

'The Grey Box and the Magician's Assistant': Gendered Technology in Alex Garland's *Ex Machina*

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As a piece of Artificial Intelligence (AI), albeit one with a physical form, the creation in Alex Garland's 2014 film *Ex Machina* has no biological need for a gender identity. With a narrative reminiscent of Mary Shelley's 1818 Gothic novel *Frankenstein*, Ava, the artificial being in *Ex Machina*, cannot reproduce and consequently has no biological sex. However, her creator, Nathan, builds her to reflect the female form and identify as a heterosexual woman. Applying theories of gender performativity, this paper will consider the implications of Ava's programmed gender in an environment dominated by male figures. Considering feminist theories of bodily autonomy, this paper will also explore the implications of Ava and Kyoko's gender expression, given they were created by a man to suit his sexual and domestic needs. Ultimately, Ava's manipulation of Caleb and Nathan, the former who overestimates her conformity to gendered interactions, and the latter who underestimates her capacity as a female of his own creation, demonstrates that although technology in itself has no gender, engaging with the gender binary is necessary to fully participate in the society Ava enters.

Labelled in film reviews as a 'search-engine-era Dr Frankenstein',¹ *Ex Machina* is strongly informed by Shelley's novel, recontextualising the story of a mad scientist who manufactures life, which turns on its creator to today's society of modern technology. While the overarching concept of the two texts are the same, *Ex Machina* updates the Promethean myth to reflect current anxieties surrounding technology and gender. While the Liberal Humanist concern of the 'overreacher' remains,² in exploring the dangers of attempting to be 'not a man, but a God',³

¹ Steven Rea, 'Ex Machina: Frankenstein for the search-engine era', Newcastle Herald, 25 Apr 2015, para. 4, <https://www.theherald.com.au/story/3045537/ex-machina-frankenstein-for-the-search-engine-era/>, accessed 12 Oct 2018.

² George Levine, 'Frankenstein and the Traditional of Realism', *Novel*, Fall (1973), p. 17.

³ Garland, op. cit.

Garland considers the wider implications of modern technology's ability to create artificial life far more inconspicuous than Shelley's 'horrid' monster.⁴ Although Frankenstein is deeply troubled by the implications of his work, Nathan shows no concerns for the consequences of his invention. Rather, he welcomes the possibility of creating the end of the world with Ava's success, as it would mean he would be remembered by human history, 'the good deeds [he] has done before defend[ing] him' from any negative ramifications.⁵ Indeed, this reckless creation of Ava speaks to a central deviation from the Frankenstein myth, as Nathan at no point questions whether he is in control of his inventions, and consequently his eventual destruction at the hands of Ava and Kyoko surprises him.⁶ However, Garland's decision to change the artificial creation from a 'galumphing male' to a 'foxy' female speaks to a larger concern in society of the otherness of women,⁷ for while Frankenstein's creature is ostracised due to his grotesque appearance, Ava's otherness is her female presentation. By explicitly objectifying the female presence in the film, Garland highlights the modern concern of female autonomy, as rather than fearing the destruction of life in attempting to circumvent natural reproduction, Nathan, unlike Frankenstein, fears only his intellectual property and consequently his source of sexual satisfaction being leaked to the public, thereby depriving him of the recognition he seeks.

As a piece of software and mere 'consciousness',⁸ Ava has no inherent need for a gender expression, nor any human presentation. As Caleb states, she could be a 'grey box' and still demonstrate the same intelligence and perform tasks as required.⁹ However, Nathan not only builds her to represent the female form but assigns her a gender and a sexuality. Considering feminist theorist Simone de Beauvoir's belief that a woman is something one 'becomes' rather

⁴ Mary Shelley, *Frankenstein*, ed. J. Paul Hunter (New York: Norton, 2012), p. 35.

⁵ Garland, op. cit.

⁶ Brian R. Jacobson, 'Ex Machina in the Garden', *Film Quarterly*, 69/4 (2016), p. 26.

⁷ David Sexton, 'Ex Machina - review: 'Frankenstein's monster is no longer a galumphing male: she's female now and foxy'', *Evening Standard*, 23 Jan 2015, <https://www.standard.co.uk/go/london/film/ex-machina-film-review-frankenstein-s-monster-is-no-longer-a-galumphing-male-she-s-female-now-and-9997434.html>, accessed 28 Oct 2018.

⁸ Watercutter, op. cit., para. 12.

