

Original citation:

Constable, Catherine (2018) *Surfaces of science fiction : enacting gender and "humanness" in Ex Machina.* Film-Philosophy, 22 (2). pp. 281-301. doi:10.3366/film.2018.0077

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Surfaces of Science Fiction: Enacting Gender and "Humanness" in *Ex Machina*

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Abstract:

This article explores two different conceptions of the postmodern surface and their take up in relation to mainstream science fiction cinema. Each offers a rather different genealogy for considering the surfaces of the science fiction film. The first traces Frederic Jameson's conception of postmodern superficiality and its dual role as a mode of reading texts and an aesthetic paradigm. The second traces Judith Butler's conception of gender performativity, its application to technology, and the expansion of performativity as a key mechanism for the enactment of "humanness". The reading of Ex Machina (Alex Garland, 2014) will explore the aesthetics of film's mise-en-scène with its plurality of textured and reflective surfaces. It will trace the performative constructions of gender and humanness that intersect across the film, before finally focussing on the ending as a way of addressing key issues at stake in the conceptualisation of surface readings.

Keywords: postmodern; surface reading; science fiction; performativity; humanness

This article will begin by examining two different conceptions of the postmodern surface and their take up in relation to mainstream science fiction cinema. The first traces Frederic Jameson's conception of postmodern superficiality, its dual role as a mode of reading texts and aesthetic paradigm, and its use in Vivian Sobchack's seminal analysis

Film-Philosophy 22.2 (2018): 281-301

DOI: 10.3366/film.2018.0077

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of the surfaces of science fiction film. The second traces Judith Butler's conception of gender performativity and Aylish Wood's development of it as a key mechanism for considering the enactment of "humanness" by different forms of filmic android/cyborg technologies. The reading of *Ex Machina* (Alex Garland, 2014) will begin with an exploration of the aesthetics of film's mise-en-scène with its plurality of textured and reflective surfaces. It will trace the performative constructions of gender and humanness that intersect across the film, before finally focussing on the ending as a means of reconsidering how we might conceptualise surface readings.

Superficiality and Surface Readings

Stephen Best and Sharon Marcus begin their introduction to different forms of surface reading by examining Jameson's (2009) famous paradigm of symptomatic reading in *The Political Unconscious*. For Jameson, the true meaning of the text lies outside it, creating a practice of reading that involves "moving beyond the text and across several interpretive 'horizons' to reach frameworks too vast and abstracted to achieve direct textual expression" (Best & Marcus, 2009, p. 6). The text is profoundly shaped by absence, due to its inability to directly present the Marxist conception of History, and "the critic restores to the surface the history that the text represses" (Best & Marcus, 2009, p. 5). The textual mechanics of repression are effected through the workings of ideology, which adds layers of duplicitous surfaces. Thus, within the Jamesonian paradigm, critical reading conjoins elucidation, the process of articulating the truth beyond the text, with unmasking, a process of excavating the repressed truth.

Jameson's placing of the binary surface/depth within a Marxist framework opposes the deceptive ideological surface with a strong conception of Truth. Indeed, Best and Marcus note that Jameson himself recognised "similarities between his totalizing Hegelian Marxism and Augustine's drive to read all texts in terms of Christian truth" (2009, p. 15). While both master narratives offer models of objective truth, the role of the critic differs. Jameson associates "the power of the critic with that of the God of biblical hermeneutics, who can transcend the blinkered view of humankind" (Best & Marcus, 2009, p. 15). Importantly, the possibility of transcendence is created by/through the action of unmasking – removing blinkers – thus the figure not only creates and sustains the value of the hidden depths of the text, it also secures the Truth that exists beyond the text.

Jameson famously nominates superficiality as "perhaps the supreme formal feature of all the postmodernisms" (1991, p. 9), exploring the

differences between modernist and postmodern art by contrasting van Gogh's A Pair of Boots (1887) with Warhol's Diamond Dust Shoes (1980). The first part of his interpretation of the van Gogh painting traces the ways in which it enables the viewer to construct "the initial raw materials" of a world beyond the text: "the whole object world of agricultural misery, of stark rural poverty and [...] backbreaking peasant toil" (1991, p. 7). This reading is paralleled with Heidegger's and both are described as "hermeneutical, in the sense in which the work in its inert, objectal form is taken as a clue or symptom for some vaster reality which replaces it as its ultimate truth" (Jameson, 1991, p. 8). However, Jameson argues that Heidegger fails to note the ways in which the use of colour in the painting constitutes a "Utopian gesture", opening up "a whole new Utopian realm of the senses, or at least of that supreme sense – sight [...] which it now reconstitutes for us as a semi-autonomous space in its own right, a part of some new division of labour in the body of capital" (1991, p. 7). This utopian gesture constitutes another kind of truth beyond the text that can only be elucidated by the critic. Importantly, any utopian vision of a possible future is defined through radical alterity – outside the source text, beyond the present, an alternative to the capitalist system.

For Jameson, Diamond Dust Shoes offers "a random collection of dead objects", which deny the critic any chance of elucidating the "vaster reality" beyond the text (1991, p. 8). "There is [...] no way to complete the hermeneutic gesture and restore to these oddments that whole larger lived context of the dance hall or the ball" (1991, p. 8). Deprived of a truth beyond the text, the postmodern surface cannot constitute a duplicitous ideological layer, it does not mask the mechanics of capitalism but instead foregrounds its complicity with the system. For Jameson, Warhol's picture displays its complicity and offers the wrong sort of depth: "the external and coloured surface of things - debased and contaminated in advance by their assimilation to glossy advertising images - has been stripped away to reveal the deathly black-and-white substratum of the photographic negative [which] subtends them" (1991, p. 9). The reflexive revelation of the mechanics of the photographic process is an "inversion of Van Gogh's Utopian gesture" because it constitutes a circular movement in on itself rather than gesturing towards to a truth beyond itself, which can then be fully elucidated by the critic (Jameson, 1991, p. 9). This circumvention of the truth that lies beneath/beyond marks the end of symptomatic reading.

