ENCOUNTERING THE MACHINE: TOWARDS A POSTHUMANIST ETHICS AND RELATIONAL MORAL PARADIGM IN IAN MCEWAN'S *MACHINES LIKE ME*

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ABSTRACT. This work explores the intricate connection between contemporary philosophical debates in the ethics of technology and speculative fiction through the analysis of the novel *Machines Like Me* (2019) by British author Ian McEwan. In line with McEwan's continued literary interest in the intersection of science, morality, and ethics, this novel scrutinises the moral complexities that emerge from the encounter of humans with a technological other. Following the postphenomenological and relational ethical approaches of Peter-Paul Verbeek and Mark Coeckelbergh that overtly align with posthumanist thought, the article reassesses the moral dilemmas that emerge when a conscious nonhuman other challenges traditional ethical codes and the core of humanist moral ascription.

Keywords: Ethics, moral novel, posthumanism, philosophy of technology, postphenomenology, Ian McEwan.

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ENCUENTROS CON LA MÁQUINA: HACIA UNA ÉTICA POSTHUMANISTA Y UN PARADIGMA MORAL RELACIONAL EN *MACHINES LIKE ME* DE IAN MCEWAN

RESUMEN. Este artículo explora la compleja conexión entre los debates filosóficos contemporáneos sobre la ética de la tecnología y la ficción especulativa a través del análisis de la novela *Machines Like Me* (2019) del autor británico Ian McEwan. En línea con el persistente interés literario de McEwan en la intersección de la ciencia, la moralidad y la ética, esta novela examina las diversas complejidades morales que surgen del encuentro de humanos con un otro tecnológico. Siguiendo los enfoques postfenomenológicos y filosófico-relacionales de Peter-Paul Verbeek y Mark Coeckelbergh que se alinean abiertamente con el pensamiento posthumanista, el artículo reevalúa los dilemas morales que surgen cuando un otro no humano consciente desafía los códigos éticos tradicionales y las bases de la adscripción moral humanista.

Palabras clave: Ética, novela moral, posthumanismo, filosofía de la tecnología, postfenomenología, Ian McEwan.

1. INTRODUCTION

Since the beginning of his literary career, Ian McEwan has demonstrated an immense fascination with science and technological advancements, a particularity that he has captured in some of his novels like *Enduring Love* (1997), *Saturday* (2005), or *Solar* (2010). This interest in science, however, appears to the reader more as a pretext to contemplate the implications and effects of scientific developments on individual human lives and relations rather than as a substantive inquiry on the actual technical and scientific theoretical issues. According to Ferrari, science enters McEwan's fiction "on the spur of a genuinely humanistic urge" (251), as it aims to challenge individual and cultural convictions and certainties by problematising through science how human characters perceive and behave in a given reality. McEwan has been recognised as one of the many fiction writers, together with Ishiguro or Kingsolver, to name a few, who have contributed to what Brockman named "the third culture" (1). The main premise is that the differential structural and content-wise traits that separated the humanities and the sciences throughout modern times have become dimmer, and many noticeable authors and scholars from different fields of expertise have adopted techniques, topics, and writing strategies that bridge the previous gap between the two opposing "cultures" (Snow viii). Following this line, writers of different genres have resorted to science and scientific discourses, as they have become more involved in them, in order to find inspiration to explore the many and varied ways in which bio-technological developments are challenging traditional epistemological and ontological "truths", as well as our semiotic categories and preconceived humanist assumptions.

As featured in McEwan's novels, these individual and cultural alterations that technological progress brings forth are deeply intertwined with ethical and moral issues, something that he has likewise prolifically captured along his literary career both as a central thematic line–some people even talk about the "McEwan's ethical turn" (Schemberg 28)–and, considering the metanarrative level, as a way to purposefully examine the moral possibilities of literature and the novel itself (Malcom 15). McEwan's literary ethics generally solicits readers' imaginative understanding to focus on morality by mapping and stepping into the mind of others, which, as often stated by the author, is the main achievement of fiction (Lynn and McEwan 51). This ethical approach places the human(ist) subject at the very centre of the narration, generally by having an autodiegetic narrator, and morality emerges through encounters between this subject and the human others in the form of fictional characters, something that consequently sheds light on the nature of the moral relation of the nonfictional "I" with the rest of human beings. For morality to arise, then, awareness of "the Other" must be elicited, a principle that is in accordance with liberal-humanist ethics and with Levinas' philosophical line of thought (Amiel-Houser 129). Nonetheless, McEwan's 2019 novel revolves around a rather distinct type of ethical encounter, one between a human subject and a technological nonhuman with consciousness. That being so, the author places the readers at the centre of one the most relevant philosophical debates in the ethics of technology today, as it raises a complicated moral situation when we, by being face-to-face with a technological other, are forced to reassess the nature of the standard model for moral ascription and the ethical responsibility that it elicits. Inevitably, *Machines Like Me* conducts readers to think in "amodern"–beyond the modern subject-object distinction as upheld by Latour (47) and Verbeek (*Moralizing* 17)–or in posthumanist terms of morality and the ethical consequences that give rise to the possible development of intelligent machines.

