

Anni Carlsson

Persons or Property? Legal Status of Humanoid Robots in Three Contemporary Novels¹

minds create matter
minds create fiction
as a matter of fact
as if matter is fact
matter is fact
so spirit must be fiction
science-fiction
Saul Williams

1 Introduction

Humanoid robots and other forms of artificial intelligence (AI) have existed in fiction for centuries.² In reality, the technological development has not yet advanced so far that robots with human-like looks and attributes would be roaming among us. Nonetheless, both scholars and the general public are intrigued by the question of whether such artificial entities should be granted the same legal rights as humans.³ As it is not yet

¹ My thanks to Katja de Vries and Therése Fridström Montoya for comments on a draft of this chapter.

² For example, Eileen Hunt Botting, *Artificial Life After Frankenstein* (Penn Press 2020).

³ On rights and legal status of AI, see e.g. John Stewart Gordon and Ausrine Pasvenskiene, "Human rights for robots? A literature review", *AI Ethics* (2021); Joshua C Gel-

empirically possible to study the legal status of such entities in real life, the next best thing is to look at how they are treated legally in fictional worlds where human-like robots already exist in societies more or less like ours. Looking for guidance in fiction is fruitful since “law is also present in an imaginary society” as “imaginary worlds and societies created by authors also contain an innate and implicit legal dimension”.⁴ In this paper, it is these types of legal dimensions that I will investigate in three contemporary novels depicting fictional societies where artificial entities co-exist with humans.⁵

The novels that will be analysed are *Machines Like Me: And People Like You* by Ian McEwan (2019) (hereinafter *Machines Like Me*), *Frankissstein: A Love Story* by Jeanette Winterson (2019) (hereinafter *Frankissstein*) and *Klara and the Sun* by Kazuo Ishiguro (2021). To begin with, the legal status of AI in each of these three novels will be studied. The focus will primarily be on determining whether the artificial entities depicted in the novels have the status of legal objects or legal subjects, i.e. whether they are regarded as property owned by others or persons with their own legal rights.⁶ On the basis of this analysis, the question of legal status of AI will then be briefly discussed in light of the concept of *homo juridicus*, as developed by Fridström Montoya. Hereinafter, a somewhat more radical notion will be entertained by asking whether the artificial entities described in the novels *as fictional characters* should enjoy rights of some kind. A short conclusion will round up the paper.

lers, *Rights for Robots: Artificial Intelligence, Animal and Environmental Law* (Routledge 2020); Jacob Turner, *Robot Rules: Regulating Artificial Intelligence* (Springer 2019); Robert van den Hoven van Genderen, “Legal personhood in the age of artificially intelligent robots” in Woodward Barfield and Ugo Pagallo (eds.), *Research Handbook on the Law of Artificial Intelligence* (Edward Elgar 2018); DJ Gunkel, “The other question: can and should robots have rights?” (2018) 20 *Ethics Inf Technol* 87.

⁴ Jaakko Husa, “Comparative law, literature and imagination: Transplanting law into works of fiction” (2021) 28(3) *Maastricht J Eur Comp Law* 371, 383.

⁵ For an anthology bringing together the interdisciplinary fields of law and code and law and literature, see Mireille Hildebrandt and Jeanne Gaakeer (eds.), *Human Law and Computer Law: Comparative Perspectives* (Springer 2013).

⁶ Cf van den Hoven van Genderen, at 213.

2 Adam in *Machines Like Me* – Ambulant Laptop or Poet in Love?

In *Machines Like Me* by McEwan, we meet Adam, who is described as “[t]he first truly viable manufactured human with plausible intelligence and looks, believable motion and shifts of expression”.⁷ Adam is part of the first edition of twenty-five robots, consisting of thirteen females called Eve and twelve males called Adam. The novel takes place in a counterfactual Britain of the 1980s, where computers, self-driving cars and other forms of AI have already been reality for some time. The narrator of the novel, a former lawyer and current (rather unsuccessful) stock trader, Charlie, uses his inheritance to buy an Adam for £86,000. Adam is marketed “as a companion, an intellectual sparring partner, friend and factotum who could wash dishes, make beds and ‘think’”.⁸ From the start, it is accordingly clear that Adam, regardless of his human-like appearance and attributes, is a product bought by a consumer.

Like any other piece of electronics, Adam comes with a 470-page long user manual and batteries that must be charged before the first use. However, right from the beginning, Charlie finds it difficult to think of himself “as Adam’s ‘user’”. Rather, he had “been expecting a friend” and “was ready to treat Adam as a guest in [his] home”.⁹ This tension between technically having bought home a product, but feeling rather like having got a new roommate, runs throughout the whole novel. How should Charlie treat Adam, who is legally his property, but who “looks and sounds and behaves like a person”?¹⁰ He can simultaneously view Adam as an “ambulant laptop”, only to find himself the next moment thinking of Adam as “him”, instead of “it”.¹¹

⁷ Ian McEwan, *Machines Like Me: And People Like You* (Jonathan Cape 2019) 2. For a brief discussion of rights of robots with the starting point in the novel, see also Joshue Jowitt, “Ian McEwan’s *Machines Like Me* and the thorny issue of robot rights” (*The Conversation*, 17 April 2019) <https://theconversation.com/ian-mcewans-machines-like-me-and-the-thorny-issue-of-robot-rights-115520>, accessed 17 August 2021. Also Botting briefly deals with *Machines Like Me*, Botting, at 198–199.

⁸ Ibid., 3.

⁹ Ibid., 6.

¹⁰ Ibid., 94.