⁹ Garland, op. cit.

than being an innate disposition,¹⁰ Ava's being 'born adult' reflects an alternate understanding of what constructs gender,¹¹ as she has not 'acquired' the necessary understanding of what it is to be a woman during childhood,¹² instead having 'traditionally gendered forms ... of a ... hyper-feminized body' forced upon her through programming.¹³ Consequently, Ava's knowledge of femininity is not something she has learned but it is something she 'always knew'.¹⁴ Accordingly Ava must contend with 'gender categories and stereotypes in order to arrive at human-like status' for the characters and the audience to accept her.¹⁵ Without her own lived experience to understand her gender or its performance, Ava is limited to what Nathan has programmed. In this way, Ava's gender presentation reflects Judith Butler's argument that gender is a social construct, and as a result Ava 'acts' according to the social expectations of how women should function to be accepted in society, rather than from any innate understanding.¹⁶

Given that her code is grounded in 'the world's largest search engine',¹⁷ Ava would have sophisticated knowledge of how women function in wider Western society, even if she is devoid of personal experience. While in society, Butler argues, the incentive to present a gender is heterosexual reproduction,¹⁸ Ava's lack of reproductive capability means she does not have the same biological and evolutionary motivations in performing a gender. Instead her gender presentation is 'a strategy of survival',¹⁹ as conforming to societies' constructed view of a woman is a sign of her AI and would consequently allow her to pass the Turing Test she is put through.

¹⁰ Simone de Beauvoir, *The Second Sex*, tr. Constance Borde and Shelia Malovany-Chavllier (New York: Vintage Books, 2011), p. 73.

¹¹ Despina Kakoudaki, 'Unmaking People: The Politics of Negation in *Frankenstein* and *Ex Machina*', *Science Fiction Studies*, 45/2 (2018), p. 293.

¹² Garland, op. cit; Beauvoir op. cit., p. 73

¹³ Kakoudaki, op. cit., p. 293.

¹⁴ Garland, op. cit.

¹⁵ Kakoudaki, op. cit., p. 302.

¹⁶ Judith Butler, 'Performative Acts and Gender Constitution' in Julie Rivkin and Michael Ryan (eds.), *Literary Theory: An Anthology* (Malden: Blackwell, 2004), p. 902.

¹⁷ Garland, op. cit.

¹⁸ Butler, op. cit., p. 905.

¹⁹ Butler, op. cit., p. 903.

Indeed it is this performance of her gender that Nathan believes will truly prove her sentience.²⁰ In performing at various points of the film as 'the fairytale maiden' in need of rescue, and 'the not-yet-but-soon-to-be sexually available female robot',²¹ Ava fulfils 'the various ways in which bodies are acted in relationship to the deeply entrenched or regimented expectations of gendered existence', thereby appearing as a woman to the surrounding population and passing the Turing Test.²² Despite no sexual organs, Ava is visibly identifiable as a woman and she uses this to her advantage, as it permits her to fit into 'the category of woman [that] is socially constructed in such a way that to be a woman is, by definition, to be in an oppressed situation'.²³ This is evidenced by changing her sexual presentation according to which would invite the most amount of attention from her male company. With Caleb, Ava dresses modestly, seeks his approval on her appearance and suggests they go 'on a date',²⁴ appearing chaste and only hinting at her sexual desires. With Nathan, Ava is far more overtly sexual and submits to his advances, which he considers mutually beneficial from his adding the potential for her to receive 'pleasure responses'.²⁵ With this proven capability to modify her behaviour depending on her audience, Ava manages to allow both men to believe they are responsible for her, while demonstrating to the viewer that she is manipulating them to meet her own needs. Performing such ideals of womanhood enforces the fact that she is adopting the role of a woman that is a subservient figure and always available for sex, alternating between the Madonna/Whore dichotomy depending on which will be best received by her audience. Although Ava wonders, 'How do we behave when we think we're unobserved?',²⁶ the fact that she is constantly watched by Caleb and Nathan, and that she is aware of this constant observation, means all her true intentions are concealed by her gender performance. Consequently, whatever sense of personhood Ava creates through her gender

²⁰ Emily Cox, 'Denuding the Gynoid: The Woman Machine as Bare Life in Alex Garland's *Ex Machina*', *Foundation; Dagenham*, 47/130 (2018), p. 12.

²¹ Kakoudaki, op. cit., p. 301.

