WRITING NON-HUMAN HUMANS: A CREATIVE WRITING EXAMINATION OF ROBOTS IN IAN MCEWAN'S *MACHINES LIKE ME* (2019)

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ABSTRACT

This research paper contributes to speculative fiction creative writing practice through its investigation into the ways in which storytelling techniques and literary devices are used to depict non-human characters, with a focus on robots and androids. This study examines Ian McEwan's *Machines Like Me* (2019), evaluating the language and literary techniques used to characterise robots, the effects of its post-humanist theme, and the ways it adheres to conventions of the speculative fiction genre. A literature review provides a contextual understanding of key philosophical concepts related to the novel, as well as contemporary discourse on robotics, specifically the sociocultural integration of advanced machinery. A textual analysis identifies and investigates McEwan's application of narrative techniques, including allusion and anthropomorphism. The discussion showcases McEwan's exploration of human-computer interaction and relationships and draws attention to key literary devices used in the characterisation of the robot as a non-human.

BIOGRAPHICAL NOTE

Kyle Mackenzie is a Ph.D. student at the University of the Sunshine Coast in Australia. His passion and expertise are centred in creative writing and science fiction literature, specialising in robots and artificial intelligence-related short stories. As a dedicated scholar and emerging author, he explores the intriguing possibilities and ethical complexities of AI and robotics through the analysis and creation of science fiction narratives.

Introduction

Ian McEwan's *Machines Like Me* (2019), follows 32-year-old Charlie Friend, living in an alternative 1980s London. Charlie spends his inheritance on an advanced humanoid robot named Adam, one of the first synthetic humans developed by the still-living Sir Alan Turing.

At the centre of this speculative alternate history, a love triangle evolves between Charlie, his neighbour Miranda, and Adam. Over the course of the novel, this allows McEwan to explore post-humanist technological hierarchies, the potential future of human-computer interaction, and the anthropomorphic characterisation of human-centred robotics.

This is a well-established field within speculative fiction literature. Notable examples of texts featuring robots as principal characters include: Karel Capek's *Rossum's Universal Robots* (1920), which explores the consequences of convenience in robotic labour (Christoforou & Mueller, 2016); Isaac Asimov's *I, Robot* (1950), best-known for introducing the 'Three Laws of Robotics'; Ted Hughes' *The Iron Man: A Children's Story in Five Nights* (1968), which applied the trope for younger audiences utilising the robot as a friendly deuteragonist; and Phillip K. Dick's *Do Androids Dream of Electric Sheep?* (1968), which 'explicitly plays with confusions between human personality and artificial or machine-derived intelligence' (Wheale, 1991, p. 298). Like these stories, McEwan's *Machines Like Me* offers a nuanced approach to the characterisation of robots, through its deployment of a post-humanist theme and its alternative history setting.

While these examples highlight the heritage of robots in fiction, and particularly science and speculative fiction, the topic of the anthropocentric posthuman and non-human has been subject to academic scrutiny since Donna Haraway's *A Cyborg Manifesto* (1985), in which Haraway employs the concept of the 'cyborg' to reject dualisms that perpetuate oppressive hierarchies and obscure the boundaries between humans and machines. The philosophical framework of Bruno Latour's actor-network theory challenges traditional distinctions between human and non-human agents (1996). Katherine Hayles' emphasis on information as a key factor of the post-human condition extends the post-human effect of the cyborg to cyberspace, addressing the intersection of virtual and physical realities (Belsey, 2013; McKee, 2001; Smith, 2016). There are surprisingly few points where the employment of robots with agency in fiction and discussion about post-humanism overlap, so there is much that speculative fiction writers can learn from McEwan's depiction of advanced machines as a representative of the non-human in *Machines Like Me*, and the ways the robots are characterised within thematic contexts related to post-humanism.

This paper therefore aims to answer the following research questions: *How can an analysis of Ian McEwan's Machines Like Me (2019) lead to a better understanding of non-human characters and what can speculative fiction writers learn from McEwan's approach?*

The study is designed from a creative writing research approach in which practice is considered within the context of existing literature on *Machines Like Me*, followed by a close textual analysis (Belsey, 2013; McKee, 2001; Smith, 2016), informed by literary analysis and techniques, including biblical allusion, anthropomorphism, and post-humanism. We begin with a review of literature related to McEwan's novel to contextualise the writer's use of an alternative history setting to speculate the development of robotics. While paying close attention to human-computer interaction and relationships, a textual analysis of *Machines Like Me* then identifies the use of post-humanist dynamics and anthropomorphic characterisation. A comparative analysis with stories showcasing similar narrative techniques and literary devices is then followed by a discussion of the study's insights on a creative writing approach to the incorporation of advanced machinery, in this case robotics, in the speculative fiction genre.