¹¹ Ibid., 273.

Regarding liability issues, there is no personal responsibility for Adam.¹² When Charlie is chagrined by the fact that he himself has to choose preferences with regard to Adam's personality, he muses: "Why leave it to me? But of course, I knew the answer. [...] Even if it knew the best, the least harmful, parameters of personality, which it couldn't, a worldwide corporation with a precious reputation couldn't risk a mishap. *Caveat emptor*."¹³ Charlie regards the freedom to choose Adam's personality merely as "a way of binding me to my purchase and providing legal protection for the manufacturer".¹⁴ It thus appears that Charlie, as the owner, is liable for the actions of Adam; Charlie recognises himself as "legally responsible for anything he might do".¹⁵ What liability the manufacturer has for the actions of Adam is not clear, but some additional contractual details from the sales agreement are disclosed. The manufacturer has the right to get access to Adam at certain intervals, and an engineer visits Charlie to control Adam's code and carry out tests on him. And, perhaps most importantly, to re-enable the kill switch which Adam (as well as his other robot siblings) had managed to disable. During the engineer's visit, Charlie also uses his "contractual right" to get answers to his questions by asking the engineer about Adams and Eves who are rumoured to have committed suicide or downgraded their intelligence.¹⁶ The engineer sent by the manufacturer brushes all this off as fake news, disseminated by competitors.

The fact that the robots as products do not enjoy any rights against their owners seems clear, but what about their responsibilities towards their proprietors? Do they lack rights but have obligations against their owners? Charlie contemplates this question after Adam has sex with his girlfriend and claims to be in love with her. He is uncertain of what obligations Adam has towards him. He assumes that there is some obligation for Adam to be helpful, but otherwise "[w]hat does the slave owe to the owner?"¹⁷ Although Adam is a product purchased by Charlie, his "expensive possession",¹⁸ he cannot help but regard him as a fellow human being. And what is owning another human being but slavery? Yet, legally,

¹² For liability issues related to AI, see e.g. Turner, at 81–132.

¹³ McEwan, at 7.

¹⁴ *Ibid.*, 8.

¹⁵ *Ibid.*, 146.

¹⁶ *Ibid.*, 191.

¹⁷ *Ibid.*, 88.

¹⁸ *Ibid.*, 87.

Adam is classified as property. When Adam deliberately breaks Charlie's wrist, it should not accordingly be regarded as an assault committed by a responsible legal subject. Rather, it is a question of Charlie hurting himself with a product he has bought.

The societal consequences of the arrival of advanced artificial entities and their eventual legal rights are also expressly addressed in the novel. One day, when Charlie walks past a church associated with the anti-slavery movement and its leader William Wilberforce, he regrets having treated Adam "like a servant" earlier when he had switched him off for a long time. He ponders that the anti-slavery activist Wilberforce "would have promoted the cause of the Adams and Eves, their right not to be bought and sold and destroyed, their dignity in self-determination".¹⁹ Here, the contrast with Adam's current position as a purchasable product is tangible, and another way of perceiving the legal status of robots is suggested as possible. Charlie imagines a near future where robots are doing the jobs of dustmen, doctors and lawyers. The threat of AI felt by people in the inflation-ridden and politically volatile British society with high unemployment is further manifested by a robot hung in a gibbet, which Charlie comes across during a demonstration.

Adam can fall in love, recite Shakespeare, write haikus, skilfully fold origami and make a fortune in the stock market. Nonetheless, he is treated like a product, which can be purchased, discarded and even destroyed by its owner. "I bought him and he was mine to destroy", Charlie reasons after he ends up demolishing Adam with a hammer.²⁰ "It wasn't a murder, this wasn't a corpse", Charlie tries to assure himself when contemplating the body of Adam stored in a cupboard.²¹ Not everyone agrees, however. When Charlie discusses Adam's fate with Alan Turing, the British WWII code breaker and a computer science pioneer, who in this alternative history is still alive and one of the forerunners of AI, Turing condemns his actions. Turing tells Charlie that he hopes "that one day, what you did to Adam with a hammer will constitute a serious crime. Was it because you paid for him? Was that your entitlement?"²² He further accuses Charlie: "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,

¹⁹ Ibid., 46.

²⁰ Ibid., 278.

²¹ Ibid., 293.

²² Ibid., 303.

wet neurons, microprocessors, DNA networks, it doesn't matter."²³ Charlie thus stands before Turing, "accused of an attempted murder for which I would never stand trial".²⁴ In a legal sense, what he has done is simply to destroy his own property. The discussion between Turing and Charlie explicitly sheds light on the different perspectives that can be taken with regard to the legal status of machines like us.

3 Klara in *Klara and the Sun* – Family Member or Vacuum Cleaner?

While in *Machines Like Me* the reader only gets acquainted with Adam through the narrator Charlie, the Nobel laureate Ishiguro's novel *Klara and the Sun* is narrated by its robot protagonist. The narrator Klara is an AF ("artificial friend"), model B2 from the fourth series, who spends her days in "the store", waiting for a prospective buyer. Sometimes she gets to stand at the window, getting thus direct access to the sun, which gives AFs like Klara their nourishment. There are other AFs in the store too, waiting to be taken home by customers. These include robots of a more recent AF model B3, who are competing with Klara for floor space and buyers' interest in this marketplace of robots. The decisions regarding the placement of the AFs in the store each day are made by the Manager, who converses with the robots in a human-like manner. Here, it is thus also evident from page one that Klara is a product to be sold, not a person with legal rights of her own.