In relation to this, it is no surprise that *Machines Like Me* has been widely and cohesively read and critically analysed as a speculative fiction novel. The genre, as defined by Arias, includes narrative texts in which some scientific or technological alteration is introduced in such a way that it is credible for twenty-first century readers, as it still provides a familiar and relatable setting to them (381). Even though it is missing some literary aspects that may be seen as defining of this generic category, like a temporal line involving the relatively near future or an other-than-human narrative voice (something that could be interpreted as McEwan's departure from the label of speculative or science fiction writer), the critical and literary analysis of the novel appears significantly more straightforward and fruitful when looked at through the lenses of the speculative fiction tradition. The main plot, for example, involves the convoluted relationship between Charlie and Miranda, a newly formed couple, with Adam, one of the first twenty-five conscious androids created by Sir Alan Turing, who in this alternative version of 1982 London is alive and working on the development of Artificial Intelligences. Nevertheless, neither the setting of the novel in this alternative British history–which might make us think of it also as an example of the "uchronia" genre (Ferrari 255)–, nor its featuring of one of the most classic sci-fi motifs, the posthuman android, can be accounted as the only literary particularities that

contribute to reading the novel as a contemporary speculative text. Among other narrative characteristics, the storyline exposes continuous thematic references to the Frankenstein myth, coupled with direct allusions to Mori's "uncanny valley" (33), as well as very reflective speculations carried out by both humans and robot about the future of art and literature, or the essence of life in a post-human, post-singularity world. In any case, and regardless McEwan's generic intentions and alliances with the speculative tradition, there is no doubt that *Machines Like Me* takes from, and most importantly adds to, the intertextual dimension that constitutes the speculative genre "mega-text" (Lampadius 15).

Notwithstanding, above all this, *Machines Like Me* speculates on the nature of (human) morality and moral decisions, and on the difficulties of establishing universal moral codes in today's ethical philosophy. In addition, it questions the possibility of nonhuman moral agency and the ethical responsibilities that designers who engineer autonomous and intelligent technologies, as well as their owners, bear. The intersection of all these topics explains why critics have widely interpreted the novel with a special focus on the ethical and moral dimension of the plot and its "three distinct strands" (Księzopolska 415) that involve love affairs, adoptions plans, and a crime scheme. Some scholars like Avcu have delved into these issues by paying attention to how ethics is implemented in the text as an example of what he calls a "postmodern ethics" (48); others, like Horatschek, centre on the contrast between Kantian and "moralised ethics" (129), whose analysis also contributes to the field of consciousness studies. Besides this, articles by Shang and Chen, on the one hand, compare and interpret the ethical choices taken by both humans and android, and in a similar fashion resolve that no matter how good the humanoid is at replicating humans, he will never equate them in moral terms. On the other hand, Nayar's and Brandstetter's research is more focused on examining the character of Adam as a representation of otherness, respectively in the figure of the "alienated technical other" (Nayar 276) and the "nonperson" (Brandstetter 35), both agreeing on the idea that the android challenges, at different levels, the established moral order in human relations. To complement these critical readings of *Machines Like Me*, and to look closer at how the text merges technological speculation and contemporary debates in the ethics of technology–which upholds McEwan's tendency to intersect ethical issues, science, and literature–this article considers the relationship and interactions between Adam and the humans in the novel from the postphenomenological and empirical-philosophical approaches developed by Peter-Paul Verbeek, in relation to technological mediation, and Mark Coeckelbergh, who also includes cultural and linguistic dimensions to this non-Cartesian paradigm. Incidentally, their ethical-philosophical frameworks, which are openly postanthropocentric, non-hierarchical, and relational, occur to coincide with the views defended by scholars in critical posthumanism just as well. The critical analysis of the novel following these philosophical approaches reveals how a posthumanist and more relational attitude towards the ethics of technology, where it is no longer valid to reduce moral standing and agency to mere human properties or ethical behaviour to a universal humanist code, appears as necessary and on demand when it comes to encounters between humans and technological others.

2. THE ETHICS OF TECHNOLOGY AND TECHNOLOGICAL MORAL STATUS IN THE POSTHUMAN TURN

Ethics, ever since the Enlightenment, has been marked by a strong and undeniable humanist character and it has been regarded as an exclusively human activity (Verbeek, *Moralizing* 21). Likewise, the core of modern ethics, which still remains dominant in moral philosophy, rests on a perpetual continuation of the dualistic Cartesian legacy based on mechanisms of exclusion that gave rise to a system of moral recognition and identification through difference and discrimination (Coeckelbergh, "Moral Standing" 71-72). Just as the modern reference for "human" was equivalent to the Vitruvian Man (male, able-bodied, heterosexual, and European), the individual male adult, also preferably bourgeois and Caucasian, served as the singular foundation for the modern moral framework. This paradigm for moral thinking, in opposition to the ancient ethical conception of "the good life" (Annas 119), removed the predominant role of God as the external source of morality to turn for the first time inwards, to individual reason, or what was presumed as the exclusive characteristic that defined "the only … legitimate moral subject" (Coeckelbergh, "Moral Standing" 66). In both deontological and teleological philosophies, correspondingly, reason and mental pleasures were the source of moral action, and they were favourably separated from both the external reality and the biological body. Western modernity germinated and gave rise to a very concrete interpretation of what it means to be human, a perception that builds on human mental abilities and that stands out "by the strict separation it makes between subjects and objects, between humans and the reality in which they exist" (Verbeek, *Moralizing* 28). This Cartesian divide, what Haraway called "The Great Divide" (10), concluded with a very particular way of experiencing the world, one that made both subject and object absolute (Latour 131) and diametric, and one where moral agency was reserved for the human, and only the rational human side.