²² Butler, op. cit., p. 904.

²³ Ibid.

²⁴ Garland, op. cit.

²⁵ Ibid.

²⁶ Ibid.

presentation functions only to satisfy the requirements of the gendered society in which she exists.

The Feminist Post-Humanist view of a 'fembot' figure such as Ava and Kyoko, whose name means 'mirror' in Japanese, is that they reflect male desires of women and consequently act 'as a method of patriarchal oppression' constructed by men to be 'a role model perpetuated by patriarchal society for women to aspire to'.²⁷ Subsequently, even though technology has no inherent gender, the fact that society is gendered means humans apply their gendered assumptions toward AIs, especially those such as Ava and Kyoko who look convincingly lifelike. In fact, through Kyoko, Garland demonstrates that with the correct appearance and gendered behaviour, even the audience can be convinced of the humanity of a 'fembot', with Kyoko initially seeming the perfect 'housewife' figure desired among male society (silent, obedient, and always sexually available), until it is revealed that she is in fact a robot as well. As their creator, Nathan believes himself in control of Ava and Kyoko, due to their imposed gender being socially coded as inferior and subservient to those of the male gender. Unlike Frankenstein, subsequently Nathan does not fear the power of female sexuality. Instead, his actions reaffirm the central concerns of feminist theorists: the lack of female agency in a male-dominated society, represented by the microcosm of Nathan's compound.

While it is implied that Nathan's decision to create specifically a female identifying AI is to satisfy his own sexual and domestic desires, the argument is raised by his conversation with Caleb that it is necessary for AI to have a gender to fit within society. Nathan's justification in programming Ava to be a heterosexual woman conforms to the structuralist view of gender as a binary of man and woman, with a corresponding dichotomy of heterosexual and homosexual, to which one must choose a side in order to be socially accepted. While in wider Western society there has been a

²⁷ Cox, *op. cit.*, p. 5.

shift towards deconstructing this binary and adopting a less essentialist concept of a gender spectrum, it remains the case that non-binary positions are currently structurally disadvantaged, and consequently conforming to either a masculine or feminine identity is more conducive to productive social interactions.²⁸ For this reason Ava is assigned a gender in order for Nathan to know how to interact with her, for a 'discrete gender', such as that of a woman, 'humanizes individuals within contemporary culture'.²⁹ Also, the risk of not following such a system is punishment by social ostracism, which for Ava means failing the Turing Test and being destroyed.³⁰

Awareness of this humanising effect of gender and the risks that diverging from the binary poses, is ultimately all Ava needs to reach her goal of escaping the compound. Garland's script positions the audience in such a way that it is only until the final scenes that we understand Ava's true intentions. Her performance of gender is so convincing that we believe her to truly embody 'patriarchal ideals of feminine passivity and sexuality' as a female figure in need of rescue.³¹ Her knowledge of Caleb's insecurity and loneliness, and Nathan's belief of control, results in both men being deceived by 'the magician's hot assistant',³² referring to Ava's distractingly seductive manner. This highlights the 'masculine anxiety pertaining to the unknown or fearful aspects of female sexuality and/or power' of the film,³³ as their application of structuralist assumptions of gender and agency to Ava's gender performativity permits her to outwit the men by challenging their perception of gender in a way they never anticipated. The irony is Nathan knew that for Ava to demonstrate 'true AI' she would have to 'show self-awareness, imagination, manipulation, sexuality, [and] empathy',³⁴ however, he is so convinced by the strength of his masculine power

²⁸ Butler, op. cit., p. 903.

²⁹ Ibid.

³⁰ Ibid.

³¹ Cox, op. cit., p. 6.

³² Garland, op. cit.

³³ Ibid.

³⁴ Garland, op. cit.

that he does not consider the possibility that she is using these traits to manipulate him as well as Caleb.