Literature review

Before analysing *Machines Like Me* as a work of speculative fiction, we must first define the genre and its conventions. As Marek Oziewics (2017) asserts, speculative fiction is a 'super category that houses all non-mimetic genres—genres that in one way or another depart from imitating consensus reality—from fantasy, science fiction, and horror to their derivatives, hybrids, and cognate genres' (n.p.). Speculative fiction focuses on humans and their reactions to new technologies and alludes to 'narratives about things that can potentially take place, even though they have not yet happened at the time of the writing' (Oziewicz, 2017, n.p.). According to Belinda von Mengerson (2018), speculative writing has 'the potential to [create] paradigm disrupting narratives', the works are 'research-informed' and explore futuristic concepts (p. 201). Further, as Gregory Currie asserts, 'imagination might be a source of knowledge; in imagining things, we might thereby come to know (possibly other) things' (1998, p. 161). Using Crawford Kilian's chapter in *The Handbook of Creative Writing* (2014), McEwan's use of the following speculative fiction conventions can be identified: 'An isolated society ... a morally significant language ... an inquisitive outsider ... the importance of documents ... [and] a "rational" or ideological attitude toward sex' (p. 135). McEwan's isolated society is shown in the novel's alternative history setting as a temporal variety of isolation. McEwan's inquisitive outsider is illustrated by Adam's character, as he observes human society as a non-human. Morally significant language and the importance of documents are shown through Adam's comprehension of the world's pool of literature, which he uses to predict the end of the novel (in the narrative). The 'rational' or ideological attitude toward sex is illustrated through conflict between the three main characters, beginning when Miranda and Adam sleep together in the first half of the story, and evolves as Charlie observes and is intimidated by Adam's humanisation and growth. This dynamic introduces the underlying post-humanist theme that develops throughout the narrative, which is explored in more detail below.

Helen Kopnina (2019) defines post-humanism, specifically in its relation to anthropology as 'associated with the notions of social change, responsibility, and multispecies coexistence', noting that anthropocentric post-humanism speaks to the 'hierarchical relationship between humans and nonhumans' (p. 2). McEwan explores this human and non-human hierarchy through Charlie and Adam's relationship. As Indrajit Patra (2020) asserts in his analysis of McEwan's novel, 'Adam forces Charlie to accept the vision of a relational, symbiotic, interconnected, and highly networked mode of existence where the humans as well as their non-human counterparts continue to influence, define and redefine each other' (p. 613). As a consequence of the growing humanisation of machines in speculative fiction, philosophers have theorised what it would mean to be human in an era that has undergone significant robot or AI-driven social change (Kopnina, 2019). Post-humanist theory speculates an anthropological shift in the ways we see ourselves, leading to privileging individuality or a need to be distinct from human-like machines (Dow & Wright, 2010). Although, Laura Colombino (2022) argues this individuality is counterproductive and instead suggests a hybrid relationship in which humans and social robots can benefit each other. Colombino examines *Machines Like Me* with a focus on computer science and neuroscience to investigate the posthuman mind and the role of agency in the development of the human species, from its biological roots to its possible digital future. In this way, McEwan utilises Adam as a representation of the post-human, drawing on the advent of non-human consciousness as a theme to reiterate the value of agency and postulate ways narrative frames the mind and thought (Colombino, 2022). Pramod K. Nayar (2020) addresses this human-machine symbiosis or collective consciousness, considering the ways *Machines Like Me* explores human-computer interaction and relationships. Nayar illustrates how Adam, Charlie and Miranda act as co-dependent equals, highlighting the complex nature of the unspoken (or unwritten) illusion of control that Charlie has over Adam. Through the novel's example of a post-human relationship, McEwan dehumanises humans and humanises robots, imbuing Adam with complex human emotions like honesty and empathy, which contrast the shallow, materialistic interests of Charlie and Miranda (Gulcu, 2020). Further, Adam's 'moral superiority over human beings' is used as a device to relay McEwan's cautionary message that the loss of ethical values is destructive to human society (Gulcu, 2020, p. 181). For comparison, Phillip K. Dick's *Do Androids Dream of Electric Sheep?* (1968) is another novel that features humanoid robots that blur the line between the human and the non-human. Where McEwan's alternative history setting affords the cautionary exploration post-humanism, Dick's *Androids …* offers a pessimistic vision of a post-humanist future inspired by the American eugenics movement of the 1960s (Pottle, 2013). While both novels explore the increasing similarities between humans and non-humans, *Machines Like Me* presents the persistence of anthropocentric values and the survival of the human, whereas *Do Androids Dream of Electric Sheep?* perpetuates a narrative in which humans have assimilated with androids, despite their negative feelings toward each other (Vinci, 2014). Ian McEwan's *Machines Like Me* employs a fictional narrative enhanced by the conventions of the speculative fiction genre to draw attention to our increasingly post-humanist culture through its anthropomorphic characterisation of robots and