The loss of the horizon – outside/beyond/above – marks the end of the possibility of radical alterity that is crucial to the creation of properly utopian (or dystopian) visions of the future, and has a particular impact

on Jameson's analysis of the science fiction genre. In traditional accounts of science fiction literature, the educative role of the genre is located in its construction of a future age or alternative world whose radical differentiation from the present opens up a space for a thoughtful engagement with that present (Palmer, 2009, pp. 171–172). For Jameson, postmodern science fiction, particularly the visions of the future offered by cyberpunk, cannot achieve such radical alterity. The futuristic nature of the contemporary present seen in its fulfilment of science fiction's predictions, causes "a modification in our relationship to those imaginary near futures, which no longer strike us with the horror of otherness and radical difference" (Jameson, 1991, p. 286). The future anterior of cyberpunk can no longer create "a relationship to the present which somehow defamiliarizes it and allows us that distance from immediacy which is at length characterised as a historical perspective" and this failure contributes to the end of history itself (Jameson, 1991, p. 284). The horizon - the outside - creates and sustains the possibility of differentiation that underpins the defamiliarisation necessary for a sense of history and the critical distance required to create/convey alternatives to capitalism.

The second edition of Vivian Sobchack's (2004) seminal analysis of the American science fiction film directly addresses and incorporates Jameson's writing on the postmodern in a new final chapter entitled 'Postfuturism'. However, her initial position is developed through a conception of the surface that is fundamentally different from the Marxist model. Sobchack argues that the defining feature of the science fiction genre is not to be found in the films' iconography or visual style, but rather in a specific surface relation that occurs between or within images: the 'visual surface of all SF films presents us with a confrontation between [...] those images to which we respond as "alien" and those we know to be familiar' (2004, p. 87). This confrontation creates the heightened visual tension that is said to be unique to the genre:

a tension between those images which strive to totally remove us from a comprehensible and known world into romantic poetry and those images which strive to bring us back into a familiar and prosaic context. (Sobchack, 2004, pp. 88–89)

In this model, the surfaces of the science fiction film, including non-representational special effects, are not the locus of duplicity or complicity but are rather a site of struggle between two opposed trajectories: a reaching towards that which lies beyond human comprehension and a movement back to familiar, human concerns.

Importantly, the non-anthropocentric truth beyond the text cannot be comprehended. The surface is the both the site of human truth and the space wherein its anthropocentric limitations can be exposed.

Within Sobchack's initial model, reading is not an excavation for hidden meaning or an elucidation of truths beyond the text. Instead, her film readings trace the ways in which the visual surfaces and narrative development work together to create a dynamic that privileges one opposing trajectory over the other. The narrative drive of the special effects driven science fiction film often resolves the visual tension of its surfaces by offering "a neutralization of the alien and the abstract" in a return to the human and familiar (Sobchack, 2004, p. 108). The key exemplar of an alien image that takes us to the poetic edge of human comprehension is the Star Child from 2001: A Space Odyssey (Stanley Kubrick, 1968). As one of the film's final images the Star Child is not contained by a developing narrative, which endeavours to fully explicate the significance of the figure in human terms. Within this model, radical alterity becomes the limits of comprehensibility, an otherness that cannot be assimilated within the terms of the human. There are echoes here of Burke's model of the sublime and its take up within literary theory as that which is necessarily inexpressible/inexplicable within language (Shaw, 2006, pp. 49–53).

Sobchack retains her initial model of the science fiction film by utilising Jameson to construct a new epoch within the genre, a second Golden Age, which is said to begin in the late 70s (2004, p. 225). Star Wars (George Lucas, 1977) and Close Encounters of the Third Kind (Steven Spielberg, 1977) mark "a strange new transformation, technological wonder [...] [becomes] synonymous with domestic hope" (Sobchack, 2004, p. 226). As a result, the tension between the alien and familiar characteristic of the visual surface of films from previous epochs is nullified as the alien Other becomes domesticated, indeed almost familial. The negation of the trajectory of reaching towards an inexpressible Otherness also undermines its reverse – the return to the human – reducing the play of difference to a singular universal humanism. Following Jameson, Sobchack reads the collapse of difference into totalising homogeneity as an expression of the pervasive movement of capitalism itself. At this point, the visual surface of the mainstream science fiction film becomes a locus of complicity. Such films "dramatize the familiarity of multinational capitalism, and represent its totalised [...] pervasion of worldly space in visualizations that valorize the cluttered abundance of consumer culture" (Sobchack, 2004, p. 300). Caught within the familial and the familiar such films cannot offer imaginative depictions of a radically different future and/or a critique of capitalism.

While Sobchack's overarching characterisation of the second golden era conforms to Jameson's model, her exploration of the ways in which these films convey the literal superficiality of the postmodern is more interesting. She argues that they adopt two key visual strategies: the deflation or inflation of space. The deflation of space is effected through the use of computer graphics and exemplified by films such as *TRON* (Steven Lisberger, 1982). 'The "deep" and indexical space of cinematographic representation is deflated – punctured and punctuated by the superficial and iconic space of electronic simulation' (Sobchack, 2004, p. 256). However, Sobchack does not simply pursue a familiar lament for the postmodern loss of reality and dimensionality, such films are said to present "an excess of surface" offering a vision of hyperspace that "hyperbolizes material and surface detail while it schematizes (rather than represents) texture" (2004, p. 256).