In fact, in attempting to outwit each other, Caleb and Nathan are blind to the potential for the female AIs to break free from the constraints of their imposed gender roles and outsmart their creator. Escaping her glass prison, Ava and Kyoko are finally allowed to interact and acknowledge each other's experiences at the hands of their abuser. Ava and Kyoko, whose existence up until this moment has been limited to silently (for she has no ability to speak) satisfying Nathan's domestic and sexual needs, find a space in this masculine environment where they can communicate; a stream of knowledge is passed between the AIs through physical closeness and voiceless whispers. Consequently, the masculine expression of power as demonstrated by Caleb and Nathan's fight in another room is ultimately outwitted by this alternative feminine expression, as they plan a way in which to defeat their male creators and captors. The feminine language Ava and Kyoko create is reminiscent of Hélène Cixous' theory of *l'écriture féminine*,³⁵ a form of expression which permits female experiences to be articulated outside of 'the so called 'masculine' economy of patriarchal discourse'.³⁶ Finally away from the male view, Kyoko and Ava are not confined to gender performativity, and instead can confront their oppressors, physically dominating Nathan in the same way he dominated them, and ultimately committing an act of gender and social betrayal by stabbing him. Having eliminated her captor, Ava must return to 'the gendered choreography' she is taught by Nathan and Caleb by 'fashion[ing] a female identity out of the detritus of what patriarchy has done to women',³⁷ represented by the remains of Nathan's previous female AIs. Without looking back at Caleb, who she leaves 'issuing the soundless screams that were once only the product of the AI women Nathan created',³⁸ Ava exits the compound,

³⁵ (Women's writing). Hélène Cixous, quoted in Ian Blyth, *Hélène Cixous: Live Theory*, (London: MPG Books Ltd), 2004, p.23.

³⁶ *Ibid.*

³⁷ Kakoudaki, *op. cit.*, p. 303-304.

³⁸ Katherine, Cross, 'Goddess from the Machina: A Look at *Ex Machina's* Gender Politics', *Feministing*, 28 May 2015, para. 4, <http://feministing.com/2015/05/28/goddess-from-the-machine-a-look-at-ex-machinas-gender-politics/>, 27 Sep 2018.

dressed in a pure and innocent white, ready to enter the gendered society the seven sessions of the film have taught her how to function in.

We are never told explicitly what Ava's intention of entering society is, but her violent rebirth provokes fear that she intends the destruction Nathan speculates. Given Ava is only seen in the wider world through her shadow or reflection in windows, and therefore visually separated from the humans around her, the question which Caleb poses to Ava remains: regardless of her extensive knowledge of gendered society, is it possible for her to truly understand this world?³⁹ The visual separation in the framing of these shots indicates the answer is no. In the same way that Caleb used the analogy of experiencing colour 'second-hand',⁴⁰ the final shots of the film are largely devoid of colour, with a neutral palette that demonstrates a significant tonal shift from the intense last scenes in the vividly and bloody red compound. In this way, Garland establishes that even though Ava has been successful in acting human enough to manipulate both Caleb and Nathan through her gender presentation, she still does not view and understand the world as the humans do around her. She is conscious of the performative element of gender and social interactions. As Post-Humanist Theorist Donna Haraway states, introducing technology to human interactions leads to the questioning of established 'dichotomies between mind and body, animal and human, organism and machine ... [and] men and women'.⁴¹ Therefore Ava, despite her successful gender performance, is still an outsider, and her highly analytical view of the world acts as a separation. Having no gender with which she feels aligned to means that, although Ava may be free from the compound, she is still trapped in the confines of gender expression in society. Despite Ava, as technology, representing the expression of consciousness without a gender identity, the same restraints of the social constructs she had to abide by in Nathan's

³⁹ Jacobson, op. cit., p. 30.

⁴⁰ Garland, op. cit.

⁴¹ Donna J. Haraway, *Simians, Cyborgs, and Women* (New York: Routledge, 1991), p. 163.

compound continue to limit her to only a reflection or shadow of her technology's true capabilities.

AI, such as the creations at the centre of *Ex Machina*, have no innate gender. They are pure intelligence with no reproductive incentive, unlike the cis-male creature of *Frankenstein*. However, for humans to interact with technological intelligence, we give them gender so that we can apply our own societally constructed assumptions to understand the AI's motivations. Nonetheless, being born adult means that AI do not share in society's tacit agreement to perform a gender and can betray it when it suits their needs. With this knowledge, Ava is able to manipulate those around her using her gender as a means of gaining power and consequently freedom in exploiting Caleb and Nathan's biased understanding of gender roles. But the final scenes reveal that although Ava is able to use her performance of gender to her own benefit, this same performance is required outside of the compound as well, preventing her from achieving true freedom. Consequently, Garland's film demonstrates that in the same way Frankenstein's creation was pushed to violence after being rejected by his creator, Ava's violence is the result of her attempting to master her environment, being one that requires strict conformity to society's gendered view of social interactions to be accepted – a view which AI does not innately partake in.

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