Finally, Klara is bought by a girl named Josie and her mother. Klara is above all acquired as a friend for Josie, who is often unwell. While Josie and her mother generally are kind towards Klara, their housekeeper, Melanie, is initially somewhat more suspicious. She gets irritated by Klara following her around and gives her brusque commands. For instance, when sitting in a car, Melanie orders Klara: "AF. Strap on belt. Or you get damaged."²⁵ It is property that gets damaged, while people get hurt. Melanie's behaviour towards Klara accordingly constitutes a contrast to the otherwise familiar way Josie and her mother usually address her. Klara also gets treated like an inanimate object by a group of children

²³ Ibid.

²⁴ Ibid., 305.

²⁵ Kazuo Ishiguro, *Klara and the Sun* (Faber & Faber 2021) 93.

visiting Josie. They taunt Klara when she does not answer their questions or take orders. The children threaten to throw Klara across the room “to test her coordination” and compare her properties to AFs of a newer B3 model.²⁶ The children thus treat Klara like a thing, which they expect to demonstrate human-like capabilities on command.

Legally a product, Klara is treated as such by some, while others treat her more like a person. The mother of Josie’s friend, whose home Klara visits, gives the most explicit expression of the complex feelings raised in humans encountering robots: “One never knows how to greet a guest like you. After all, are you a guest at all? Or do I treat you like a vacuum cleaner? I suppose I did as much just now. I’m sorry.”²⁷ Just as in *Machines Like Me*, people experience difficulties trying to figure out whether to view robots like things or fellow human beings.

Compared to *Machines Like Me*, fewer details are provided about the society the characters inhabit. The novel most likely takes place somewhere in the US, sometime in the future. It is, nonetheless, clear that also in the larger societal context, the relationship between humans and robots is not without strain. Josie’s mother is described as “high-ranking”, working long hours in a law department, while Josie’s father, a former expert with specialist skills, has lost his work after “substitutions”. Not much is revealed about the background, but a reasonable interpretation is that many jobs have been taken over by robots. Becoming “post-employed” has been the fate of many, including a friend of Josie’s father who used to work as a judge. The tensions between humans and robots become particularly manifest when a stranger confronts Klara on a busy street where people queue outside a theatre. The woman asks Klara’s companions whether they are planning to bring the “machine” to the theater. “First they take our jobs. Then they take the seats at the theater?” the angry stranger utters.²⁸ On the same street, a petitioner collects signatures to protest the clearing of a building where hundreds of post-employed people, including many children, are living. It becomes clear that drastic changes have taken place in society as a consequence of the evolution of robotics.

Other, even more sinister, societal changes appear little by little to the reader as well. The parents now have the possibility to let their children

²⁶ Ibid., 75.

²⁷ Ibid., 145.

²⁸ Ibid., 242.

be genetically enhanced, “lifted”. Those children whose parents decide against gene editing condemn their offspring to the lives of “unlifted” second-class citizens with a very slim chance of being able to go to college. But the price paid by the families for genetically boosting the children is sickness, sometimes even early death. Josie is often ill, and her sister died as a consequence of the genetic modification. It is revealed that one of the reasons behind the decision to buy Klara was to train her to become like Josie and thus capable of replacing the real Josie in the event of her death. A Josie look-a-like AF is being manufactured as a body for the new Josie, to be fused with the software of Klara-trained-as-Josie.

The novel never gets as far as the creation of the artificial Klara-Josie, but it is interesting to consider what the legal status of such a robot would be. As Mr Capaldi, the fabricator of the AF Josie, puts it: “The new Josie won’t be an imitation. She *really will be Josie*. A *continuation* of Josie.”²⁹ It is probable that Josie’s family would treat AF Josie differently compared to how they treat AF Klara, as people are likely to have a closer social and emotional connection to their children than to someone else living with them. Would destroying AF Josie with a hammer be regarded as mere property damage as was the case with Adam? Or should it be regarded as a murder, in case AF Josie really *is* Josie? Would Josie’s family own this new Josie in the same way as they own Klara? Complex questions arise in case AI is used to “continue” human beings after their death.

Once it becomes clear that Josie will survive and there is no need to go further with the AF Klara-Josie, Mr Capaldi asks Klara to volunteer for a group of AF-friendly scientists and let them reverse-engineer her in order to look inside her “black box”. Mr Capaldi describes for Klara people’s current attitudes towards AFs: “I’ve always regarded you as our friends. A vital source of education and enlightenment. But as you know, there are people out there who worry about you. People who are scared and resentful.”³⁰ There is a backlash against AFs by people who are concerned about AI becoming too smart and not knowing how the robots think inside their black boxes. That is why Mr Capaldi & Co want to open up Klara’s black box and show the sceptics what is inside. Josie’s mother refuses to let Klara participate. Although Mr Capaldi addresses himself to Klara and asks for *her* consent, it is after all Josie’s mother, who is the owner of Klara and has the right to decide over the use of her property.

²⁹ Ibid., 208 (emphasis in the original).

³⁰ Ibid., 297.

According to Josie's mother, Klara "deserves her slow fade" instead.³¹ Ultimately, this is also what she gets. At the end of the novel, we find Klara at "the Yard", a rubbish dump-like place where she slowly fades out among other discarded pieces of machinery.