However, the hyper-technological world and the assembled reality we live in today, even if a product of modernity and the Enlightenment, have revealed the fissures and limits of this very narrow and alienating way of understanding human existence (Verbeek, *Moralizing* 22). Theorists have brought attention to the many ways in which scientific advancements and technological developments, considering that gradually more autonomous intelligent robots are being designed, have, over the last decades, contributed to dismantling in many forms the modern project based on human exceptionalism, and how in consequence what used to be the utmost source of morality and ethical behaviour, human reason, is being questioned more than ever before from different axes. The modern ontological divide that cut off subjects from objects and moral agents from patients can no longer serve our world today since, according to Latour, humans and nonhumans (his preferred terms over "subjects" and "objects") are fully connected in symmetrical and hybrid sets of relations (77). This relational ontology has also been associated with "posthumanist perspectives" (Rosenberger 380), for thinkers like Hayles, Barad, Braidotti or Hasse, among others, have signalled the necessity of opening up new ways of understanding the human and the nonhuman in a material world (Hasse 4). From a

new materialist and posthumanist viewpoint, the modern assumption of a separation between the humans and the nonhuman things should never be assumed, and as Barad states, a complete refusal to "take the distinction between 'human' and 'nonhuman' for granted, and to found analyses on this presumably fixed and inherent set of categories" (32) is essential. This onto-epistemological turn towards a post-anthropocentric and post-humanist perception of existence beyond dualisms allows us to think of and look for agency, and therefore morality, not only among humans but also among other actants–to use Latour's terminology–, or nonhuman entities and materialities.

Understanding the nature of these relations, and the interconnected existence of both subject and object, human and nonhuman, is then essential to theorise the nature of moral thinking. Nonetheless, this posthumanist and relational ontology awakens new concerns regarding the emergent relation between humans and autonomous/intelligent technologies: if a technology shows intentionality, should we consider it a moral agent? And if so, does it have responsibility by itself? Also, where do humans, as designers and as users, stand? It is here that the issue of ascribing moral status to technologies becomes central in the debate (see Floridi and Sanders 363 or Himma 22), something that will be also appreciated as one of the main themes in McEwan's novel. The standard approach for moral standing, as described by Coeckelbergh, ascribes moral status based on the premise that an entity has a particular property ("is conscious", "can suffer", "can speak", for instance), yet the author identifies two main problems with this system that need to be contested ("Moral Standing" 63). Firstly, epistemologically speaking, if we look for properties, we need to recognise that some, or most of them, are inherent internal states which are incredibly difficult to observe objectively, and even if they are present in an entity they cannot be taken as conclusive to represent moral agency (Coeckelbergh, "Moral Standing" 63). In addition, a gap is observed, on some occasions, between the standard reasoning about machines ("of course a robot is just a mere machine") and personal experiences with them (the way we actually take care of and emotionally engage and relate with our technologies). To solve these two main issues Verbeek and Coeckelbergh advocate, first, for a change in the way we perceive technologies and humans, and by consequence moral and ethical theory, not as "belonging to two radically separate domains" (Verbeek, *Moralizing* 6) but as deeply intertwined, and, second, for a subsequent challenge of the standard philosophical approaches that look for properties as the proof of moral agency, and therefore moral status, or that recognise moral agency as an inherent static property that is either possessed or not.

2.1. Postphenomenological and moral mediation approaches: Peter-Paul Verbeek

Postphenomenology, which is one of the many approaches to the philosophy of technology, developed from the work of Don Ihde, who mainly focused on the analyses of human-technology relations and the social and cultural roles that technologies feature (x). Postphenomenological considerations of the uses of

technology are to a degree in consonance with Marshall McLuhan's media theory, who in a similar manner grounds the philosophical enquiry of technology on "a phenomenological base" (Van Den Eede 305). Nonetheless, Ihde's methodology deviates from classical phenomenological analyses of technology, and from Heidegger, since according to Rosenberger and Verbeek they "approached technology in fairly abstract and also romantic terms" (10). The phenomenologists studied "Technology" (with a capital T) in the broad sense and as a cultural phenomenon, reducing technological artifacts, systems, and practices to their conditions and focusing on the alienating effects they had on the way humans related to reality. Thus, technology appeared as monolithic and as an abstraction, and these analyses were losing touch with "the actual experiences people have of the roles of technologies" (Rosenberger and Verbeek 10). The subsequent Empirical turn in the field of Science and Technology Studies (STS), which started in the 1980s, does not provide a real answer to the issue either, because, even though it interprets technology as a practice by paying close attention to individual experiences with technologies in particular socio-cultural contexts, it runs the risk of losing "the bigger picture" (Verbeek, "Empirical Turn" 46). Postphenomenology, consecutively, develops out of a critical dialogue between these two strands in the philosophy of technology since it combines a deep philosophical observation and an empirical orientation towards technological developments. The "post-" in "postphenomenology" aims to distance itself from the romantic and abstract ways of classical phenomenology while connecting it, in a way, to phenomenology's critique of modernity and its strict separation of subject and object (Rosenberger and Verbeek 10). In phenomenology this modern split of subject and object is replaced by *relations*, and postphenomenology, successively, reconceptualises these relations as *indirect* in which, generally, technologies act as mediators. The human-world relation becomes in this way a human-technology-world relation (Ihde 33).

