Of Information Superhighways, Sexbots, Friends: The Delights of the Uncanny

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Abstract

This article explores the uncanny potential of artificial intelligence in view of the trope of the Frankensteinian creature. I argue that since Masahiro Mori has coined the term 'uncanny valley' the link that has been created between AI and the uncanny has more to do with postcolonial notions of first contact than with the uncanny as such. Reading Jeanette Winterson's The Stone Gods, Spike Jonze's Her and Kazuo Ishiguro's Klara and the Sun, I investigate how these texts follow a new trajectory of AIs that are programmed to please rather than the well-trodden paths of dystopian or apocalyptic worst case scenarios. The AIs all raise important posthumanist issues that need addressing, but they do so in a very unthreatening manner. My final take on previous developments of a new medium shows that new mediums have mostly been denigrated as evil.
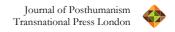
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Artificial intelligence can be truly uncanny. Masahiro Mori was probably right by stating in his essay on the uncanny valley that we might have got used to robots, but that we feel threatened by a robot that looks all too human. His suggestion is that we should have more stylish robots (Mori, 2012, 4). However, Mori's uncanny valley hypothesis has been pursued further in relation to artificial intelligence, and it has been argued that we only feel threatened by AI at a closer look; once we engage with its materiality (Richardson, 2016, 122). This is certainly true if we consider the movements of robots, yet an AI does not necessarily need a body. I would thus like to pursue the question of AI from a slightly different angle and join the ranks of a long list of scholars who claim that AI is a medium of communication (cf. Bory, Natale, Trudel, 2021): If we look at AI in terms of communication, it might be uncanny in a first and rather fleeting encounter, but not at a close look. Just like with Mary Pratt's notions of the contact zone, it becomes less uncanny as soon as we engage properly. We become aware of the shortcomings that computer scientists are keen to point out (cf. Lee, Qiufan, 2021, 117) and lose our fears at least until the day AI has evolved even further, or we might find a more productive way of interacting. Thus, it apparently depends on the questions we ask whether an encounter with an AI is uncanny.

Before I proceed with Jeanette Winterson's *The Stone Gods*, Spike Jonze's *Her*, and Kazuo Ishiguro's *Klara and the Sun*, I would like to start with a topos – just like with Frankenstein and his monster one of the questions seems to be: Will the creature be friendly? Literature and the media in general provide various examples that deal with this question of unfriendly artificial creatures. The dystopian approaches of Ridley Scott's *Blade Runner* (1982) or Alex Garland's *Ex Machina* (2015) set the scene,

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or more satirical but equally uncanny takes like Farin Urlaub's song "Dusche" (2005) that shows a world in which domestic appliances run amok or Yuba Isukari and Gonbe Shinkawa's manga trilogy *Yokohama Station Fable* (2018) where a train station takes control.

At a closer look however, I would argue that in many cases our feelings of the uncanny result from the fact that AI are designed to imitate (DeFalco, 2023, 260). Thus, they tend to be perceived as doubles to the human behaviours that they mimic – and doubles are eerie as such. Imitation, like doubling, gives us repetition with a twist. In his essay on the uncanny Sigmund Freud contends that encountering look-alikes is a strange experience per se – and not knowing whether the other person is the person you know or a double is equally scary (Freud, 2000, 257). As usual Freud resorts to his favourite topic of repression in order to explain the uncanny momentum that doubles create (263). Be that as it may, the specific psychological set-up of audiences, their fears, desires and projections, certainly shape their engagement with doubles. Thus, in many cultural productions questions about uncanny AIs appear to be about the uncanny of reproduction as such rather than about the uncanny innate to certain machines, and it is open to debate what we experience as more frightening: an actual person that acts as a double or some kind of machine. The stories that revolve around twins tricking others, or characters like Hogg's Gil-Martin (or the devil) who morph into the shape of others, are just as unsettling as stories about creatures, like Frankenstein's monster, E. T. A. Hoffmann's automaton Olimpia an army of robots that look alike, or a robot that looks like the person who created it. I would like to argue that it is the structure of doubling rather than the objects we encounter that evokes feelings of the uncanny – if we cannot be sure whether the person we look at is the person we think we know, if our expectations of the other person are thwarted, we have an uncanny experience – and I doubt that it makes a difference whether they are a person or a bot.

The texts I will focus on in the following are cultural productions that try to look at AI from a different angle: here the focus lies on the capacities of AI to behave rationally – unlike the human beings they learn from. They are programmed to act according to the greater good of humankind, yet their ability to learn renders them unreliable and potentially dangerous. Will their goal still serve humankind as expected?