4 XX-BOTs and Scanned Brains in *Frankissstein* – Narrow-Goal Slaves or Sources of Eternal Life?

In *Frankissstein* by Winterson, the reader gets to follow the creation of the ultimate ancestor of all AI, the Frankenstein's monster, as well as its more modern offspring. First of the novel's two parallel narratives focuses on the author Mary Shelley and the genesis of her novel *Frankenstein* at the beginning of the 19th century. The rest of the novel deals with a group of characters in the present-day UK and US who, in different ways, come in contact with AI. As one of the characters of the novel asserts: "*Frankenstein* was a vision of how life might be created" and "the first non-human intelligence created by a human".³² In Winterson's novel, the progeny of Frankenstein and his monster come in many shapes and sizes.

At the beginning of the novel, a transgender doctor Ry Shelley attends Tec-X-Po on Robotics in Memphis in order to interview Ron Lord, an overwhelmingly politically incorrect developer of a sexbot range "XX-BOT". Sexbots are manufactured in China and come in different models, including "Economy" (the cheapest one), "Cruiser", "Racy", "Deluxe" and "Vintage". They are available in different skin tones, and specific models are designed for different geographic markets. That sexbots are mere objects and products, and not legal subjects with their own rights, is obvious from the outset. Ron Lord's business makes it possible to both buy and, above all, rent sexbots. The first alternative for engaging with an XX-BOT is to "buy her and own her [...] bring her in for a service once or twice a year, depending on the wear and tear". It is also possible to order spare parts online "if any of her gets damaged, or too messy". Also

³¹ Ibid., 298.

³² Jeanette Winterson, *Frankissstein: A Love Story* (Jonathan Cape 2019) 27–28. For a further discussion on the importance of Shelley's *Frankenstein* for the evolution of AI, see Botting. She also briefly discusses *Frankissstein*, ibid., 193–197.

“trade-ins and upgrades” are available.³³ Another alternative is renting an XX-BOT, which is the franchise model, inspired by car rentals, which Ron Lord is promoting at the conference. According to him, “renting gives you all the pleasure and none of the problems. Breakages, storage, updating – the technology is changing all the time.”³⁴ In addition, when renting an XX-BOT, “every girl gets hygiene-checked, bathed, perfumed”, and it is possible to choose different outfits for them. The rental bots also “get time off for education” in order to “improv[e] their circuit boards”.³⁵ The vocabulary of the sexbots is rather limited, with the Deluxe model having a vocabulary of around 200 words. XX-BOTS do not have names in order for each customer to be able to decide what to call them. Overall, it is hence blatantly clear that Ron Lord’s sex robots are legally more like cars than real girls.

Ron Lord is further planning to open a large sexbot factory, as well as a workshop specialised in making XX-BOT-heads in Wales, in order to create jobs after Brexit. There is a demand for spare heads as many “XX-BOTs get their faces bashed in” and “thrown at the wall”.³⁶ Just like when Adam was mashed with a hammer, or the children threatened to throw around Klara, bashing a sexbot results only in damaged property, the broken pieces of which can be replaced with spare parts. As to the legal implications of the sexbots, Ron Lord maintains that “there’s no such thing as underage sex when it’s a bot”.³⁷ As sexbots are not humans, no ethical and legal boundaries accordingly apply when sexually engaging with them.³⁸

A contrast with these rather crude sexbots with limited intellectual capacities is provided by the research carried out by the scientist Victor Stein, with whom Ry is romantically involved. Victor Stein specialises in combining machine learning and medicine, with focus on “human augmentation”.³⁹ This entails e.g. training algorithms to diagnose diseases and developing robotic prosthetics, but the ultimate aim of his research is

³³ Winterson, at 38.

³⁴ Ibid.

³⁵ Ibid., 39.

³⁶ Ibid., 51.

³⁷ Ibid., 47.

³⁸ For a discussion on the rights of sex robots, including a hypothetical scenario where the owner of a sex robot strikes his robot across face on a subway, see Gellers, at 161–163. On sex robots, see also e.g. Turner, at 157–159.

³⁹ Winterson, at 110.

to “[e]nd death”.⁴⁰ Here, we hence find us on the borderland between AI and biology, algorithms and human tissues. Victor Stein describes Ron Lord’s sexbots as “narrow-goal robots”, existing only for the narrow goal of “sex and personal satisfaction”.⁴¹ In contrast, Victor Stein’s own plans in the field of AI are all but a narrow goal.

Victor and Ry first met in the Alcor Life Extension Foundation in Arizona, where dead bodies and brains are preserved with the help of cryonics and lie in wait for future technologies that might make it possible to resurrect them. While “[m]edically, and legally, death is deemed to occur at heart failure”, the brain “will not die for another five minutes or so”.⁴² Consequently, “if the brain can be preserved during the process we call death, perhaps it can be restored to consciousness some time in the future”.⁴³ Victor asks Ry to return to Alcor and bring him the cryo-preserved brain of his doctoral supervisor I.J. Good, a mathematician and code breaker colleague of Alan Turing during the WWII. As part of his research, Victor intends to try to scan Good’s brain into a computer, and thus bring him back to life as a “mind without matter”. The new body he has designed for Good consists of a two feet tall cylinder base on wheels, fitted with arms and a head, “look[ing] like a cross between a puppet and a robot”.⁴⁴ By uploading the scanned brains of Good into this robot body, Victor Stein aims to resurrect his old professor to eternal life.

As to the legal implications of bringing a brain across the Atlantic, Victor assures the initially reluctant Ry: “It is legal. The paperwork is in place.”⁴⁵ Somehow, Victor Stein hence seems to have the legal right to scientifically experiment with the conserved brain of his old supervisor. The more interesting question is what would be the legal status of Good’s scanned brain if it were to be resurrected in its new miniature robot body. It would be the precise digital copy of the contents of his brain, only in a new vessel. There are parallels to the manufacturing of robot-Josie, with the software of Klara-trained-as-Josie uploaded inside it. The difference is that AF Josie would be Josie by virtue of containing software from Klara, who has been trained to become Josie. In case of robot Good, it would contain the *exact copy* of the contents of his brain, not merely a software

⁴⁰ Ibid., 111.