suggests that our anthropological understanding of ourselves will likely change with the real-world introduction of such advanced technologies.

A key element in the characterisation of robots is ethics, particularly the ways in which robots interact with humans (Friedman & Kahn Jr., 2007) and the rights they are given (Coeckelbergh, 2010). Ethical robots, both in the real and fictional world, are often evaluated using several ethics frameworks, each with a different approach and value hierarchy (Huang et al., 2023). While the approach varies, the aim of each system is to govern or control the behaviour and function of robots to ensure the safe sociocultural integration of machines into human society (Dignum, 2018). Common ethical frameworks include, consequentialism, which determines if an action is right or wrong based on its consequences (Card & Smith, 2020), deontology, which judges the action itself (Alexander & Moore, 2021), and virtue-based ethics as an internal system focusing on moral virtues, often imagined as an advanced, moral variety of machine learning (Govindarajulu et al., 2019). These ethical systems are addressed further in an article by Bruce King entitled, *The Testaments; Quichotte; Machines Like Me and People Like You* (2019), in which he discusses the lack of ethical models designed to enable or inform artificial intelligence (or a robot possessing artificial intelligence) of its function in human society at a meaningful level. King details, through McEwan's novel, the aspects of life in our society robots (possessing artificial intelligence) are expected to understand, including the unspoken rules of social etiquette and moral values, and do so with 'no models to follow' (p. 870). Although, the speculative and science fiction space has taken strides in the theorisation of such a system, despite King's claim that there is no 'model to follow', perhaps due to the lack of thinking machines. Isaac Asimov's 'Three Laws of Robotics', first introduced in his short story *Runaround* (1942), is perhaps the best-known example of an ethical model for robots. Asimov's laws represent a human-centred approach, prioritising humans over robots, and controlling when and what action is appropriate behaviour for machines. For example, Asimov's laws dictate that a robot must: not harm human beings, obey a human's orders, and protect its own existence, exclusively in this order. The order of the laws is paramount in understanding the potential issues of a human-centred approach, as it establishes a value hierarchy with humans at the top and robots at the bottom. The result in Asimov's short stories is that a robot's 'life' is less valuable than a human's, and, less valuable than a human's orders. *Machines Like Me*, however, subverts the role of robots in Asimov's Three Laws (Shang, 2020). Humans are liable for the machines they own; a modality which leads to Charlie's decision to 'kill' Adam in the novel's climax. *Machines Like Me* portrays an alternate approach that extends the ways social robots are integrated into society, alluding to the evolution of occupational fields of healthcare and the potential displacement of labour-focused jobs as a consequence of the introduction of working robots (Gaggioli et al., 2021).

Where ethics informs sociocultural aspects of the literary characterisation of robots, there must also include a description of their physical appearance, but what will (or do) these robots look like? As Hirotaka Osawa et al. (2022) explain, 'The acceptance of AI and robotic anthropomorphic systems in society has been a major theme in [science fiction] for many years' (p. 2124). A study conducted by Eduardo Sandoval et

al. (2014) examined the role of anthropomorphic design in 'robots that look and behave as humans' (p. 54). They indicate that fictional robots often have several characteristics, including 'anthropomorphic bodies', 'communication skills', and 'emotional capabilities', and possess the ability to interact with humans 'through diverse mechanisms such as non-verbal and verbal communication cues (for example, body language, voice, gestures, gaze or facial expressions), and they use this interaction to accomplish certain tasks' (p. 56). As Jakob Złotowski et al. (2015) assert, anthropomorphic design is particularly significant for robots due to their highly anthropomorphizable design. The following section discusses Ian McEwan's characterisation of 'Adam' as an example of this kind of anthropomorphism.

Machines Like Me

Having considered the theoretical underpinnings of *Machines Like Me* (2019), we now analyse the ways McEwan's use of a variety of literary techniques reinforce its post-humanist speculations and characterisation of the non-human. Their recognition affords a deeper understanding of the ways these techniques can be employed in and support robot-related creative writing practice.