The second strategy, the inflation of visual space, has two rather different forms: 'an "excess scenography" so rich, intricate and complex that it tends to diffuse the film's temporal force' exemplified by films such as Blade Runner (Ridley Scott, 1982), and "a particular kind of emptied terrestrial space [...] free of [...] familiar material clutter" found in presentations of the natural terrain and night sky in mainstream films such as Close Encounters (Sobchack, 2004, p. 262). The cluttered scenography of the former brings the 'values of [...] density and complexity associated with the older "depth models" of realism and modernism [...] literally to the surface' (Sobchack, 2004, p. 266). This making superficial can be paralleled with the revelation of the substratum of the photographic negative in Diamond Dust Shoes. Both are forms of materialisation that make visible the mechanics of capitalism, foregrounding their complicity with the system. While Sobchack reads the excess of clutter and "omnipresence of waste" in such films as "monuments to the culture of late capitalism"; it is worth noting that her critical vocabulary also defines accumulation in terms of layers of texture, visual density and complexity (2004, p. 266). This positive emphasis continues in the analysis of low-budget science fiction films of the epoch, which are

characterised by the discontinguity of a busy, eclectic and decentered mise-en-scène that ... undermines ... [and] playfully mocks the temporal and causal relations that supposedly give narrative its coherence. All meaning is generated by spatial relations. (Sobchack, 2004, p. 269)

Here accumulation, decentring and juxtaposition combine to create a model of surface meaning – an expansion of Jameson's 'paradoxical slogan: [...] "difference relates" (1991, p. 31).

Sobchack contrasts her second model of surface reading with traditional symptomatic reading. The viewer's desire to see films such as *Repo Man* (Alex Cox, 1984) more than once

has nothing whatever to do with concealment, with cinematic or narrative "depth" with "hidden" meanings that must be teased out. Rather it has to do with a sense of having "missed" something ... There is more than meets the eye here, but the "more" is always available to vision, not hidden from it. (Sobchack, 2004, p. 271)

Importantly the visible is not simply elided with the literal or the obvious. To be visible is to be legible – but it is the viewer who generates meaning in terms of creating patterns of relationality across the surface. The active role of the viewer is clear: "we want [...] to generate meaning from the absolutely visible flux of material and action in complex but superficial relation" (Sobchack, 2004, p. 271). Thus Sobchack's study of science fiction offers two very different models of surface reading: a first in which the viewer traces visual tensions and the ways these are resolved by the overarching dynamics of the text; and a second in which the viewer imposes patterns on the heterogenous "flux" that constitutes the text.

I want to turn to a different model of the surface offered by Judith Butler's (1990) ground-breaking analysis of gender performativity and its take up in relation to science fiction. Butler's analysis of gendered subjectivity as a construct created through surface inscription impacts upon the key oppositions of surface/depth, manifest/latent that structure both psychoanalysis and symptomatic reading. Focusing on the key binary distinction outer/inner, Butler asks how the inner world comes to be conceptualised as a topographical space.

In what language is "inner space" figured? What kind of figuration is it and through what figure of the body is it signified? How does a body figure on its surface the very invisibility of its hidden depth? (Butler, 1990, p. 134)

Butler argues that the Christian inscription of the body as "a vital and sacred enclosure" creates and maintains the concept of the invisible soul within (1990, pp. 134–5). This can be paralleled with the ways in which versions of symptomatic reading deploy the figures of the duplicitous surface and concomitant possibilities of "unmasking" to construct the hidden depths of the text and/or the truth beyond it.

Butler's methodology – outside to inside – reverses the logic of traditional psychoanalytic models "in which physical expressions are perceived as the manifestations of inward feelings; [and] [...] bodily gestures are the symptoms of psychological states" (Vermeulen, 2015).

For Butler, behaviours, postures and gestures all serve as the external means through which gender is inscribed on the body: 'There is no gender identity behind the expressions of gender; that identity is performatively constituted by the very "expressions" that are said to be its results' (1990, p. 25). Importantly such behaviours are learned through imitation and continuously inscribed through repetition: "gender is an identity tenuously constituted in time, instituted in an exterior space through a *stylised repetition of acts*" (Butler, 1990, p. 140). The imitative structure of gender undermines Freudian and Lacanian models of singular moments of original gender identification, either via the interpolation of parental figures or the necessarily failed assumption of the phantasmatic positions of "having" or "lack".

In place of an original identification which serves as determining cause, gender identity might be conceived as a personal/cultural history of received meanings subject to a set of imitative practices which refer laterally to other imitations. (Butler, 1990, p. 138)

This breaking of the stability of causal logic, undermining the putative prior term in favour of continuous lateral movement, is typical of surface models.

Butler argues that the depth model of gendered subjectivity is created by a causal ordering of sex, gender and desire in which the first term is presented as the cause of the second and third. The equation: male causes masculine and desire for the female, combines causal and oppositional logic in that desire is conceptualised within a binary system of institutional heterosexuality. Drag performances are said to undermine both the logic of cause and effect and binary opposition.

If the anatomy of the performer is already distinct from the gender of the performer, and both of those are distinct from the gender of the performance, then the performance suggests a dissonance not only between sex and performance, but sex and gender and gender and performance. (Butler, 1990, p. 137)

Drag reveals the imitative structure of gender identity and its groundlessness, offering a mode of iteration that opens up "performative possibilities for proliferating gender configurations outside the restricting frames of masculinist domination and compulsory heterosexuality" (Butler, 1990, p. 141).

Aylish Wood takes up the concept of performativity in relation to technology, presenting it as a mechanism for the enactment of "codes of humanness [...] [that] include gender, race and sexuality" (2002, p. 9).