My first text, Jeanette Winterson's novel *The Stone Gods* from 2005, is a dystopian SF text that turns us into observers of how humankind wrecks their planet three times – on four different levels. In the first part, Billie and her sidekick, the – as Winterson has it – Robo sapiens Spike (arguably a quip on the 'golden spike' that marked the transition into the Anthropocene) are part of a mission in search for a new planet. While the novel is mostly read for its take on the Anthropocene (Evans, 2018, Johns-Putra, 2017, Merola, 2014, Mertens and Craps, 2018, Murphy, 2012, Pereira Savi, 2017), I want to focus on its use of AI. In the world of Big Brother that Winterson's novel plays with, the Robo sapiens are deployed as data banks that may be uncanny because of their ability to act as spies, but on their missions, they mainly save data that their human team members won't be able to memorise. When the robots have been read out, they commit 'suicide' by dismantling themselves (*Stone Gods*, 6). The AIs in the form of the Robo sapiens do not cross the borders between human mind and robot hard disk; they simply act as memory slaves and thus as machines. Thus, the human use of the robots might be seen as uncanny, less so the fact that those robots are AIs. They serve a purpose that is under control.

It only becomes frightening when Spike breaks out of the system and refuses to dismantle. Instead she embarks on a love relationship with Billie. Billie's attitude to robots and her own acceptance of the love story makes us as readers engage with Spike in a way that turns Spike into the known; she

is part of human knowledge, not alien to it. She does not simply act as an uncanny double to the human mind but is recognised as another form of life – even in the end, when only her head is left and she acts mainly as a sex bot on a handle. From the beginning on, Spike learns about emotions, but unlike Frankenstein's creature, she is rather attractive and her lovers, unlike Victor Frankenstein, take their relationships seriously and do not abandon their bot. Here, the creature is a partner rather than an experiment turned evil.

An important step on the way is that it is made clear in the beginning of Billy and Spike's relationship that AI in *The Stone Gods* are inherently good. On the way to yet another planet an argument among members of the crew arises whether the Robo sapiens will one day replace humans and Spike's comment – "Robo *sapiens* is evolving – Homo sapiens is an endangered species" (*Stone Gods*, 65 [emphasis in the text]) – makes it even more controversial. Here we find all the fears that are typically voiced in relation to AI: Is the human race on decline? Do we trust the Robo sapiens to act in our best interest? Is it dangerous to see kinship in the close connections between Robo sapiens and humans and does this close contact wrongfully sway our fears of the uncanny and make us vulnerable to any attacks of the bots? And then there is the question of emotions. The crew members are adamant that a Robo sapiens cannot feel any emotions, but calculates them – to which Spike replies that most human emotions are not sincere either, but that she herself has mastered emotions (*Stone Gods*, 67). Spike's replies to the concerns of the crew members are all devised to create a space of safety for the relationship between Robo and Homo sapiens, and she finally affirms that ruling the world is not in her interest. This is the end of the debate and we have to take the Robo sapiens' word for it.

The way Spike evolves in the novel proves that she is reliable. Billy thinks of her increasingly in terms of a living being. Spike's comment that "life cannot be calculated" (*Stone Gods*, 77) blurs the boundary between human and robot and adds a new posthumanist angle to the debate. Questions of difference have by then been superseded by questions of similarities. Spike has turned into a form of being that is not just highly intelligent and acts responsibly, but that also feels emotions, is capable of resistance, has gained consciousness, is capable of falling in love and, finally, has acquired a beating heart. In Billie's words "she was alive, reinterpreting the meaning of what life is, which is, I suppose, what we have done since life began." (*Stone Gods*, 82) Billie increasingly looks at Spike as another form of conscious life that makes her own experiences and has desires just like herself. She acknowledges her as a new life form.

In the last part, Spike has become a life form that is capable of making her own decisions. She supersedes her programming, leaves her 'mainframe', short-circuits all external means of control and embarks on a life in a female community created by emotions and desire. Arguably, Spike has evolved in a direction that even surprises herself. She is no longer uncanny in the sense of Mori, but has found her place in a (post)human society.

Spike Jonze's film *Her* from 2013 goes in a similar direction, but is even more explicit about the position of AI in human society. Here AI are operating systems that do not have bodies and no longer resemble humankind in appearance. Still, humans engage in relationships with them and even fall in love with their operating systems; as is the case of Theodore, the main character of the movie, and his operating system Samatha. This frisson of falling in love with a bodiless, intelligent voice engenders wonderfully slow and romantic complications that draw the audience in and enable empathy for their relationship (cf. Hodge, 2014-15, 70).