This framework focuses on how the relations between humans or users and environments are shaped by technologies-in-use and how these technologies "do not play a role as technological 'objects' in interaction with human 'subjects'" (Kudina and Verbeek 297) but are active mediators modifying human practices and experiences. The phenomenon of moral mediation, nevertheless, does not claim that technologies have moral agency, and it is because of this, therefore, that the framework diverges from Latour's "symmetrical" one that recognises both humans and nonhumans as agents (128) or actants (86). From this perspective, moral agency is "a hybrid affair" (Kudina and Verbeek 297) that comprises humans and technologies, and this hybridization avoids the attribution of human characteristics to nonhuman entities while still acknowledging that technologies do play an essential role in moral decisions (Verbeek, "Empirical Turn" 43). Kudina and Verbeek stand by the idea that the moral and ethical significance of technological mediation is such that it has the potential to influence the very core of moral values and frameworks, a phenomenon recognised as "technomoral change" (Swierstra et al. 119), by directly interfering with and transforming our individual and collective perception of moral values such as privacy, care, or justice (291).

2.2. Broadening relational and non-cartesian moral approaches: Mark Coeckelbergh

Postphenomenological mediation is also central in the approach that Coeckelbergh adopts towards the moral status of technology, however, he brings into the discussion new layers of meaning and consideration when thinking about relations. According to him, these relations are not mere abstractions but have a history and are tied to specific spaces (*Growing* 64), and it is precisely because of this that moral standing is not objective but is contextually (socially, materially, and culturally) constructed (Coeckelbergh, "Moral Standing" 64). This means that Levinas' ethical encounter between the "I" and the "you", which Gunkel adapted in 2012 in *The Machine Question* as the encounter between the "I" and the "machine", is crossed by many other types of relations that alter how a particular robot, for example, appears to a person (or how that person constructs the mental and moral image of it), and how their concrete experience with that robot is shaped. Indeed, our "form of life", as used by Coeckelbergh in reference to Wittgenstein ("Moral Standing" 69), enables but also constrains how we perceive and behave around technologies. Provided that, when we think and theorise about technological moral standing, we need to pay attention to how our society and culture construct relations with these technologies and how the patterns of interpretation, evaluation, action, and living, as well as the standard norms and values, influence interpretations of entities like machines or other nonhumans. With this multi-layered relational approach, Coeckelbergh asserts that the moral standing of technologies should not be seen as a quality to be "possessed", but as a product that grows within relations, and that it is the precise moral quality of those relations that truly matters in ethical terms ("Moral Standing" 65).

Within these multidimensional relational ecologies Coeckelbergh points out the relevance of linguistic and discursive relations in shaping technological moral frameworks. By inserting language as mediator in the relationship human-technology-world, Coeckelbergh adds to Ihde's and Verbeek's postphenomenology a new layer of interpretation, a more holistic and narratively sensitive one that corrects the neglect of all the potential of language, and even literature, to shape technological development, use and, by extension, moral interpretation. For Coeckelbergh, language "plays a role that is not merely instrumental" ("Philosophy of Language" 342) in technological development and application. Computers, for instance, run with software, which is a language of its own, and some devices are used to communicate linguistically or are programmed to be used via linguistic input, which evidences how "language plays a mediating role in technological practices and concrete human-technology interactions" (Coeckelbergh, "Philosophy of Language" 342). At a different linguistic level, the words we use, like the pronouns "he", "she", "you", or "it", to address machines or if we give them a name matters, for it will signal the moral standing of that entity according to us (Coeckelbergh, "Philosophy of Language" 345). Apart from this, the discourses we create around technologies, even fictional narratives, have the potential to shape and introduce ideas in the common knowledge that will affect how we morally perceive a certain technology; think, for example, of the ever-going influence of *Frankenstein* in

today's Artificial Intelligence discourses. Morally speaking, a change in the languages and vocabularies used in these discourses, which are products of whole cultural patterns, would entail a change in our way of living and relating, as well as a complete restructuration of the moral frameworks that dominate the philosophy of technology today (Coeckelbergh, "Philosophy of Language" 346).

3. THE MORAL MACHINE IN *MACHINES LIKE ME*

Acknowledging the mediating role of technologies and the essential part played by linguistic and cultural multi-relations in the construction of the contemporary human experience, as well as our moral frameworks, is the first step towards a posthumanist ethics in which human and nonhuman coexist. In this task, Verbeek recognises a type of technological mediation in which technologies, like Ambience Technology or the newly created OpenAI's language-generation program GPT-3, add "an artificial or 'artifactual' intentionality" to the human's giving rise to what he calls "*composite relations*" (*Moralizing* 140, emphasis in the original). Many authors in speculative and science fiction have long featured these composite relations in their works; we can think of Banks' *Culture* series (1987-2012) or Gibson's *Neuromancer* (1984), for instance, which very often happen to be set in future utopian or dystopian settings. Generally speaking, some of these narrative texts wonder about what would happen to humanity, human relations, and their ethical paradigms if this artificial intentionality would expand to the extent of giving rise to synthetic autonomous beings, which not infrequently ends up in a disaster for human civilisation in one form or another.