Machines Like Me deploys discussion of a robot to examine the intricacies of the human condition, the essence of what it means to be human, and the depth of multi-levelled human-computer interaction (HCI). McEwan's novel highlights a human-robot relationship through the love triangle between its three main characters, Charlie, Miranda, and Adam. Charlie impulsively purchases Adam, a first-of-its-kind android, and asks his upstairs neighbour and love interest, Miranda, for help in an effort to progress their relationship. While the pair wait for Adam's battery to charge, they are as Charlie thinks, 'Like eager young parents, we were avid for his first words' (McEwan, 2019, p. 3). The use of simile foreshadows Charlie and Miranda's relationship, which develops further when Charlie proposes that Miranda be responsible for half of Adam's personality programming, saying, 'We would be partners, and Adam would be our joint concern, our creation. We would be a family' (McEwan, 2019, p. 22). The family dynamic changes throughout the novel as the story progresses and characters grow, exploring the breadth of post-humanist relationships by presenting a hypothetical future of HCI. At first, Charlie is intrigued by Adam in a social context, illustrated in the ways Charlie and Miranda marvel at their interactions with Adam and pay close attention to the smallest details of his anthropomorphic design.

> [his eyes] could open at any moment and find me looming over him. He
> was muscular around his neck and spine. Dark hair grew along the line of
> his shoulders. His buttocks displayed muscular concavities. Below them,
> an athlete's knotted calves. (McEwan, 2019, p. 9)

Adam becomes somewhat of a sexual or romantic rival for Charlie, shortly after, leading to discussions between Charlie and Miranda about consciousness and the value of 'thinking' machines. Adam evolves to a point of near individuality and makes

complex moral decisions by the end of the novel. For example, this scene in which Adam gives Charlie and Miranda's money to others, 'With the remaining £50,000 I visited various good causes I'd notified in advance' (McEwan, 2019, p. 272). The 'good causes' Adam refers to are homeless shelters, state-run children's homes, sexual assault victim support centres, even a year's worth of an old lady's rent, who he says, 'was about to be evicted' (McEwan, 2019, p. 272). Adam accepts new responsibilities around their home, like gardening, 'He was helping to pull up weeds. … I had brought him outside because his dexterity was still a matter of interest to me. I wanted to watch him handle a hoe and a rake' (McEwan, 2019, p. 66), to find and develop Adam's role in the family.

McEwan's decision to set the narrative in an alternative history of London in 1982 shapes the *Machines Like Me*'s narrative in several crucial ways. The first is the alternative result of the Falklands War, which (in the novel) was lost by Great Britain. This detail is particularly important due to the political and economic implications it has on the narrative, namely Jimmy Carter remaining president for a second term, and the failing British economy, an element which lends itself to Charlie's (and eventually Adam's) occupation as a stock trader. The second detail of McEwan's alternate history, which has a more direct influence is that Alan Turing is still alive. Alex Kasman's (2021) review of *Machines Like Me* notes that Turing's status as a public figure and his general inclusion in the story has some hidden consequences. Turing's status as a public figure partially influences Charlie's decision to purchase Adam in the beginning of the novel, as shown in the following section.

> I'd made a reckless decision, but I was encouraged by reports that Sir Alan Turing, war hero and presiding genius of the digital age, had taken delivery of the same model. (McEwan, 2019, p. 2)

This background influence also includes a part in the Falklands War, of which Turing's 'open-source movement' is partially responsible for the outcome. Turing develops from a background character to direct interaction with the protagonist and becomes a crucial part of Adam's and Charlie's story (Kasman, 2021).

For context, Alan Turing (in the real world) was the inventor of the Universal Turing Machine, which later served as the foundation for the first computer. Turing is often mentioned in conversations about artificial intelligence, with his famous 'Imitation Game' (also known as the 'Turing test') being a widely researched and applied system for defining machine intelligence and human-like thinking capabilities. See James Moor's book, *The Turing Test: the elusive standards of artificial intelligence* (2004), which explores the classification of machine intelligence, the goal of the Turing test, and its potential future applications. Understanding who Turing was in the real world is essential because it can provide a 'deeper appreciation' of the narrative and the alternative history McEwan built (Kasman, 2021). For example, Kasman (2021) states that time and technology appear to progress faster as a result of Turing living past 1954, the year he died by suicide in the real world. Further, some of the Adams and Eves die by suicide as a result of their integration into an 'imperfect' human society (2019, p. 180), which is perhaps a reference to Turing's (real-world) suicide. Turing's

influence on the technology featured in the story, as well as the way the world has adapted in its perception and acceptance of sexuality, which played a substantial role in Turing's life, illustrates how speculation in McEwan's alternate history was amplified by Turing's inclusion in the narrative.