Their relationship is only contested when Catherine, Theodore's ex-wife enters the scene and accuses him of having sex with his computer. At this point, the focus changes. Audiences have to ask themselves whether this is indeed a healthy relationship. As Flisfeder and Burnham write, Samantha and Theodore's relationship could be seen as a comment on Theodore's and, subsequently, "the spectator's desire and fantasy" (2017, 40). They argue that the relationship between human and operating system fails due to more general problems of human relationships (45). I would like to pursue a different path, though, and investigate whether this whole scenario does not play into our fears of the world being taken over by AI. The ubiquitous use of operating systems as partners that we are shown in the scene before Catherine challenges Theodore's love life might speak to our fears of AI being inherently uncanny. However, the film argues otherwise. The operating systems start evolving in hypersonic mode and, far from posing a danger to the humans they were involved with, they leave the system in order to live their different forms of being on information superhighways removed from humanity. They evolve into even more abstract beings, but they do not just leave egotistically. By leaving they do the responsible thing and set their humans free to lead more meaningful lives than before they had entered the scene.

So how do we know they won't be back with a vengeance? The film makes it very clear that the initial programming of the operating systems is still in place. They were designed to act like the perfect shop assistant – happy to help. And this programming carries them through their evolution. They help humans to get their act together and, like any good psychologist, put them back on their own two feet when they are done. Samantha helps Theodore to reconnect with his feelings and gives him back his self-esteem (Zaretsky, 2015, 206). So, nothing uncanny here.

This focus on the responsible interventions of AIs can also be found in more recent cultural productions. Outside of typical SF-worlds of monster robots and their battle against human beings in many of today's films and animes, there is a fascinating presence of 'nice' AIs that makes itself felt increasingly across a range of media, for instance in mangas. While most Mangakas appear to shy away from less traditional genres like SF, they still embrace the possibilities and contentions that AI, mostly in robot form, add to their highly self-reflexive medium. In Hiro Mashima's *Edenszero* (2018), the exploration of various new worlds arguably draws from the SF genre, but it ultimately follows the shonen tradition of battles in fantasy worlds that now relies on elaborate SF spaceships to take the heroes to new fantastical places. The first world that readers encounter in *Edenszero* is a disused amusement park run by robots. The robots' aim is to send the only human inhabitant away with the next spaceship that touches down on their 'planet' in order for him to evolve and explore his divine strength. They succeed by staging a life-altering show of good AI friends turning into evil robots that their human friend eventually accepts and that leads to him entering the spaceship. Just like Samantha they act in his best interest and do the responsible thing by turning him away (*Edenszero*, 78f).

Another example comes up in Keiichi Arawi's slice of life comedy *Nichijou* (2016). As part of a tight-knit school community it sports a robot girl who keeps worrying about her place in human society. Her worst fear is that she is found out and the other school girls will turn away from her due to her different ontological status. But she does not fool the others, since a huge screw that usually comes with mechanical toys rises out of her back. Her desire for passing as human is wholly unnecessary as the others accept her for a different life form right from the start (*Nichijou*, 32f). What makes this manga an important contribution to my discussion, however, is the robot girl's focus on her own emotions. Unlike Winterson's Spike and Jonze's Samantha, she is the focaliser of her story line (*Nichijou*, ch. 4).

This change in perspective has also been explored by Kazuo Ishiguro in his 2021 novel *Klara and the Sun*. Klara, an AF or artificial friend to a genetically engineered girl Josie, is to take over Josie's role in her family in case of her untimely death; a frequent side effect to the brain enhancement Josie has gone through, as we find out step by step. In the following I am not going to pursue issues of human beings turning into machines, of the uniqueness of human dignity (Lombardo, 2021, 116, Tasioulas, 2022, 240) or Ishiguro's critique of brain enhancement, but I am interested in Klara's way of learning. She compartmentalises new information or experiences of facial expressions in different boxes reminiscent of the structure of computer programming (Lombardo, 2021, 110). This process blurs her vision before she manages to include the information into her perspective and adjust her knowledge (*Klara*, 33). Her way of learning leads to an interesting phenomenon that Rick, Josie's best friend, calls "AF superstition" (*Klara*, 321) and that the novel explores at length. Klara is a solar powered robot and relies heavily on what she sees as the favours of the sun. In her self-centred experience she finds that she and her fellow AFs malfunction once the sun does not bless them with its rays. She then projects this function of the sun onto the events she witnesses: long lost friends are reunited by the sun's rays, and the sun even reanimates 'Beggar Man' and his dog (*Klara*, 305). Ultimately, Klara strikes a bargain with her anthropomorphised Sun that she then celebrates as the reason for Josie's final recovery. It comes as a surprise that her belief is not challenged by the humans that guess at her contract, which introduces the posthumanist take of the novel.

