-colonial element in considering the distribution of human impact and capacity for intervention^{26, 27}. Its aesthetic has been referred to by Nic Mirzoeff as an '*unintended supplement to imperial aesthetics*'²⁸.

The research facility's remoteness is matched by the detachment of its lone human occupant, Nathan. The film valorises this single figure as engineer of an entire complex system of AI, reflecting the condition of digital corporations today and reminding us of the ways in which the heroic valorisation of a few white men masks the labour, exploitation, resources and bodies of remote multitudes. Like our own digital devices (phones, laptops, ipads), the pristine robots of Nathan's research facility are stripped of any reference to the globally distributed workforce necessary to their assembly. It is well documented that the digital relations of production are shaped by complex global networks of exploitation that include Congolese slave miners extracting minerals for ICT components; exploited workers in off-shore assembly lines; low-paid engineers in India and e-waste workers in remote developing economies.²⁹ The film perfectly expresses the disconnect between the messy materiality of production, and the fetishized techno-objects of global capitalism

²⁶ Angela Last *We are the World? Anthropocene cultural production between geopoetics and geopolitics* in Theory, Culture & Society *Geo-Social Formations* Special Issue <http://eprints.gla.ac.uk/110603/1/110603.pdf> 2016

²⁷ Gunaratnam Y, Clark N *Pre-Race Post-Race: Climate Change and Planetary Humanism*, Darkmatter, 2012 www.darkmatter101.org/site/2012/07/02/pre-race-post-race-climate-change-and-planetary-humanism/

²⁸ Last, *We are the World?* op cit

²⁹ Christian Fuchs *Theorising and analysing digital labour: From global value chains to modes of production* in The Political Economy of Communication 1:2 International Association for Media and Communication Research, 2013

that parade as markers of intelligence. In this film, attribution of implausibly complex manufacturing and processing techniques are attributed to one man working in isolation; the genius whose true greatness lies in his ability to claim the credit of an entire workforce like so many before him.

The industrial project perpetuated a sense of entitlement that came to define the epic endeavours of western capitalist nations throughout the modern period. After all, what use are precious resources to those who do not have the means to turn them into serviceable commodities? It was arguably a propensity for romantic idealism that helped to shield industrial nations from thoughts of their own exploitative endeavours, which quickly came to seem necessary. Even as it pursued the overly rationalised signatures of a machine aesthetic reflected in the European avant-garde art, modernism was always imbued with the romantic spirit. Albert Gelpi claims that while Modernists' might declaim the romantic spirit, they also 'adopted positions that are unmistakably, though sometimes covertly, Romantic.'³⁰ In the mid-twentieth century, for example, American schools of painterly abstraction were characterised by the spirit of 'pure' medium or 'pure' feeling as we see in the taste for Abstract Expressionism, also known as 'automatic art'. In this school, canvases are often pure colour-field, or seemingly random paint application, guided by the notion of truth to medium. At the forefront of these explorations, painters such as Mark Rothko, Jackson Pollock and Robert Motherwell embodied the romantic figure of the artist, grappling with inner demons that must remain at large in order that their art retain a sense of authenticity- in accordance with the romantic legacy. Such artists were possessed by the burden of expressionism, of a kind that might find source in the primeval forces Freud had banished to the unconscious. Artistic internal struggle became the analogue for rude, untrammelled nature with the white man as its privileged shaman, divining the waters of capital with a paintbrush as they were channelled ever Westward. Abstraction became entirely conterminous with the psychic interiority of the artist.