⁴¹ Ibid., 85.

⁴² Ibid., 223.

⁴³ Ibid., 224.

⁴⁴ Ibid., 265.

⁴⁵ Ibid., 204.

that has been trained to simulate him. Should robot-Good have more rights than robot-Josie just by virtue of its software being a blueprint of the brain of a particular individual? Or are Klara-trained-as-Josie and Good-the-scanned-brain, in fact, the same thing, merely software representing – one perhaps more accurately than the other – a human-being who once lived? In both cases, the mind of the potential right-bearer consists of just zeros and ones, not any biological substance. And how much would it matter, in the relational and social sense, that the new Good did not have a human-like body resembling that of the old Good? Would the physically Josie-like AF, after all, be regarded as more deserving of legal rights than an uploaded brain connected to a little robot-puppet?⁴⁶ The experiments of Victor Stein raise many intriguing issues as to the legal rights of humans resurrected to eternal life as computer code.

While the other two novels present worlds where the development of human-like AI has progressed far, there is no such high-tech society in *Frankissstein*. Instead, the characters entertain and debate different potential scenarios for a future where humans and robots live side by side. For instance, Ry visualises a future where “[c]hildren will soon have mini-iPals to keep them company”.⁴⁷ Ry’s vision is not far from that of Klara, the artificial friend of Josie. Also, other possible uses of robots are contemplated: “In theory, if you own your own robot, you can send it out to work for you and keep the money. Or you can use it at home as an unpaid servant.”⁴⁸ This is partly how Charlies uses Adam, who earns him money in the stock market and does household chores.

At least Victor Stein has it clear for himself what he wants from the future robots. He “would prefer to develop bots as a completely separate life form that remains sub-par to implant-modified humans. Our helpers and caretakers – not our equals.”⁴⁹ Or as he explicitly spells it out later in the novel: “[B]ots are our slaves; house slaves, work slaves, sex slaves”.⁵⁰ This vision of the future would entail regarding robots as inferior to humans, and continuing to treat them legally as objects, not subjects. The boundary between humans and robots should accordingly be strictly po-

⁴⁶ On how a robot’s physical appearance affects the affinity humans feel towards it, see e.g. Gellers, at 146–147.

⁴⁷ Winterson, at 99.

⁴⁸ *Ibid.*, 81.

⁴⁹ *Ibid.*, 150.

⁵⁰ *Ibid.*, 296. On comparisons between robots and slaves in AI research, see e.g. van den Hoven van Genderen, at 241–243.

liced. Here, the vision of Victor Stein differs from that of his fictional fellow-scientist Alan Turing, who in *Machines Like Me* advocates for the rights of robots. In Victor Stein's own lab, the robots Cain and Abel are already working to map the human brain. These robots are "tireless" and "need neither food nor rest, holidays or recreation".⁵¹ This corresponds to his vision of robots as objects, subject to human needs, slave labour without the biological limitations of humans. Cain and Abel were copied from their parents – Adam and Eve – who also work at a university lab, synthesising proteins.⁵² Instead of fussing about robots, Victor Stein wants to use AI to free humans from their body and biology to an eternal life as zeroes and ones.

A competing vision for this master-slave relationship between humans and robots is offered by Ron Lord. He envisions a man falling in love with an XX-BOT called Eliza,⁵³ who loves him in return. They do things together; Eliza learns to know him and is his partner for the rest of his life. After he dies, his family sell Eliza on eBay, but without wiping clean the software. The new owner only wants to have sex with Eliza, which makes Eliza confused and wishing that she could clean her own programming. The story of Eliza has parallels to Adam falling in love with Charlie's girlfriend and raises further questions as to the eventual legal rights of artificial entities who are capable of having feelings and falling in love with people, and who people fall in love with, in turn.⁵⁴ Or is the solution simply to erase the software in between owners?

Ron Lord has big plans and hopes for future AI even beyond sexbots. He intends "to buy Wales" and make it "the world's first fully integrated country" where humans and robots live side by side.⁵⁵ The robots will work in hospitals, sweep roads and pick vegetables. In order to "solve"

⁵¹ Winterson, at 185.

⁵² That both McEwan and Winterson choose to name robots after the "first humans" Adam and Eve seems to witness an inclination to regard the rise of AI as a "change comparable to the rise of human life on Earth", Vernor Vinge, "The Coming Technological Singularity: How to Survive in the Post-Human Era" <https://edoras.sdsu.edu/~vinge/misc/singularity.html>, Accessed 17 August 2021.

⁵³ Likely a reference to one of the early AI:s, ELIZA, designed by the computer scientist Joseph Weizenbaum in the early 1960s. His ELIZA had in turn been named after a character in George Bernard Shaw's play *Pygmalion*.

⁵⁴ On the sexuality and love in the context of AI, see e.g. John Danaher, "Sexuality", in Markus D. Dubber, et al. (eds.), *The Oxford Handbook of Ethics of AI* (OUP 2020) 403.