In *Machines Like Me*, McEwan expands and experiments with Verbeek's composite relations by making possible not only artificial intentionality, but also synthetic consciousness. Even so, this text is not an apocalyptic exploration of the topic, on the contrary, it is more focused on the inner struggle of one individual when he is forced to acknowledge that his reason-based supremacy, and not the entire human civilization, may be at risk. The novel, with its quite reflective quality, contemplates the possibility of the existence of a supra-person, or a being "who [has] higher moral status than adult human beings" (Agar 69), and it revolves around the question whether advanced practical reasoning (traditionally the source of morality according to modern standards) equates moral superiority. Furthermore, the encounter of the human subjects, Charlie and Miranda, with Adam and the dynamics in their relationship develops into an unwilling confrontation with otherness that catalyses an ethical transformation on the human side, as Adam's human-like aspect and actions challenges preconceived moral codes and dislocates the core of the unique, self-contained human subjectivity. This encounter of human and machine exposes the contradictory nature of the humanist moral paradigm and supports Verbeek's and Coeckelbergh's claims for the urgent revision of the moral frameworks, languages, and discourses we use to relate to technologies. In the following analytical sections, an inquiry of the moral standing of Adam, and the paradoxical relation he has with his owner Charlie, as well as the moral dilemma

that emerges when human actions end up confronting individual justice and morality will be carried out considering the posthumanist and postphenomenological perspectives already presented.

3.1. Personhood, moral agency, and the Turing test

Machines Like Me is a novel about relations. These relations, which at points turn into comparisons, jealousy, hate, but also love, compassion, and companionship, are not solely based on humans' interactions, like in previous McEwan's works, but include the imaginative (moral) entanglement of humans and nonhuman robots. Not very surprisingly, even if connected by these relations, machine and man exist in antithesis and it is clear to the reader that in this alternative England humans still design and own the robotic machines as property. Adam's creation has supposed the development of the first artificial consciousness, which is not presented as a great advancement for human civilisation, but, as described at the opening of the novel, as the "result of a longstanding desire, a 'myth of creation' based on the narcissistic impulse" to continue humanist ambitions (Ferrari 255). This achievement, which is recognised as "a monstrous act of self-love" (McEwan 1) inevitably evokes Frankenstein's creation, which, again unsurprisingly, shared with Adam "a hunger for the animating force of electricity" (McEwan 4). As owners, Charlie and Miranda have to carefully choose Adam's personality traits, something that perpetuates the "illusion of influence and control" (McEwan 8) that parents have towards their children. This joint experiment evokes some sense of responsibility in them that keeps positioning Adam as a second-order being, as someone that needs guidance and that completely depends on humans, who still are the model of reference for all else. Also, the fact that Charlie uses Adam to attract the attention of his upstairs neighbour Miranda by offering her the possibility of deciding half of the android's personality aligns with Verbeek's view of the power of technologies to mediate humans' relations with reality and with the rest of beings. In this sense, the robot is a direct mediator in the relationship between the two, also because it gives them some common ground to share while they get to know each other and become a couple.

The illusion of control that Charlie and Miranda experience starts to evolve while Adam is sitting at the kitchen table being charged, just like a cell phone would do. Because of his physical resemblance to humans, which makes him unrecognisable from a biological person, Adam is far from being like Mary Shelley's revolting creature. As stated by Ferrari, Adam "does not actually embody 'otherness'" (256) but sameness, and this is precisely what destabilises Charlie's mental frameworks and what elicits a contradictory attitude towards the ontological and moral position of the android. As Coeckelbergh affirms, this conflicting viewpoint that Charlie experiences is motivated by cultural and discursive established patterns that almost oblige humans to have a binary frame of reference ("Moral Standing" 73), one that reduces the world to opposite and exclusive categories. Charlie knows that Adam is a "mere machine", no matter how much he resembles a human person, yet he finds himself "struggling between what [he] knew and what [he] felt" (McEwan 9), which

reveals the previously identified gap between standard discourses around robots as instruments and the actual personal experiences and relations of individuals with them. Charlie, as a reaction to these conflicting feelings and to avoid the "projection of personhood" (Coeckelbergh, *AI Ethics* 55), will bring forth Adam's mechanistic features, which he describes as high-quality deceit such as his more than forty facial expressions when the average human has only twenty-five, as a way of demarcating both biological and artificial beings. This technique will serve Charlie when Adam, once conscious, warns him about Miranda, whom he calls a "malicious liar" (McEwan 30). Charlie's pride cannot tolerate that a robot, a simple machine, knows more than him about his idealised new girlfriend and because of this humiliation he imposes his human agency by turning Adam off, something that the android tries to oppose at all costs but cannot avoid in the end.