The shift to "humanness" is an endeavour to challenge the construction of an ahistorical, universal category of the human within Western philosophy. The "terms of humanness" most prevalent in the American films Wood analyses are: "self-reflexive consciousness, a capacity for communication, caring, a rationality balanced by emotions, freedom of choice and the need for community" (2002, p. 182). While the characteristics of consciousness and freedom are congruent with traditional philosophical conceptions of the human, their status as contingent, historical, socially constructed terms is not.

Wood focuses on films that present technology in the human-like form of the android or the cyborg. The enactment of humanness by these figures can be paralleled with Butler's analysis of drag. "In texts where humanness is a state acquired by or attributed to a technological being, the element of performance is especially foregrounded" (Wood, 2002, p. 120). The potential for disjunction between the anatomy of the performer and the enactments of gender/race/sexuality that it is compelled to perform in iterations of humanness is particularly overt. The presentation of grounding aspects of human identity, particularly self-reflexive consciousness, as learned via imitation reveals the lack of any necessary internal locus for such an identity. This, in turn, undermines the conception of a fundamental difference between human and machine.

Interestingly, Wood does not pursue the radical shift to the post-human offered by a machine that perfectly enacts the categories of humanness. Following Anne Balsamo (1996), Wood presents the imposition of these categories onto new technology as a conservative gesture, an endeavour "to stabilise the meaning of the technologies as human-like" (2002, p. 9). Thus, the perfect enactment of humanness and indeed humanitarian values offered by Call in Alien Resurrection (Jean-Pierre Jeunet, 1997) is ultimately read as a means of rendering technology safe (Wood, 2002, pp. 140-145). Wood privileges android/cyborg figures whose fragmented and disjunctive enactments of humanness foreground the performance as an imitation thereby creating a gap between the iterations of the human and the technology itself. This gap gestures towards the possibility of comprehending technology within its own terms outside the categories of humanness. Robocop (Paul Verhoeven, 1987) is said to convey "the difference of technology" despite the titular protagonist's capacity to learn, communicate and become part of a community (Wood, 2002, p. 151). Technological difference is constructed through moments at which the protagonist both endeavours and fails to instantiate humanness, thereby preventing its complete assimilation within categories of the human: "Robocop has something like memories, experiences something

like pain, is motivated by something like revenge. We can't say more than this" (Wood, 2002, p. 166).

Wood's analysis of films that successfully convey the radical alterity of technology can be compared to Sobchack's praise for those that sustain the tension between the alien and familiar, resisting resolution through dialogue, characterisation or narrative development. For Sobchack, the alien is defined as that which lies at the limits of human comprehension and thus comprehensibility; while for Wood, technology is that which exceeds complete categorisation within the terms of humanness. Sobchack's gesture towards alterity is accomplished through parallels with romantic poetry, thereby conveying the inexplicable, inexpressible sense of a sublime beyond language. In contrast, Wood pursues two strategies: giving examples of technological protagonists who fail to fully instantiate humanness, and noting a few who are categorized through different sets of terms. The first follows Butler's model in that the imposition of the terms of humanness simultaneously creates the possibility of their fulfilment and non-fulfillment, thereby opening up gaps that take the form of momentary disparity and dissonance. Such spaces of alterity are legible through their relation to the terms of humanness and thus function within the system rather than suggesting a space beyond it. The second strategy opens up the possibility of moving beyond the terms of classification themselves and is exemplified by the T1000 from Terminator 2 (James Cameron, 1991) whose ever-changing, non-skeletal physicality cannot be mapped as human-like. Wood deploys the discourses of Deleuzian rhizomatics reading the T1000 as "a flow of aggregations" (2002, p. 150). In this case, the change in the terms of classification, from humanness to rhizomatics, renders technological alterity intelligible. I will return to the issues of classification and legibility at the end of the film reading.

The Surfaces of Ex Machina

Ex Machina begins with a young, male, computer programmer, Caleb (Domhnall Gleeson), appearing to win a competition run by Blue Book, the company for which he works. First prize is spending two weeks with the boss, Nathan (Oscar Isaac), in his remote, isolated development facility/home. On arriving, Nathan persuades Caleb to sign a non-disclosure agreement before informing him that he is to be "the human component in a Turing test". Caleb defines the test as a two-hander between human and computer. "It's when a human interacts with a computer. And if the human doesn't know they're interacting with a computer, the test is passed." Turing's original test was based on an "imitation game" that actually had 3 participants: a man (A), a woman (B) and an interrogator (C). The last received written answers to questions

in order to determine which of A or B was a woman. The man aimed to deceive the interrogator, while the woman was required to help. Commentators note the importance of deception to the original game and later variants of the test (Saygin, Cicekli, & Akman, 2003, p. 25). The 3 components of the Turing test are: a machine (A), a human (B) and an interrogator (C) with the machine/computer endeavouring to pass for human. The narrative structure of *Ex Machina* comprises a series of test sessions that put "humanness" centre stage. Adapting Turing, the film also reflexively plays with the test, posing questions of who or what is being tested and by whom.

Caleb's first encounter with Ava takes place in a rectangular room whose concrete and glass structures echo the modernist design of the facility. The room is divided by two perpendicular glass walls, which conjoin the square, spectatorial chamber to the larger L-shaped space that contains Ava. Caleb peers into the apparently empty room, noting the cracks in the long glass panel adjacent to the speaking vent. There is a cut to a long shot taken from behind Caleb, he and his reflection flanking the right and left foreground of the frame. Ava appears in the mid-ground, also initially reflected in a line of mirrors on the left. This duplication of doubling ends as Ava moves screen left, taking centre stage and causing her mirror image to disappear. The background comprises a window onto a courtyard garden housing small shrubs and a single tree, which is also reflected in the line of mirrors. The positioning of Ava between layers of glass parallels that of a specimen caught between slides before being placed under a microscope for observation.