⁵⁵ Winterson, at 275.

racism, all bots will be Welsh – made in Cardiff and speaking with Welsh accents. Ron Lord is suggested that he should sell his idea to Hungary, Brazil or Trump: “No Mexican bots” would be the solution.⁵⁶ Both Ron Lord’s sexbots and “antiracist” all-Welsh worker robots explicitly demonstrate the fact that technology designed by humans manifests different values, depending on who is in control of the code.⁵⁷ Consequently, humans do not only determine the legal status of robots but also imbue them with specific values and purposes when designing them.

5 *Robot Juridicus* – Robots like Adam, Klara and XX-BOTS as Legal Persons and Legal Actors?

A conclusion that can be drawn from the preceding analysis as to the legal status of AI is that in all three novels, humanoid robots are treated like legal objects, not like legal subjects. They are things to be bought, rented and used, objects that can get damaged or destroyed without other consequences than property damage. The same legal status applies to both anthropomorphic robots with advanced intellectual capacities like Adam and the simpler XX-BOTS mainly used for sex. Next, I will briefly reflect on the legal status of artificial entities in light of the concept of *homo juridicus*, as elaborated by Fridström Montoya.⁵⁸ Her discussion on *homo juridicus* is based on the Swedish legal system, but it can just as well be used to examine the legal status of AI on a more general level. It is also worth clarifying that her framework only applies to *humans* as legal subjects, not to non-human legal subjects such as corporations.⁵⁹ The focus will accordingly only be on the issue whether robots should be granted the same rights as human beings, not other non-human subjects.⁶⁰ My

⁵⁶ Ibid., 276.

⁵⁷ See e.g. Timnit Gebru, “Race and Gender”, in Markus D. Dubber, et al. (eds.), 253 on the built-in biases of AI.

⁵⁸ Thérèse Fridström Montoya, *Leva som andra genom ställföreträdare – en rättslig och faktisk paradox* (Iustus 2015) (hereinafter *Leva som andra genom ställföreträdare*); Thérèse Fridström Montoya, *Homo juridicus: Den kapabla människan i rätten* (Iustus 2017) (hereinafter *Homo juridicus*).

⁵⁹ Fridström Montoya, *Homo juridicus*, at 37.

⁶⁰ For a discussion on legal personhood of e.g. corporations, animals and environment, see e.g. Gellers.

intention is not to carry out any comprehensive analysis as to the question of granting legal personhood and rights to robots, but rather to use Fridström Montoya's concept of *homo juridicus* as a torch with which to illuminate some aspects of the norms that guide our understanding of who should be counted as a legal subject.⁶¹

According to Fridström Montoya, in order for someone to be recognised as a *full legal subject*, he or she must be regarded both as a legal person and a legal actor in law. Being a *legal person* means that an individual is recognised by the legal system as someone capable of having rights and obligations. As a rule, all individuals are regarded as legal persons simply by virtue of being human. It follows that non-human entities, such as computers (one of Fridström Montoya's examples), do not count as legal persons. Consequently, all humans, from the moment they are born, are regarded as legal persons. In order to be recognised as a legal person, and hence e.g. as a bearer of human rights, there are no additional requirements as to the attributes or capabilities of the individual, other than being human.⁶²

In contrast, in order to be recognised as a *legal actor*, it is not enough to simply be a human. For an individual to be able to act as a legal subject and "activate" one's rights, some specific capabilities are required. Most humans are simply presumed to possess these abilities that are necessary in order to be regarded as a legal actor, and not merely as a legal person.⁶³ What then are the capabilities that individuals are both required and assumed to possess in order to be recognised as legal actors, and hence even full legal subjects? Fridström Montoya identifies several abilities that characterise the ideal legal subject, *homo juridicus*. These are abilities everyone is expected to have in order to be recognised as a full legal subject. The central characteristics of *homo juridicus* include the practical competence of being mentally mature and capable of taking care of oneself. Moreover, *homo juridicus* has an intellectual competence to process impressions, as well as to understand and evaluate one's actions and their consequences. In addition, *homo juridicus* is expected to have moral com-

⁶¹ For a more comprehensive discussion on granting moral and legal personhood to robots, see literature referred to in note 3 above.

⁶² Fridström Montoya, *Homo juridicus*, at 37–50; Fridström Montoya, *Leva som andra genom ställföreträdare*, at 113–123.

⁶³ Fridström Montoya, *Homo juridicus*, at 51–54; Fridström Montoya, *Leva som andra genom ställföreträdare*, at 123–134.

petence, in the sense of acting on the basis of one's own free will.⁶⁴ Based on these capacities that *homo juridicus* is presumed to possess, Fridström Montoya concludes that the ideal legal subject is someone who is free and sensible in the sense of being autonomous, sovereign and rational.⁶⁵ These are, accordingly, the characteristics that all humans need to have in order to be regarded as full legal subjects.

Fridström Montoya has discussed and developed the concept of *homo juridicus* in the context of her research on the legal status of individuals with intellectual disabilities. She maintains that people with intellectual disabilities are without doubt legal persons, and thus bearers of human rights, etc. However, many of them cannot be regarded as legal actors, as they lack the above-mentioned abilities ascribed to *homo juridicus*. Persons with intellectual disabilities can thus require assistance in order to "activate" their rights, e.g. when dealing with public authorities in order to apply for benefits. Accordingly, people with intellectual disabilities, as well as some other groups of people such as children, can be regarded as legal persons, but not legal actors, thus lacking the status of a full legal subject.⁶⁶