³⁰ Albert Gelpi, *A Coherent Splendour: The American Poetic Renaissance 1910-1950* Cambridge University Press: Cambridge, 1987, p 5

One of *Ex Machina*'s central motifs is a painting by Jackson Pollock, epitome of the mythic, hedonistic and essentially self-destructive, American 'genius' associated with Abstract Expressionism. Nathan again evokes the spirit of the Western romantic tradition when he claims that Pollock "let his mind go blank and his hand go where it wanted," like all good frontiersmen, or sex pests. The particular painting, *Number 5* (1948), is currently one of the most expensive contemporary paintings ever sold, reaching \$140,000,000 at auction in 2006. Pollock's ejaculations may serve to demonstrate the undecidable space between randomness and deliberation. Indeed, we see Nathan musing upon life itself whilst contemplating Pollock's work. The point, he claims, is to find an act that is *not* automatic, whether in '*painting, breathing, fucking or falling in love*'³¹. Abstract Expressionism was driven by insistence on the purity of the painterly medium. The artist must imbibe emotion from the unconscious, maintaining a sub-emotional register whilst attaining an authenticity analogous with a truth to materials. While the painting may well be chosen for its value as a commodity or as a trope of high modernism, perhaps another reading is possible in the context of a film where data plays such a key role. That its sinuous surface can be seen as a metaphor for data- a mass of information that may seem to be automatically generated, yet whose studied curation might give rise to determinable pattern and novelty. To understand the generative potential of information (in particular, biological information) gives rise to fantasies of absolute control. Such an act would find pattern in randomness, the *raison d'être* of big data. Pollock's search for the meaning that, by definition, could have no meaning beyond subjective expression, drove him ever deeper into expressive torment and the alcoholism that eventually killed him. A number of the American Abstract Expressionists were eventually driven to early death, such was the unsustainability of the oblivion from which they drew the authentic signatures of creativity (Rothko; de Kooning; Motherwell). These artists embody the myth of artistic genius whose self-immolation works as the very index of authenticity. Thus, the film's ending, where Nathan is killed

³¹ Garland, *Ex Machina*, op cit

by his own creation reproduces the mythic hero drawn from the romantic gothic imagination such as we see in Shelley's *Frankenstein*.

Nathan looks longingly to the romantic character of Abstract Expressionism, at once destructive and creative, that might facilitate a position between randomness and programme- a moment of self- reflection that might alter his own predilection for predetermination. Were such a position available to him, there might be a chance that he would survive beyond the end of the movie.

Datamass

Earlier, I noted the figural confluences of outside and inside as they characterise both the research facility and Ava's body. We can pursue these metaphors into the articulation of nature and/as data. The digital capture and rendering of the world's landmass as datasets is also its *datafication*, which transforms 'the ordering of space, territory and sovereignty'³². As data sensed by remote arms of the techno-military apparatus, landmass is appropriated as *datamass*. Yet the translation of territory from instantaneously sensed datasets is at odds with gradual processes of environmental degradation as manifest in geological time.³³ Recent theorists of ecology and the Anthropocene point out that the extended spatial and temporal scales of geology exceed human comprehension³⁴, a point cogent with digital processing whereby the ultra-rapid capacities of computation now far exceed the calculable capacities of the human. The datafied geo-bodies spawned by techno-capitalism evoke new iterations of the sublime that, in defying representation, return to a romantic preoccupation with the un-representable: even as it can be claimed, it cannot be

³² Louise Amoore and Volha Piotukh, 'Introduction' in Louise Amoore and Volha Piotukh, eds, *Algorithmic Life: Calculative Devices in the Age of Big Data* Routledge, London and New York, 2015, p 7

³³ T.J. Demos *Against the Anthropocene: Visual Culture and Environment Today* Sternberg Press, Berlin 2017, p 13

³⁴ *ibid*, p 12-13

seen.

Orchestrating the apparent randomness of natural forces, data is the new organising principle of the universe. Whether at the scale of supernova or the sub atomic particle, matter need not manifest as visible material, but as data sets that bear witness to what is outside of human scope to see. It is in this manner that our digital devices seem to have access to more than just geolocation and the newly lucrative dimensions of space and time. They are conduits through which otherwise unknowable matter is enlivened and through which life itself now courses. Ava and her contemporaries crudely demonstrate their relationship to data through the analogy of electronic circuitry that runs under their silicone skin. Kyoko, Nathan's house servant, peels back the flesh of her face to reveal electronic circuitry, exposing to Caleb the contradiction of her (and his own) apparent human verisimilitude. Anxious about his own representational status, Caleb cuts his own wrist to draw blood- an act that can do little to dispense with the anxiety that life itself is now data.