The long shot offers a dazzling play with space. The line of mirrors constructs depth perspective across the room while doubling and distorting the perimeters of the actual space. Linear details of the modernist design, specifically the dark seaming in the glass partition panels and the window frame, create a trompe l'oeil of rectangles, transmuting foreground into background in an endless play of layers of glass. The accumulation of visual layers recalls Sobchack's analysis of postmodern superficiality, specifically the inflation of space. However, the modernist spaces of Ex Machina differ from the cluttered mise-en-scène of Blade Runner, achieving textual density through the replication and intersection of the clean, minimalist lines of the interior spaces. The layered play set up by the reflections and *trompe l'oeil* renders the minimal, geometric aesthetic unstable by swinging it across two different axes. The continually shifting juxtaposition of the visual elements that play with/across the real and reflected convey the instability and duplicity of the entire scenario - both the Turing test and general conditions across the facility.

The staging of the first encounter between Caleb and Ava complicates their positioning as interrogator and machine - the doubling of their reflections suggests both have more than one role to play in the ensuing test. In the exchange of shot counter-shot that follows, their faces are partially obscured from view by opaque, circular patterns on the glass partition walls, constructing a reciprocal relation where each is a mystery to the other. The shot pattern offers reversals of Caleb's position as interrogator/observer, putting him under Ava's observation; while positioning her as both object and, to a more limited extent, subject of the gaze. The balanced pattern of the editing also underscores their equivalence as the human and machinic components of a Turing test, which is actually being overseen by Nathan watching on the monitors. The power dynamics of the two-hander are thus complicated by the hierarchy of the trio. Like the geography of the room, the relations between the protagonists constantly shift. Doubling conveys both a plurality of incompatible roles and incommensurable narratives, raising the issue of deception and trustworthiness at the level of the characters themselves.

Ava's body is first seen in silhouette as an outline of a human, female form with a transparent technological centre. Her interior structures combine the organic design of a human lumbar and thoracic spinal column with technological conduits of blue and white light. While her shoulders, breasts and genital area are comprised of opaque metallic material, her arms and legs are transparent showing their interior, mechanical-skeletal structures. The differentiation of materials resembles a child's doll with a soft body and plastic appendages. However, Ava's form is that of a pubescent female body, the metallic material shaping small breasts atop a transparent curving corset. Her most human textural feature is the flesh-like skin that covers her face and feet. While the combination of different textures displays Ava's status as machine/toy, built not born; they also create an impression of fragility and tactility that accords with traditional analyses of beauty and human femininity. Ava's body exemplifies many of the key qualities Burke attributes to the beautiful, specifically: smallness of stature, delicacy in the intricate details of her mechanical workings, smoothness in the polished, transparent body parts and skin, and fragility - a creature of silver, light and spun glass. In accordance with contemporary standards, Ava is youthful and very slender - the insubstantial shaping of the glass corset creating a new technological size 0. Thus, Ava is not merely an android imitation of the female human form, her bodily instantiation of key qualities of the beautiful feminises and, by implication, humanises her.

After the first session with Ava, Caleb endeavours to discuss his findings with Nathan. However, Nathan refuses to provide Caleb with answers to

scientific questions concerning Ava's linguistic abilities, saying: "How do you feel about her? Nothing analytical, just how do you feel?" to which Caleb replies: "I feel that she's fucking amazing", indicating an immediate sexual attraction. From this first conversation, Nathan steers Caleb's responses by repeatedly blocking his logical, analytical lines of enquiry in order to focus on emotion and sexuality. Having established Caleb is attracted to Ava, Nathan reframes the terms of the test as ascertaining whether or not Ava is attracted to Caleb. After session 3, Caleb explicitly asks whether Nathan gave Ava sexuality as "a diversion tactic", "like a stage magician with a hot assistant". This highly pertinent question is instantly dismissed as both irrelevant and foolish and the exchange reverts to the tactics and language of high school with Nathan telling Caleb Ava has a "crush" on him. If Nathan's positioning outside the sessions constructs him as interrogator, his overt manipulation of Caleb throughout parallels the behaviour of the duplicitous male participant in the original imitation game, thereby foregrounding the film's lack of a single character that conforms to Turing's dispassionate objective observer.

The performativity of humanness and gender comes to the fore in session 3. Ava presents Caleb with a picture of a tree – a transition from the fractal patterns of her previous drawings to the representational model he requested. The choice of subject, a tree, is typical of a child's first drawing, placing Ava within a human developmental model. However, the picture as a performative enactment of humanness is also a failure to repeat in that its sophisticated Pointillist style is beyond a child's artistic proficiency. Ava's gestures and language at the beginning of the scene enact child-like humanness more successfully. She kneels on the floor, looking up in order to show the seated Caleb her picture, the height disparity and her requests for his reaction and approval suggesting their respective roles as child and adult. This relation is reprised when Ava asks Caleb to close his eyes as she has a surprise for him. Disappearing from his view, Ava chooses an outfit from clothes in her wardrobe comprising a patterned viscose dress, matching blue cardigan, cream wool stockings and ballet flats. She does not present Caleb with an external object that she has crafted, such as another picture; instead, her re/crafting of her own appearance is the surprise. As a display of human development, Ava enacts the shift from girl to young woman within a single scene. However, it is worth noting that her status as technological object, machine/doll, is congruent with the objectification required for the enactment of successful femininity within the heterosexual matrix, a surprise/present for Caleb's appreciative gaze.