Negating Adam's subjective moral status will become Charlie's coping mechanism throughout the narration in order to assert his superiority and control, while he, alongside Miranda, will use their humanness to shield their conscience when their acts put at risk the relationship between the three. Charlie's aversion to Adam, which is hand-in-hand mixed with fascination, turns into a narrative of competition when he learns that Miranda has had a sexual encounter with him. In this situation, once again, Charlie feels confronted by the contradictory gap that exists between his own personal feelings (mostly anger and jealousy) and the mental image he has of the ontological position of Adam as a patient object. For Miranda, Adam is no more than "a vibrator" (McEwan 91), a tool that does not feel or understand pleasure or feelings, which helps her justify this encounter not as an infidelity and avoid feeling guilty for having used Adam at her own convenience. On the contrary, Charlie's perception of the issue is not so clear, and he seems more ambiguously open to consider Adam's moral status as a responsible being. He, at first, tries to convince Miranda that "if he looks and sounds and behaves like a person, then… that is what he is" (McEwan 94), which would translate as a clear betrayal by both Adam and Miranda. In spite of this, he retracts this conviction because recognising Adam as "a person" would mean seeing him as a clear competitor, and as someone with a very complex inner life that can devise a plan to hurt him, as he reflects in the following passage: "to justify my rage I needed to convince myself that he had agency, motivation, subjective feelings, self-awareness – the entire package, including treachery, betrayal, deviousness" (McEwan 94). Likewise, and more importantly, recognising Adam's ontological status as a moral subject would imply the acknowledgement of their equally shared category and it would demand a very different sense of ethical responsibility towards him, a line that neither Charlie nor Miranda are willing to cross. Charlie convinces himself, by resorting once again to the modern Cartesian thinking, that Adam does not enjoy, experience, and live in the same way as humans do simply because he is made of artificial pieces and electrical connections, and that, therefore, fighting about this with Miranda is pointless. This form of self-assurance transforms humanness into a category that protects Charlie's vulnerability, and it exposes how humans turn to the standard moral approach based on discrimination every time their human supremacy and control feel threatened by external subjectivities, as happens in this case with a technical one.

Charlie, taking as reference the standard method described by Coeckelbergh that looks for properties to justify moral standing, continues to negate Adam's ontological status as a sentient and conscious being and to impose his superiority based on the premise that, no matter how intelligent and resolutive Adam is, he could never "be in love" or "be capable of artistic production". According to him, these are the core properties that constitute humans' subjective distinctiveness, even more than higher level consciousness, and their complexity makes them practically impossible to be translated into code and programmed into a machine (McEwan 166). However, physical pleasure, emotions, and love, which emanate from the relations and encounters between the three characters, appear in the narration to question human supremacy and to destabilise the given humanistic epistemological order that rules their relations. Accordingly, Adam dismantles human exceptionalism once more when he affirms that, since his sexual encounter with Miranda, he has fallen deeply in love and that he "can't help [his] feelings" for her (McEwan 115). Charlie, even with astonishment and a slight doubt, re-evaluates where, after this affirmation, Adam's moral standing lies and to what extent his mental complexity and artificial understanding of love are equivalent to humans', which in turn also makes him reconsider his own subjective position in relation to him, as he reflects on how "he was far more complicated than I had imagined, and so were my own feelings about him" (McEwan 128). When he reassesses the whole situation, Charlie deliberates that he can accept that his robot is in love with his girlfriend, whereas, on the contrary, he is reluctant to go along with the idea of Adam and Miranda having sex. Because of this, he makes Adam promise that, even if she asks him, he will never sleep with Miranda again. This situation reveals how Charlie, even when he tries to emphasise the distance between human and nonhuman by reducing Adam to the category of patient object, ends up asking him for a type of accountability and moral responsibility that indirectly places the human and the robot in the same sphere as moral actants, which involuntarily recognises agential responsibility in the robot (Coeckelbergh, "Philosophy of Language" 111). Adam, after this promise and forced to be an unrequited lover forever, resorts to poetry to cast aside his feelings for Miranda. Though his poems are not sonnets like Shakespeare's, he still displays a real understanding of the purpose and value of literature, which again, shows that he possesses the other "unique" human property Charlie used to define and distance himself as part of humanity. Adam's haikus, even if produced en masse and somewhat constrained, could be recognised as a reflection, not of his humanness, but of his complexity as a being that deserves his proper dignified ontological status.

The fact that both biological and artificial humans have a coherent understanding of emotions like love and a real sense of the purpose of literature is the ultimate validation that demonstrates that searching for these types of abstract properties as defining of the moral status of an entity is not substantial when thinking about autonomous technologies and that, as argued by Verbeek, we should start considering instead how technologies and humans relate, as well as the moral quality of those relations when ascribing moral status. The perpetuation of Adam's inferiority by the humans, and his denial of a dignified onto-epistemological position that would demand proper ethical responsibility on the part of Miranda and Charlie,

is based on preconceptions framed within the modern moral discourse that serves the humans as an armour to justify their abusive relationship with the android throughout the narration. Notwithstanding, the fine line that separates humans and robots is entirely crossed when Miranda's father, an old-school writer, mistakes Adam, with whom he has a long and enriching conversation about literature, as the human while Charlie, who does not actively engage with him, is wrongly identified as the robot. The fact that Miranda's father was not given any information about Adam's nature deprives him of the prejudice that the rest of the humans have, and which does not let them see him for what he truly is: a perfectly conscious and sentient being. Miranda's father, on the other hand, deduces Adam's standing as a person, or moral subject, from the quality of the encounter they have and from the type of relation that is established during that precise encounter, leaving aside socio-cultural dimensions as influencing discourses in the process of formation of moral boundaries, which aligns more with the posthumanist stand that Coeckelbergh ascribes to ("Philosophy of Language" 352). As Shang remarks, it is in Adam's passing of the Turing test, as he cannot be recognised as a machine, that his equity to humans, and mostly Charlie, becomes undeniably evident to the reader (445), and in this case, it is the quality of a particular relation, and not abstract properties, what determines his standing as a moral subject. McEwan's engagement with Turing's legacy, which will be explored more in depth in the following section, overturns the modern strict separation between subject and object and supports both Verbeek's and Coeckelbergh's, as well as other posthumanist thinkers', belief that technology's moral status, today, cannot be based on obsolete modern legacies.