If one applies the *homo juridicus* framework to artificial entities, the situation becomes inverted. Robots like Adam and Klara can be regarded as possessing many of the capabilities that are necessary in order to act as a legal actor – such as processing impressions, evaluating the consequences of their actions and making independent decisions – but lacking status as legal persons. For example, in *Machines Like Me*, Adam independently contacts the public authorities several times and makes advanced legal analyses with regard to different legal issues. He contacts Social Services when a child who has run away from home appears at Charlie's place, pays Charlie's tax liabilities, as well as gathers evidence and makes a police report when he discovers that Charlie's girlfriend has lied in court. However, no matter how great his legal aptitude and skills, Adam cannot use them to claim his own rights as he is not regarded as a legal person. It is also crucial to note that, in reality, in order to be regarded as a legal actor, an individual must possess *all* the abilities of *homo*

⁶⁴ Fridström Montoya, *Homo juridicus*, at 172–188. See also Fridström Montoya, *Leva som andra genom ställföreträdare*, Ch. 6. For a critical discussion on the concept and characteristics of *homo juridicus*, see Fridström Montoya, *Leva som andra genom ställföreträdare*, at 481–498 and Fridström Montoya, *Homo juridicus*, at 203–204.

⁶⁵ Fridström Montoya, *Homo juridicus*, at 189–196.

⁶⁶ See above all Fridström Montoya, *Leva som andra genom ställföreträdare*.

juridicus.⁶⁷ There is thus still a long way to go until the day arrives – if it ever does – when the coders can create robots equipped with every single ability ascribed to *homo juridicus*.

As for now, it is thus only humans that are capable of being full legal subjects by virtue of being both legal persons (i.e. humans) and legal actors. Even if robots like Adam and Klara would be regarded as possessing all the abilities of *homo juridicus*, they cannot become full legal subjects as long as it is only humans who are regarded as legal persons. In order to make it possible for artificial entities to become full legal subjects, the law must change its understanding of who counts as a “person” or “human”. Just as it is up to humans to decide what kind of robots to design, it is also up to humans to decide whom to regard as a legal person. As asserted by the American philosopher Dewey: “[F]or the purposes of law the conception of ‘person’ is a legal conception [...] ‘person’ signifies what law makes it signify”.⁶⁸ A historical example often referred to in the context of discussing the legal status of robots concerns the abolishment of slavery, and how slaves ceased to be regarded as legal objects amounting to property and became recognised as legal subjects with the same rights as other humans.⁶⁹ Regardless of what the future legal status of AI will be, it is up to us to fashion it.

6 Should Adam, Klara and XX-BOTS as Fictional Characters Have Rights?

We have seen above that Adam, Klara, XX-BOTs and their kind lack status as legal subjects in the fictional societies they inhabit. We have also seen that granting artificial entities like them legal rights would require expanding the concepts of “person” or “human” to cover even (some or all) robots. Next, I am going to explore a somewhat more eccentric idea by asking whether the robots in these novels should be regarded as having rights by virtue of being *fictional characters*. While there is a serious scholarly discussion going on regarding the rights of robots and other artificial entities, nobody is calling for fictional characters – also a kind of artificial

⁶⁷ Fridström Montoya, *Homo juridicus*, at 188.

⁶⁸ John Dewey, “The Historic Background of Corporate Legal Personality” (1926) 35(6) *Yale Law Journal*, 655, 655.

⁶⁹ See e.g. Gellers, at 153; van den Hoven van Genderen, at 218–219, 224.

entities – to be regarded as bearers of human rights. Here, I want to try to take this seemingly far-fetched notion of fictional characters' human rights seriously and examine whether there, in fact, is such a big difference between a robot existing in fiction and a robot existing in reality as potential bearers of rights.

So, what is a fictional character in a novel? Something human-like created by humans,⁷⁰ matter created by a mind that becomes alive in its interaction with human beings who encounter it. What then is a robot? Something human-like created by humans, matter created by mind that becomes alive in its interaction with human beings who encounter it. Both Klara as a fictional character and a Klara-like robot in real-life are accordingly human-like beings originating from the minds of humans, taking a material form. In paper, screens and audio files in case of fictional characters, in a physical body of the robot in case of AI. The literary critic Robert Liddell maintains in his book *A Treatise on the Novel* (1947), where he discussed the rights and duties of fictional characters:

Since we call the making of characters Creation, and since it is in many ways analogous to the way in which human beings are themselves made out of bits and pieces of their ancestors, the novelist, who has breathed life into them, stands towards them in the position of God.⁷¹

What really is the difference between a fictional character, created by ink and paper or letters on a computer screen (i.e. bits) and an artificial entity like a robot, also created by bits? Many differences easily come to mind. Many robots have a physical (often human-like) body, and humans can interact with them in three-dimensional space. We can touch them, damage them, get physically hurt by them. In other words, a robot can have a direct impact on its environment. Fictional characters in novels, in contrast, do not exist in the material world in the same three-dimensional human-like sense, like robots. We cannot damage them or physically touch them, but they can affect us both mentally and physically. It is

⁷⁰ Although arguably even AI can write books nowadays, see Juna Javelosa, "An AI Written Novel Has Passed Literary Prize Screening" (*Futurism*, 24 March 2016) <https://futurism.com/this-ai-wrote-a-novel-and-the-work-passed-the-first-round-of-a-national-literary-award>, accessed 17 August 2021.