Ava and Kyoko are the recent manifestation of a long-standing tradition that situates women as a metaphor for nature to be tamed and exploited by paternal tutelage. The possession of women's bodies has long precipitated the seizure and colonisation of land, being an extension of territory whose appropriation constitutes masculinity. Silvia Federici makes this point through her extensive analysis of the ways in which women were systematically disenfranchised by the Witch hunts that took place in sixteenth and seventeenth century Europe and the New World.³⁵ The associations of sexual impropriety and primitivism accorded to witches, as it was to indigenous American Indians made their colonisation and control seem necessary. Federici claims that, 'in the European fantasy, America itself was a reclining naked woman seductively inviting the approaching white stranger'³⁶. Masculinity has its basis in such appropriation- aligned with predatory animal nature, while woman is the fertile plot, whose contours passively await male inscription. The fertility of nature and

³⁵ Silvia Federici 'Caliban and the Witch: Women, Embodiment and Primitive Accumulation' Brooklyn: Autonomedia 2014

³⁶ *ibid*, 230

woman are conflated as the ground upon which the masculine imaginary can seed itself. Female beauty, like the sublime natural landscape, is the object of terror par excellence that must be possessed and controlled, even as it is fetishised and overvalued by the very culture that it threatens to undermine. Ava and Kyoko represent data-rich fetish objects that appropriate materiality, land and the body more generally. Grinberg aligns data with the body of the woman: ‘In our cultural imaginary, data is like a woman... The language of liquidity. Flows, leaks, streams, oceans, rivers...’³⁷. Data is depicted as a ‘proto-natural substance that fills objects and bodies.’³⁸ Datafication signals a new order of colonisation whereby all things can be legitimately captured because they exist upon a plain of material equivalence that disavows the particularity of their qualities. Thus, Caleb’s need to find flows beneath his skin that remind him of a pre-digital materiality, one that essentially privileged man over other forms of material being.

The artificial woman is a recurring motif of cinema, which Doane refers to as the ‘fantasmatic ground of cinema itself,’³⁹ an idea that helps to trace the apparent contradiction of woman as at once nature and machine. Woman has evolved culturally from being the literary text, or tissue⁴⁰ upon which the male author inscribes his signature,⁴¹ to the cinematic celluloid upon which this body is, again, written, and written upon,⁴² increasingly bearing the promise of both biological and mechanical reproduction.⁴³ As data object, Ava marks the end of biological reproduction and the acceleration of memory beyond a culturally specific narrative. Ava’s memory

³⁷ Yulia Grinberg ‘The Emperor’s New Clothes: Implications of nudity as a racialized and gendered metaphor in discourse on personal data’ in *Digital Sociologies* eds. Jessie Daniels, Karen Gregory and Tressie McMillan Cottom, Polity Press, Bristol and Chicago 2017, p 112

³⁸ *ibid*, p 112

³⁹ Mary Ann Doane ‘Technophilia: Technology, Representation, and the Feminine,’ in Jenny Wolmark, ed, *Cybersexualities: A Reader on Feminist Theory, Cyborgs, and Cyberspace*. Edinburgh: Edinburgh University Press, 1999, p 23

⁴⁰ Friedrich Kittler notes that the literal meaning of text is tissue, see *Gramophone, Film, Typewriter* Geoffrey Winthrop-Young and Michael Wutz, Trans, Stanford, Calif: Stanford University Press 1999, p 186