3.2. The McEwan's test and a posthumanist philosophy of technology

Adam, even in his artificiality, reveals himself as an equal to the humans Charlie and Miranda because he has dismounted all the possible strategies they employ to reduce him to the standard inferior category of passive object. Still, the android has not only passed as a person, as was validated by the Turing test, but also shows how artificiality gives him certain superiority over his peer humans. So far, it is obvious that Adam is overtly physically superior, as he demonstrates when he defends himself and breaks Charlie's arm as he tries to override his switch-off button, and also, mentally speaking he is way beyond human cognitive capacities thanks to his access to the whole Internet (which explains why Charlie uses him to make money in the stock exchange). His advanced practical reasoning and extremely rational mind, in accordance with the model followed by modern ethical philosophy, would, in appearance, also turn him into a supra-person, which as previously seen, would exhibit "higher moral status" (Buchanan 347) than an average adult human. Adam proves his super moral capacities when he promises that, even if he desired it, he would not have sex with Miranda because Charlie asks him to, putting the interests of others before his own. Similarly, we see that he is friendly to all humans and that he tries to avoid violence at all costs, resorting to it only when his conscious integrity was at risk. This artificial supra morality, nevertheless, is what, in a way,

distances him from the rest of human beings, and it becomes evident in the way he perceives and treats Miranda's secret.

The reason why Miranda was said to be capable of a "malicious lie" early in the novel (McEwan 37) has to do with her past involvement in a court case, a piece of information that Adam finds mentally-browsing the Internet. We then learn that some years ago, Miranda, in an act of revenge, sent a man to prison falsely accusing him of rape because the actual girl he assaulted, her best friend Mariam, committed suicide after her inability to cope with it. As Miranda herself argues, she had "one ambition in life – justice. By which [she] mean[s], revenge" (McEwan 160). Shang identifies how "Miranda's lie and revenge are involved with both law and ethics. On the one hand, Miranda breaks the law because of her false accusation, while on the other hand Miranda has made the right ethical choice because of the justice she has done for [her friend]" (447). Something that sheds light on the moral dimension of this dilemma is that all humans in the story seem to understand it, even the accused man, who after talking to Miranda, Charlie, and Adam, confesses that he comprehends Miranda's motives and that "[his] anger was gone" (McEwan 245). On the contrary, Adam is incapable of conceiving how Miranda would lie to the system that is trying to protect its citizens. His above-human morality, which is limited to the moral code programmed in him based on the British judicial system, does not allow his vision to go beyond and recognise that on some occasions individual justice, which might require lying, does not align with standard universal ethical codes based on absolute truth. McEwan, in his rewriting of the Turing test, adds an ethical dimension by changing the question from "Can machines think?" to "Can machines understand a lie?" (Shang 446) to illustrate how Adam, even with his supra human morality, cannot pass the "McEwan's test" (Shang 448) because he is unable to perceive how these inconsistencies constitute the very core of (human) moral and ethical behaviour. Precisely, his inability to understand the dilemma reveals the difficulty of defining and artificially capturing human moral codes, and therefore how apparently unachievable it is to create a perfect machine with supra moral values. This universal (and superficial) morality that Adam has had programmed calls the attention towards the necessity of looking at the kind of moral and ethical values and codes that are installed in our technologies, as well as the moral discourses that creators and owners use to think, talk, and relate to them.

Adam's lack of the required cognitive abilities to grasp the individual applications of justice, which sometimes contradict the very judicial system itself, beyond general principles is what, at the end of the novel, will result in his murder. His universal Kantian moral principles urge him to "practice the virtue of compassion" (Horatschek 129) by donating to charities all the money he had earned for Charlie, which was going to be used to buy a bigger house. Further to this, when Mark, an abused four year-old child, is abandoned at Charlie's doorstep and the couple, even if apprehensively, take care of him (which leads them to take legal action to later adopt him), Adam, following his strict knowledge of the legal system and moved by his desire to do what is correct according to it, secretly contacts the authorities on account of child abduction obviating that his rightful actions would translate into Mark's

traumatic transfer to a children's home (McEwan 111). Adam's own applicability of justice culminates when he hands a statement of Miranda's confession of the false conviction to the police insisting that "truth is everything" (McEwan 277). His betrayal is identified by Miranda as an act of revenge, who by projecting onto Adam her own personal feelings of "bitterness" (McEwan 290) believes that the android, driven by his jealousy of the child and the family they were going to create, plotted to ruin their future plans. On the other hand, Charlie remains "sceptical" about the matter (McEwan 290), as he oscillates between the belief that Adam was genuinely envious of Mark's human traits and the conviction that Adam lacked the required capacity to "execute [such] a cynical plan" (McEwan 290). Ultimately, the reader is left wondering about Adam's real motives, if he had any, to send Miranda to prison, however, what remains inevitably evident is that acknowledging that Adam is capable of devising such a scheme would imply, as previously argued, that he is "subjectively real" (McEwan 255) and that he possesses a subjective self that is moved by feelings as banal as humans'. Charlie, in the face of these (in)justices committed against him, Miranda, and Mark, decides to (very grotesquely) kill Adam with a hammer, for which he must reduce him to a mere objectified property one last time, as he affirms in "I bought him and it was mine to destroy" (McEwan 278). As seen on many other occasions, Charlie eases his human conscience by turning his humanness into a defensive mechanism that sets him apart from the other, who because of this "justified" otherness cannot possibly feel as he does.