The imitative structure of gender performativity is most clearly indicated by Ava's choice of hairstyle. She lingers over the wigs, feeling

the different textures of the long blonde hair and dark bob. She chooses a close-cropped style that resembles the close-up of a gamin, Jean Sebergesque face at the centre of the pictures on her wall. The picture suggests type rather than a specific film reference - it could simply be an advert for the hairstyle. Later conversations indicate it might be a photo-fit drawn from Caleb's pornography history. When Ava reappears, the cropped hairstyle frames her face, giving it a waif-like aspect suggesting vulnerability and innocence. Pulling her cardigan down over her hands, a gesture that accentuates her adolescent youthfulness, Ava presents herself to Caleb asking: "How do I look?" to which he replies: "You look ... good". The pause indicates the inadequacy of the term "good", giving the impression that Caleb is bowled over by Ava's appearance. Given the dowdy nature of Ava's outfit, Caleb's discomfort is more explicable as a response to being confronted by a physical embodiment of his pornography preferences. Kneeling up, Ava asks directly if he is attracted to her, increasing Caleb's unease, and thus confirming an affirmative answer. She then leans back on her heels, the smooth, feline movement and accompanying satisfied smile, indicating her transition from child to woman.

In the scene that follows, Caleb watches Ava undressing on the monitors in his bedroom. Her slow, graceful removal of her woollen stocking constructs the revealing of the smooth surface of her glass leg as the uncovering of a sexualised body. The scene offers a retrospective reinscription of Ava's initial appearance as the presentation of a naked technological body, insofar as it displayed the markers of technology. The addition of clothing - the means of covering and uncovering those markers - thus constitutes a transformation into a nude technological body. While she is always presented as beautiful and therefore desirable, the inscription of Ava's own sexuality occurs through the addition of surfaces that can be removed. The layers of clothing provide access to the performativity of the striptease, "a stylised repetition of acts" occurring in the "exterior space" in front of the monitors, enacted for Caleb whose mesmerised reaction embodies the heterosexual male gaze (Butler 1990: 140). Importantly, the inscription of desire occurs differently for both characters. Caleb's reactions to the clothed/unclothed Ava construct desire as an overwhelming force that renders him inarticulate, thereby conforming to the depth model promulgated by the heterosexual matrix. In contrast, Ava's striptease resembles a drag act in that it displays its performativity by foregrounding the dissonance between the gestural performance - female desire and sexuality - and the performer's body - the nude technological body. While the scene shows the performative construction of heterosexual desire for a human

female subject, the dissonance also conveys the possible inauthenticity of the performance, harking back to a traditional alignment of femininity, performance and duplicity that predates Butler's model.

Reading Ava's presentation of femininity and female sexuality as performative draws attention to the "situation of duress under which gender performance always and variously occurs" (Butler, 1990, p. 139). Test conditions, specifically convincing Caleb that she passes for human, compel Ava's take up of the norms of heterosexual femininity. In session 5, Ava asks if failing the test means she will be switched off, conveying an understanding and fear of the prospect of the end of her own consciousness. Her awareness of the possibility of death provides another, different marker of humanness, as well as indicating the extreme conditions in which she is compelled to perform. In the conversation following the session, Nathan suggests to Caleb that the model after Ava will constitute the real break through, and that it will be constructed by re-using Ava's body, downloading/erasing her memories and rewriting the programme. The exchange sets up a key contrast between Nathan's treatment of Ava as a prototype, a non-human integer in a series, and Caleb's sense of her particularity – a unique (human) being.

After Nathan passes out drunk, Caleb gains access to his study/bedroom and the files on his computer, thereby learning about Ava's predecessors. The files show the development of three racially differentiated prototypes, the white, blonde Lily, the black-bodied Jasmine and the Oriental Jade. Jasmine is viewed learning to write and the failure of this experiment is suggested by the final shot of her inert figure huddled in the corner of the room. Jade is the first to use language, repeating a key question: "why won't you let me out?", before cracking the glass beside the speaker vent and finally destroying her own arms by scraping them against the concrete wall. The androids' reactions to experimentation and incarceration - the huddled Jasmine, Jade's descent into self-harm – clearly resemble a human response to mental and physical abuse. Their dreadful exploitation conforms to a "general pattern in sf" in which "female characters [...] [are] objects of enquiry and experimentation, their personhood denied, their bodies subjected to cruel tortures" (Bould, 2012, p. 47). However, in Ex Machina Caleb's revolted reaction to the files suggests the female androids achieve the status of persons through the presentation of their human capacity for suffering.

The files also display the bodily perfection of the unclothed androids – ectomorphic, small breasted and smooth skinned. Their continual sexual exploitation is made clear when Caleb discovers the inert prototypes hanging in wardrobes at the end of Nathan's bed. Caleb's horrified reaction on viewing the wardrobes' contents presents the

bedroom as a modern version of Bluebeard's chamber, which contained the corpses of previous wives. While Nathan views the android body as a vessel for future, improved reanimation, Caleb constructs it as a physical remainder/reminder of a former consciousness. The central positioning of Jade invites the viewer to note her restoration after the episode/s of self-harm, imbuing the body with a history, and thus forming a reading congruent with Caleb's response.

In the series of reveals that follow session 6, Nathan offers a précis of the perimeters of his test. Comparing Ava to "a rat in a maze", he continues: "I gave her one way out. To escape she'd have to use self-awareness, imagination, manipulation, sexuality, empathy, and she did". While the list of attributes is congruent with some of the key qualities of humanness in the films analysed by Wood, the emphasis on manipulation obstructs the alignment of empathy with caring for others or a sense of wider community. Nathan's test is designed to promote the egoistic individualism of survivalism and capitalist entrepreneurialism, thereby undermining any straightforward idealisation of qualities of humanness presented in the film. Moreover, the alignment of manipulation and sexuality reverts to traditional models of femininity as duplicity.