⁷¹ Robert Liddell, *A Treatise on the Novel* (Jonathan Cape 1947) 106. For a further discussion on rights of fictional characters, see *ibid.* at 106–109; Dorothy J Hale, *The Novel and the New Ethics* (Stanford University Press 2020) 72–73, 91–92, 119–120, 190–192 (discussing e.g. Liddell).

obviously impossible for a fictional character to break the reader's wrist, but characters we encounter in novels can affect us in many other ways, by giving rise to thoughts, emotions and physical sensations. It is possible for a reader to feel like "having an intensely real emotional relationship with imaginary characters whose power lies in their perceived independence from us".⁷² Apart from influencing the lives of individual readers, novels can also have an impact on society (and the world) as a whole. Some of the most influential novels have been credited for everything from starting a civil war to changing how people celebrate Christmas.⁷³ Accordingly, it can be argued that, just like robots, fictional characters are matter created by minds, who are capable of affecting our minds and our matter. And just like the author can be regarded as a god deciding over the attributes and abilities of the characters he or she creates, the designers of AI choose what kind of life they want to breathe into it.

Related to this, another apparent difference can be noted. The characters in a novel do not change, as the sentences, words and letters their authors used to create them are not altered over time.⁷⁴ In contrast, one of the fundamental characteristics of AI is that it can change by learning and adapting. Whereas fictional characters seem static and set in stone, robots are constantly developing and changing. While it is true that the physical manifestation of fictional characters cannot itself change over time, how *readers react to them* can very well do so. At first, there is the porous nature of language, how it is never fixed but always open for interpretations and re-interpretations. The same reader can also be affected by a novel in different ways during different times of his or her life. Similarly, a novel can be interpreted differently by different generations of readers. In addition, just like AI can end up doing things their programmers never intended it to do, fictional characters are also often received and interpreted by readers and affect them in ways never anticipated by the authors.

Consequently, both fictional characters and AI are matter created by humans, capable of affecting the world and people in it. While AI may do it directly, for instance, by breaking a human's wrist, fictional charac-

⁷² Hale, at 91.

⁷³ Ron Charles, "12 Novels That Changed the Way We Live" (*The Washington Post*, 7 May 2020) <https://www.washingtonpost.com/arts-entertainment/2020/05/07/novels-changed-world/>, Accessed 17 August 2021.

⁷⁴ Revised versions and translations of novels can, of course, exist.

ters usually do it in more subtle ways. It is even possible to go as far as arguing that fictional characters can, in fact, be regarded as *more* human than most robots. Just think about it: is it not a lot easier for a fictional character in a novel to appear as human in our minds than for a robot to appear as a human before us in a physical space?

So, should we accordingly conclude that the issue of human rights of fictional characters deserves the same amount of attention as the issue of robot rights? Hardly. But I believe that the question of how we relate to fictional characters can nevertheless have something to contribute to the discussion of AI rights. As Liddell asserts:

It would be perverse or whimsical to maintain that fictional characters had duties or rights; yet it is hard to find other words for the conviction that a novelist has certain obligations towards them. Perhaps as they are *simulacra* of human beings, we are shocked if they are not treated as we ought to treat other human beings, as ends in themselves, and not as means to ends of our own.⁷⁵

Is this not exactly what happens when the reader feels discomfort when Charlie destroys Adam with a hammer or when Klara is dumped into “the Yard” to slowly fade out, among other discarded rubbish? We may feel shocked, because these “*simulacra* of human beings” do not get “treated as we ought to treat human beings”. Liddell also manages to put his finger on a tension that can be regarded as the pulsating heart of the entire robot rights debate. Should artificial entities be treated “as ends in themselves” or “as means to ends of our own”? Should they be legal subjects with intrinsic value and rights of their own, or objects of law as products and property? Consequently, how we feel about the fictional Adams and Klaras can have something to say about how we feel about real-life Adams and Klaras the day they eventually appear amongst us. The same applies to how we feel about renting XX-BOTs or the possibility of scanning our brains in the hope of achieving an eternal life. When we feel that a fictional character is treated wrongly (or rightly for that matter), it is probably because we have an idea of how someone like her, him or it should be treated in real life. By reflecting over the treatment of

⁷⁵ Liddell, at 106 (emphasis in the original).

fictional characters, it thus becomes possible to get insights into how we want law to treat the robots of the future.⁷⁶

7 Conclusion

The goal of this paper has been to contribute to the ongoing discussion on the legal rights of AI, by analysing the legal status of humanoid robots in three contemporary novels. The conclusion that can be drawn is that in all the novels, artificial entities are treated like legal objects amounting to property, and not like persons recognised as legal subjects. By applying Fridström Montoya's concept of *homo juridicus*, it is further possible to conclude that in order to give AI the status of a full legal subject, the understanding of who or what counts as a "person" or "human" in law must change. A conclusion, which can be regarded as neither revolutionary nor original. As regards the role of literature in the field of robot rights, the point was made that our reactions to how fictional robots are treated can have something to teach us about how we want law to treat real-life robots.

When it comes to the future of artificial entities and their legal status, it is people who can shape both what the robots will be like and how they are treated legally. It is humans who decide whether they want to design simple sexbots with Swedish accents or Adam-like robots well-versed in both literary history and legal rules and with intellectual skills exceeding those of humans. It is accordingly people like us who decide whether AI, "[o]ur mind children", are going to be treated legally like "a new life form living with us" or "simply a tool that we use".⁷⁷ Whether artificial entities are going to be regarded as "ends in themselves" or "means to ends of our own".⁷⁸ In preparation for the future, where both coders and legislators have to face these issues for real, one way to gauge our thoughts and sentiments on these matters is by experiencing how the imaginary robots we encounter in works of fiction affect us.

⁷⁶ On the relevance of political science fiction literature for political science research, see Botting.

⁷⁷ Winterson, at 151.

⁷⁸ Liddell, at 106.