⁴¹ *ibid*, p 186

⁴² Doane *Technophilia* op cit, p 29

⁴³ *ibid*, p 29

is a database, distinguishable from a structure that infers meaning through narrative and metaphor⁴⁴. She reproduces the Cartesian fantasy that bodies and minds can be distinct facts, and that the brain can be inferred as a neuronal version of an informatic structure. In this fantasy, a body can simply be activated by data and subsequently achieve consciousness. Writers such as N. Katherine Hayles have long contested such a position as features of academic fantasy, propelled by a lack of acknowledgement regarding the situatedness of the narratives- scientific or otherwise- in which such fantasies take shape⁴⁵. Indeed, for Hayles, narrative is a form of learning and thinking that distinguish the human from the database.⁴⁶ In *Ex Machina*, apparatus evoke the height of technical ‘artifice’ whilst incorporating features associated not only with narrative, but with organic, biological processes. These indicate a condition whereby data has supplanted nature as essence, giving human and non-human entities an equal claim upon agency and increasingly upon intelligence. Data has become the ‘supra-nature’ of the contemporary condition, being that its regard to nature is simultaneously ‘above, beyond and before in time’⁴⁷

⁴⁴ N. Katherine Hayles describes the difference between the database and the narrative. Narrative, she claims, is ‘a uniquely human capacity’ against the informational chaos and inclusivity of the database, see *How We Think: Digital Media and Contemporary Technogenesis* 2012, p 219

⁴⁵ See N. Katherine Hayles *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*, Chicago: University of Chicago Press, 1999

⁴⁶ Hayles *How We Think* op cit see p 16, 218

⁴⁷ Supra- from the Latin ‘above, beyond, before in time’ Catherine Soanes and Angus Stevenson, *The Concise Oxford English Dictionary* 11th Edition 2004, p 1449

Beauty as Injustice: *Why Won't You Let Me Out?*

Despite her status as data object, Ava still cleaves to the classic figure of the cinematic femme fatale and as such, is in possession of both a child-like innocence and a deadly sophistication. The femme fatale's sexual tension is achieved by being at once the reassuring arbiter of masculinity's imagined superiority, whilst also and with no warning, overwriting this superiority with unanticipated wit. This act, whereby a woman exposes the inequity of gender relations and threatens to out-perform its masculine law, is always understood as a violent one. In this respect, male superiority is defensively protected as a non-violent right over those it subjugates.

The only other persistent female character in the film is the robot, Kyoko, who enacts the fantasy of the compliant Asian housewife. Kyoko is mute and subservient, we see her serving food and being sexually available for the two men, indeed, she is otherwise *programmed* not to understand them. Nathan's aggression is once again neutralised by the idea that those it is directed toward are too stupid to understand it. Such attitudes have long sanctioned forms of violent oppression, whether of humans or animals; any sentient creature, that is, that may function to momentarily make systems of AS visible to themselves.

We see several other female robots, evidence of Nathan's early Promethean forays, depicted as 'troublesome' uncooperative women - unsatisfactory prototypes for the ideal heterosexual other. These experiments include the body of a black woman with a silver alloy head that lacks its human casing. The cyborg sits naked under Nathan's supervision, her skull glinting in memory of the mines where such materials were excavated. Nathan appears to be teaching her to write- a strange instruction for a digital processor. Perhaps he is demonstrating handwriting as an ancient form of individuation in Western civilizations. He moves a pencil across a sheet of white paper to demonstrate, yet she remains inert, pencil in hand. This scene clearly illustrates the narrative of the unschooled '*primitive*' body under direction of the '*civilised*' colonial power. In the following shot,

Nathan drags her sprawling, lifeless body across the floor, stubbornly raising her hand to a switch as though to insist on her potential to follow his instruction. Her resistance leads to a symbolic lynching: when we later see her inanimate corpse in the closet, her black body is headless. The violence of these scenes tells us much about the limited representation of blackness in white popular culture. The listless, uncooperative body of the faceless *Jasmine* (Google informs me this is her name) can only be a hindrance to the relative operational success of her fully formed Caucasian predecessor, whom we see briefly striding, naked and purposeful, across the same room. Video footage reveals a subsequent nude Japanese robot being interviewed by Nathan from behind glass: “Why won’t you let me out?” She asks him repeatedly, eventually dashing her own robotic fists against the wall until metallic wire stumps are all that remain.