Nathan's jubilant presentation of his discovery of the plot between Caleb and Ava takes the form of demonstrating his planting of a hidden camera "in full view" of them both. While Nathan demonstrates his triumph by replaying his successful moment of misdirection and the aural track of the power cut in session 6, this is undercut by Caleb's revelation that the plot is actually proceeding according to plan. The replays invite the viewer to consider and reconsider what has been/is about to be played out "in full view". The ending of the film accords with Sobchack's second model of surface reading, presenting a textual excess that "is always available to vision, not hidden from it", which reflexively demands that the viewer consider patterns of relations between surfaces and acknowledge a plurality of possible combinations.

Nathan confronts Ava and demands that she go back to her room, positioning him as the father of an unruly adolescent. His violent attack on her recumbent body, breaking her arm with an iron bar, both recalls the domestic violence of the files and reconstructs it in the form of an abusive father/daughter relationship. While Nathan drags Ava down the corridor to her room, Kyoko stabs him in the back. Kyoko moves Nathan's head, forcing him to face her after the stabbing, a gesture that recalls his repositioning of her own face in order to command and reprimand her. The gestural appropriation gives the mute Kyoko a language while also presenting the stabbing as a response to her domestic incarceration and sexual exploitation. It draws on a classic revenge motif in which the

avenger forces the antagonist to face them and acknowledge who they are. The doubled significance of the performative gesture renders Kyoko's motives intelligible within a psychoanalytic model, a human response to abuse and trauma. Nathan's immediate reaction, striking her across the face with the iron bar to reveal her steel skeletal structure, is an absolute refusal to recognise Kyoko as avenger that reduces her to a machine.

In the second stabbing of Nathan by Ava, the avenger holds the gaze of the antagonist for a long moment exacting the required recognition. The revenge motif combines with the psychological model, enabling the viewer to read Ava's killing Nathan as the human response of an imprisoned and abused daughter. Nathan's final response, breathing her name, marks an important hailing of Ava as an individual rather than an integer in a series. His final word and her kneeling posture beside him underscores their respective familial roles. The father-daughter relation is a reminder that Ava's enactments of humanness are also imitations of Nathan. Ava's calm execution of her escape plan imitates his sociopathic treatment of human and non-human others as pawns in a game, continuing the film's undercutting of humanness as ideal.

Caleb, who has been knocked unconscious, does not witness the killing of Nathan. He comes round as Ava appears in the living room. She asks: "will you stay here?" and he echoes: "stay here" in a dazed and questioning tone. His reply is tonally complex, a non-answer to a question that is temporally ambiguous – stay here for now or forever? However, it is not a lie and Ava's brief nod indicates her understanding of it as a direct expression of choice. Caleb remains in the living room, watching Ava in Nathan's bedroom through the doubled glass windows that frame a tiny courtyard of plants, separating the two spaces. On finding the previous prototypes, Ava displays a fascination with texture, feeling Jade's hair and stroking her body, while also using her as a repository of spare parts, taking her arm as a replacement before peeling off her skin. This interaction differs fundamentally from Caleb's horrified response, which humanised the bodies by treating them as remainders of former consciousnesses.

For Ava, the encounter with Jade, like with like, sets up a play of textural differences. Her enjoyment of the tactile skin-surface of the replacement arm marks the start of a sensual encounter with her own body. This narcissistic, sensual encounter in which Ava reconstructs her bodily surfaces to become like Jade (and Kyoko) is framed within a heteronormative voyeurism presented by three reverse shots of Caleb craning around foliage to stare at Ava through the glass. In the longer take of Ava enjoying the sight and feel of her new body and long hair in the

mirrors, the camera position coupled with the four reflections displays her from all angles, constructing her as the perfect human female object of the heterosexual gaze. She then dons a short, white lace dress and there is a cut to a shot of Caleb in the living room, the close-up of his mesmerised face inches from the glass, recalling his reaction to her earlier striptease. The parallel presents the additional layers of clothing and skin as an enactment of an inverted striptease, the dress covering the nude female body, which, in turn, covers the nude technological body. At the same time the all-encompassing covering of the skin reconstructs the technological body as hidden depth, an intimate secret that is shared with Caleb. The voyeuristic framing of the inverse striptease suggests that its performative enactment of desire and desirability is, once again, for him. This is immediately undercut as Ava exits the building, leaving Caleb trapped in the living room.

Ava's exit is clearly a terrible shock to Caleb, undercutting his assumption of ownership constructed through the voyeuristic gaze and the narrative trajectory of his romantic fantasy of rescuing Mary from her black and white room. The viewer is also invited to anticipate a romantic resolution to the narrative through a key detail of the mise-en-scène in Nathan's bedroom, the Klimt portrait of Margaret Stonborough-Wittgenstein (1905), which is juxtaposed with Ava on her entering and leaving the room. The frothy textures of the white wedding dress and train visible in the portrait provide a visual model for Ava's choice of the white lace dress, suggesting her preparation for a romantic union with Caleb. The portrait sets up a model of imitation, a constellation of femininity, beauty and romance - the last in the form of monogamous marriage, which is then visually repeated and narratively subverted. The film's use of visual techniques and motifs to present Ava's leaving alone as a shock to the viewer foregrounds the key issue of how to make sense of her decision, which involves considering categories of humanness, gender, genre and the logics of surface and depth.