Like McEwan's other novels (*Atonement* 2001 for example), *Machines Like Me* is gilded with biblical allusion. In this case, the allusions relate to examination of the theory of creation woven through the narrative. The androids' names, 'Adam' and 'Eve' are the most obvious. Another explicit example can be found in the opening paragraphs, where McEwan describes the emergence of 'thinking' machines into human society, as 'a creation myth made real' (2019, p. 1). Charlie's growing envy of Adam is perhaps a subtler example of biblical allusion, seen in the aforementioned love-rivalry dynamic, and centred in the Bible's tenth commandment, 'thou shalt not covet'. These references accumulate to strengthen the relationship between the themes of creation and being. Charlie raises the question underpinning the novel and possibly the question McEwan wants the reader to ask; are robots a 'triumph of humanism – or its angel of death' (2019, p. 4).

While there is more to discuss, themes of post-humanism as they are presented through moments of Adam's characterisation, his actions, ideas, and worldview should be noted. These are perhaps most evident in moments in discussion of his 'occupation' as a stock trader. Adam learns of the profession through Charlie's interest, and to Charlie's chagrin, quickly outperforms him, which adds to burgeoning resentment layering the tension in the love triangle and enhancing the post-human dynamic.

McEwan illustrates how the characterisation of the robot has an effect on the novel's examination of human emotional responses toward a non-human object or character through simulated emotions, behaviours, appearance, and social status to humanise Adam and provide an example for speculative fiction writers (Fussell et al., 2008). This is exemplified in the following scene in Charlie's kitchen, where Charlie describes Adam's appearance and alludes to his personality:

> Now I noticed that he'd pulled up the sleeves of the sweater to his elbows
> to expose powerful wrists. He'd interlaced his fingers and was resting his
> chin on his hands. And this was him without a personality. From where I
> stood, with the light picking out his high cheekbones, he looked tough, the
> quiet guy at the bar you'd prefer not to disturb. (McEwan, 2019, p. 29)

The notable use of the 'He' pronoun and the intimate description of Adam's wrists, fingers, chin, hands, and cheekbones suggest Adam is more than a machine. Charlie emphasises the absence of a 'personality', undermined by a description of Adam being the 'tough', 'quiet' type, as if he is intimidated by Adam's masculinity, which further develops the love-rivalry dynamic between the two characters and aligns with Charlie's sense of inferiority throughout the narrative.

Conclusion

The intricate interplay of robotics and post-humanist relationships come alive within the alternative 1980s London of Ian McEwan's *Machines Like Me* (2019). McEwan navigates uncharted territories of post-humanism through the lens of a love triangle involving Charlie, Miranda, and the android Adam. The novel provides insight into the human condition within an evolving technological landscape through its application of literary techniques including biblical allusion and anthropomorphism. The narrative finds resonance in the realm of ethical frameworks, where traditional concepts of robot ethics are reimagined, and showcases how the philosophical underpinnings of a theme can contextualise creative work and shape its overall influence through its post-human approach. The anthropomorphic characterisation of Adam emerges through vivid description and human-like attributes and his 'evolution' beyond mere machinery invites readers to ponder the boundaries of human identity. Complexities of a love triangle underscore the novel's thematic exploration, revealing layers of human emotions and interactions which transcend the human-robot binary. Embedded within the text are reflections on post-humanism, manifesting through Adam's philosophical musings and actions. McEwan's portrayal of Adam's evolving self-awareness raises fundamental questions concerning the nature of consciousness and the symbiotic relationship between humans and machines. Through these dynamics, McEwan challenges readers to reconsider their understanding of humanity in a world in which technology breaches new frontiers, intertwining the speculative with the conceivable. *Machines Like Me* enriches the realm of speculative/science fiction by engaging with the intricacies of science, ethics, and humanity. It highlights the potential for speculative fiction writers to explore and articulate complex themes through its innovative approach to speculation, particularly around the use of an alternative history setting as a vessel for exploring a hypothetical society and characters built on real-world technological advancement. As the literary landscape continues to evolve alongside technological advancements, McEwan's novel serves as a guide for speculative fiction writers seeking to navigate beyond society, as it is known today to the uncharted territories of a human experience influenced by social robots.

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