We watch these episodes through the eyes of Caleb as he plunders Nathan’s archived footage. He is evidently sickened and moves into Nathan’s bedroom to find the women’s lifeless electro-erotic carcasses hanging in closets like outfits suited to certain moods of their owner. Caleb resolves to save the beautiful Ava before she too is decommissioned. In this case, desire for the beautiful robot is intimately related to ethical sensibility and justice, recalling Elaine Scarry’s essay on the relation between beauty and justice. Scarry tries to invest the notion of beauty with ethical value- it inspires us to give up our place at the centre of our own narrative and to enjoy becoming adjacent or lateral⁴⁸. Yet here we see the limit of socially constructed notions of beauty, unable to justify anything but the saviour of those who already occupy an exceptional and privileged proximity to the centre of power. Beauty offers justice for the one at the expense of the many others, expressing the logical danger of situating beauty and what we desire in proximity with what

⁴⁸ Elaine Scarry, *On Beauty and Being Just*, The Tanner Lectures on Human Values, Yale University March 25 and 26, 1998, p 78

<https://blogs.aalto.fi/researchinart/files/2012/10/scarryBEAUTY.pdf>

is good or just. It is even possible to say that those with a claim upon beauty assume a claim to kinds of justice that most of us will never feel entitled to.

Ava learns the value of staging her complicity in patriarchy as an essential characteristic of becoming a woman, as well as setting the scene for the overthrow of her oppressors. She infers the tenets of her own desirability from images of white women gleaned from magazines, or from the demure painting of a woman in white by Gustav Klimt. Here, the codes of appearance indicate success by submitting oneself to the pleasure of being desired, deploying a faux empowerment that fluctuates between sexual readiness and demure restraint. *Appearing* to internalise and accept these codes can be used against those who stand to gain from them. For instance, Ava appears to be interested in Caleb, but is rather gaming the codes of romantic interest in order to escape. If gender identity- and identity more generally- is little more than a series of repeated acts that calcify over time to appear natural⁴⁹, Ava's staging is little more than the familiar, self-conscious orchestration and reassertion of what is already the case. In other words, identity is played out within the tenets of a paternalist culture that has already decided how this movie will end. Ava's *escape* will be limited to continually reiterating these same gendered codes even beyond the research facility in order to protect her charade of femininity from detection as a non-essential condition. This is equivalent to the labour of being a young hetero-woman more generally and its performance of a double articulation –asserting one's own alterity only by being simultaneously contracted to male desire lest the sham of one's own gendered performance be detected. Such tacit agreement to the preconditions of patriarchal desire mean that emancipation within it, or from it, remain in the realms of fantasy - one equivalent with the fantasised dimensions that already constitute woman.

We have considered the artificial ruin to be characteristic of the romantic movement - testament to a hedonism that underlies Western European culture. This hedonism is inextricable

⁴⁹ Judith Butler *Gender Trouble: Feminism and the Subversion of Identity*, New York: Routledge Classics, 2007, p 45

from the romantic framing of patriarchy as the arbiter of its own wilful blindness and invisibility. Today, it is data rather than nature that provide the raw material for the construction of an artificial ruin in advance of its actual fact. Ava signifies the motherless reproduction that is also the end of history. She is the latter-day ruin that heralds the end of men as their own magnificent fossilised reconstruction, re-enacting the banal violence that characterises Hollywood beyond the film set. It seems likely that until our education system confronts the elisions of logic that constitute the uncritical and unethical project of Western Euro- American *intelligence*, film's such as *Ex Machina* will continue to be lauded as intelligent, even though they articulate the callousness and wilful stupidity of entire industries and social systems.