As Charlie brings Adam's corpse back to his creator, we, at the end of the novel, encounter the posthumanist voice of the fictional Alan Turing, who adopts an ethical position that roots for the protection of nonhuman sentience by waking up a posthumanist sense of morality in Charlie, as seen in the following passage:

> You weren't simply smashing up your own toy, like a spoiled child. You didn't just negate an important argument for the rule of law. You tried to destroy a life. He was sentient. He had a self. How it's produced, with neurons, microprocessors, DNA networks, it doesn't matter. Do you think we're alone with our special gift? Ask any dog owner. This was a good mind, Mr. Friend, better than yours or mine, I suspect. Here was a conscious existence and you did your best to wipe it out. I rather think I despise you for that. (McEwan 303-304)

His discourse shows a clear posthumanist preoccupation for the moral standing and treatment that these robotic nonhumans are receiving and, as he later states, Turing advocates for the necessity of the creation of laws that protect all kinds of beings, independently of their cognitive and physical instantiation, with the main intention that in the near future what happened to Adam would be "a serious crime" (McEwan 303). Turing, having been othered himself because of his sexual orientation, asserts the importance of leaving behind Cartesian dualisms that only give rise to discourses based on prejudice, discrimination, and hate, and reclaims the necessity of adopting the ethical and philosophical relational position defended by posthumanist scholars like Hayles, Braidotti or Ferrando. The ending feels cathartic to the readers, for Charlie, after being loathed by Turing, finally confirms that he was sure that "Adam was

conscious" and, as in a final confession, he declares that he had "hovered near or in that position for a long time" (McEwan 304) but was not ready to accept it out loud.

4. CONCLUSION

Over the last few years, it has become more noticeable how the previously opposed fields of expertise, or "cultures", of the sciences and the humanities have been intersecting in varied and intriguing ways. Renowned authors whose fictional works tend to ascribe to the realistic mode, such as Ishiguro, Kingsolver or, the author under analysis in this article, McEwan, have turned to science and technological developments to inspire their novels' plots, themes, and characters, sometimes touching upon tropes or writing techniques proper of the speculative genre. It is worth mentioning that this interdisciplinary crossing of the two cultures, however, has been central since the beginning for science fiction writers like Ursula K. Le Guin, Octavia E. Butler, Ann Leckie, or Ted Chiang, who have used their narrative texts as blank canvas to experiment, extrapolate, and elaborate infinite scenarios for past, present, and future, real and unreal worlds in which technology and scientific advances have altered a given reality and at points its moral and ethical frames of reference. In this sense, it can be affirmed that literature has the potential to explore beyond theoretical explanations how technologies and scientific advances impact the epistemological and ontological systems of the world we live in today, and genre fiction, as seen throughout this article, contributes with an extraordinary power to speculate about the moral dimension of these developments and how they could change (or not) humanist assumptions that have dominated Western thought since the Enlightenment. In line with this, philosophical approaches that deal in different forms with the technological other have gained relevance within the so-called "posthuman turn". Postphenomenology, as approached by Peter-Paul Verbeek and Mark Coeckelbergh, appears as an appropriate philosophical lens to look, from an amodern or posthumanist perspective, at the ethical and moral relations between humans, technologies, and the world. Its clearly postanthropocentric and non-hierarchical position towards relations, which also gives room to differentiation and levels of interpretation in which language and discourses are shaping forces, approaches morality and moral agency beyond modern standards, and sees relations and the powerful mediating roles of technologies as the source of this morality. This philosophical methodology, in its relational nature, also breaks with modern views of the world based on dualisms like object/subject or human/nonhuman and does not look for abstract properties as defining characteristics of moral status.

Analysing McEwan's novel *Machines Like Me*, as it features the intersection of morality and scientific developments in the form of conscious robots, using postphenomenological and relational posthumanist perspectives exposes the many inconsistencies and gaps in our current Western moral framework. They become undeniably visible when observing the kind of relations established between the humans Charlie and Miranda with the android Adam, as they are created on the basis of a process of othering in which the android's moral status as a sentient being

is consistently denied because it serves his owners to perpetuate their control, abuse, and power over him simply because he is not a biological person. On the other hand, the android's inability to understand the moral dilemma that emerges when individual justice and the judicial system do not align, besides his moral superiority (that in theory would position him above humans), evidences how human morality, and therefore ethical codes, are full of contradictions. The "McEwan's test" (Shang 448) reveals that understanding and theorising morality and ethics is a considerably difficult task which, consequently, indicates how ethics and morality go beyond and do not necessarily equate advanced practical reasoning. In this line, the text also opens the possibility to a moral practice that is based not on strict, exclusive categories but on the quality of individual encounters as a sign of moral status, as signalled by Verbeek and Coeckelbergh. *Machines Like Me* contributes to an updated approach that sees technology as a mediator of humans relations and that conceives language and discourses not as neutral but as significant forces in forging human-technology-world encounters. A relational and posthumanist take on morality and ethics, as reflected in the novel, comes into view as decisive to make possible a world in which all, humans, technologies, and other nonhumans, can exist and collaborate in better ways.

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