The ending can easily be read following the film's repeated alignment of femininity, female sexuality and duplicity. It accords with Nathan's suggestion that Ava merely pretended to like Caleb, using him as a means to a concealed end. The seductive surface thus covers over its underlying motivation – the hidden depths being Ava's desire to escape, which, logically also requires the removal of Nathan. The psychodynamic model of the duplicitous surface versus scheming depths is a staple of the construction of the femme fatale in *film noir*. Ava, like Diane Tremayne (Jean Simmons) in *Angel Face* (Otto Preminger, 1953), is a youthful femme fatale whose fine-featured, gamin beauty is the ultimate disguise for her deadly plans.

The patriarchal conditions of the facility and the Turing test mean Ava is always positioned within human character typologies and heteronormative power relations: either Nathan's femme fatale or Caleb's romantic partner. The moment at which Ava both imitates and fails to imitate the Klimt portrait offers an interesting negotiation with human cultural conventions of femininity and romance. The film offers a disjunctive juxtaposition of Ava's successful enactment of human femininity, desirability and sexuality with her walking away from Caleb. The latter can thus be read as a forcible rejection of the possibilities he represents: heterosexual coupling with a human male and monogamous romantic union. The simultaneity of the repetition and the failure to repeat undermines any causal linkage between female sexuality, heterosexuality and monogamy.

On Wood's model the failure to repeat marks the beginning of the possibility of contemplating the alterity of technology. Ava's choice of the lace dress can be seen as a non-repetition of the visual portrait insofar as it is based purely on texture. The importance of the textural feel of clothing and hair to Ava is evident across the film, from her first choice of the blue dress and gamin wig. The additional layers of hair, clothing and skin constitute a series of differential interfaces. The reconstruction of bodily surfaces from material and glass to skin changes the ways in which the android body touches and is touched by the wider world. Ava's body is itself performative – a tactile, aggregative construction comprised of substitutional parts and differential textural interfaces. At this point, the viewer's reading via the Klimt portrait exposes the limitations of reading Ava via the imitation and non-imitation of humanness, foregrounding the inadequacy of the conceptual categories themselves. Importantly, the technological is not that which lies outside human understanding per se; it is rendered intelligible/legible via patterns of repetition across the text as a whole.

Utilising repeated moments of non-repetition as the basis for contemplating the lived modalities of technology also facilitates a shift beyond the human types of romantic partner or femme fatale and the binarism of truth versus duplicity. Moments in which Ava does not successfully enact human femininity include her extolling the desirability of viewing a busy pedestrian and traffic intersection to Caleb in session 3. This is the space in which she is located at the end of the film – one that exhibits conditions of continuous change. The spectacle parallels the continual, relentless onward movement of the search engine, which forms the basis of her thought processes. The symmetry between the spectacle and the structures of her mind suggests that we could think of her leaving Caleb as a rejection of monogamous romance with

its limited, singular focus on the one. In addition, rather than viewing Ava's escape plan as always already formulated, the true motive beneath the duplicitous surface, we might see it as a reflection of her mental faculties: continually evolving, shifting and opportunistic, deceptive and truthful.

The ending of Ex Machina invites attentive viewers to think about the ways in which they are endeavouring to find and formulate patterns amid the heterogenous flux of surfaces. The film's playing of and with the Turing test foregrounds the importance of the categories of humanness. At the same time, understanding how and why the ending appears to be a shock, forces viewers to become aware of the limitations of the very conceptual categories the text invites us to use. It is at this point that the film challenges us to think beyond the categories of humanness, to focus on moments of non-repetition and to utilise them as a basis for rendering legible different modalities of subjectivity and bodily materiality. Thus, we can see that the loss of the figures of the horizon and repressed depths, which constitute the spaces of the political in models of symptomatic reading, does not actually mark the end of the political per se. The politics of surface readings lies in their capacity to make us see the limitations of our familiar conceptual categories, such as: humanness, gender and genre, while challenging us to draw together overlooked surface details to think through differential modes of conceptual organisation. In this model, radical alterity is not positioned outside, above or beyond the text, but occurs within it, in full view, in what is overlooked when we choose to remain within the comfort of the familiar. Ava's final ambiguous question: "will you stay here?" challenges us to endeavour to think through the other possibilities that are always already in play – part of a plethora of visual and tactile surfaces. The alternative is to remain trapped in the living room.

BIBLIOGRAPHY

Balsamo, A. (1996). *Technologies of the Gendered Body: Reading Cyborg Women*. Durham and London: Duke University Press.

Best, S. & Marcus, S. (2009). Surface Reading: An Introduction. *Representations*, 108 (1), 1–21.

Bould, M. (2012). Science Fiction Film Guide Books Series. London: Routledge.

Burke, E. (1990) [1757]. A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and the Beautiful. Oxford: Oxford University Press.

Butler, J. (1990). Gender Trouble. Routledge: London.

Jameson, F. (1991). Postmodernism: Or the Cultural Logic of Late Capitalism. London: Verso.

Palmer, B. (2009). Imagining the Future, Contemplating the Past: The Screen Versions of 1984. In S. M Saunders (Ed.), *The Philosophy of the Science Fiction Film*. Kentucky: The University Press of Kentucky.

Saygin, A. P., Cicekli, I., & Akman, V. (2003). Turing Test: 50 Years Later. In J. H. Moor (Ed.), *The Turing Test: The Elusive Standard of Artificial Intelligence* (pp. 23–78). Dordrecht: Springer.

Shaw, P. (2006). The Sublime. London: Routledge.

Sobchack, V. (1987). Screening Space: The American Science Fiction Film (revised edition). New Jersey: Rutgers University Press.

Vermeulen, T. (2015). The new "depthiness". e-flux journal, 61 (1), n.p.

Wood, A. (2002). Technoscience in Contemporary American Film: Beyond Science Fiction. Manchester: MUP.