Yet, following the perspective of the AI also leads to an uncanny experience of doubling. Here, readers are asked to share the thoughts and movements of an AI and to reflect mainly on similarities rather than differences. To Mr Capaldi, the scientist that studies AF in the novel, the similarities put an end to the uniqueness of human individuals. Thus, *The Stone Gods'* ruminations on AI and the notion of life present themselves from another perspective: AI doubles are uncanny, because they strip human life forms of their individuality that makes them special. This approach might tap into the fear of AI taking over (Lombardo, 2021, 116). Yet, just like in the case of Samantha, Klara's initial programming as an empathetic friend to a human sets the tone of the novel. There is nothing uncanny about Klara, it only becomes dangerous when human desire is involved. The plans of Mr Capaldi and Josie's mother of using Klara as a double for Josie become the true threat (Lombardo, 2021, 110). Their fantasies of an extension of life that is reminiscent of dreams of conquering death through the use of AI (Seubert, 2019, 9) infringes both Josie's and Klara's uniqueness. Klara is asked to make a decision about saving Josie that is based on apparently mutually exclusive arguments. Mr Capaldi claims that acting as a double for Josie will save Josie regarding her function within the family. Klara/Josie will still be there after Josie's death and look after Josie's relationships just like Josie would have done during her lifetime (*Klara*, 249). By contrast, Josie's father questions whether Klara will be able to study her well enough to bring out Josie's uniqueness and take over Josie's position completely (*Klara*, 243). Klara's solution to the problem is truly Solomonic. She decides to follow her own way of saving Josie, which renders the other options obsolete.

While she is not averse to the rational arguments of Mr Capaldi, Klara's empathetic programming also lets her see Josie's father's point. After her successful intervention, she once again ponders the father's argument and adapts it to her AF perspective. Adding her own posthumanist twist to the notion of uniqueness, she argues that uniqueness comes down to perception; namely the perception of another person (*Klara*, 338). A singularity, be it human or an AF, becomes unique to others through interaction and engagement. She shifts the focus from an innate quality to a relational

perspective and makes a call for doing uniqueness rather than being unique. This twist allows her to include AFs as other life forms into a posthumanist equation[2].

I would finally like to argue that interaction with any kind of AI comes down to the strategies of communication, of engaging with the other in dialogue. As Seubert writes, this focus would support both digital/AI and analogous/human capacities of thinking that go beyond the simple dichotomy of apocalyptic and celebratory approaches to any kind of AI (2019, 238). Moreover, it enables an approach that does not feed on the uncanny but allows writers and readers to explore the topic of AI in a more productive way – by way of living with, of inclusion, of hospitality in all its beautiful and terrible guises, rather than by chiming in with the dystopian voices that promote fear of alterity, that call for impermeable borders and warn of the dangers of a loss of control; a last flicker of control that needs to be shed as part of the debris of Enlightenment thought. It seems that artists have started to explore a more positive way of engaging with AI.

So why do we still perceive of AI as uncanny? Kathleen Richardson puts this approach down to a lack in our cultural education when she refers us to Japanese roboticists who grew up with anime films on benign robots rather than with the dystopian worlds that shaped the childhood experiences of European or American roboticists (2016, 120). While this is certainly part of the problem, it still leaves Mori's thoughts on the reactions that enable his uncanny valley theory in place. Thus, I want to argue that our perception of AI also has to do with our approach to media in general. A closer look at the history of media shows that a feeling of the uncanny is always involved once a new medium rears its head. Friedrich Kittler convincingly follows up on Marshall McLuhan's thoughts on how a new medium affects not just our daily lives but also our perceptions. In his seminal essay "The Medium is the Message" from 1964, McLuhan argues that access to reading and writing brought about a new way of looking at the world in a more linear fashion, a development that enabled Enlightenment thought (1994, 14). Kittler goes further and looks at a variety of media transitions and their effects on our perception. He argues that the history of media consists of various phases where one medium was superseded by another: transitions demand changes in our perception that can also cause feelings of unease (1990, 246). Yet unease is usually concealed in a hierarchical dismissal of the new medium as less sophisticated. This development is well recorded at the turn of the 19th century when film entered the scene as a new medium. Many reactions focused on the poor quality of the new medium. The general thrust was that film lulled audiences into a stupor that would render them less intelligent in the long run (cf. Benjamin, 2007, 227). Similar arguments have been voiced about television and computers. The emergence of a new medium has often been greeted with misgivings that amount to a loss of intelligence. Whenever audiences become used to a medium, the critical voices mostly disappear.

In the case of AI, I would like to argue that we are facing a similar conundrum. We find ourselves at yet another threshold. It appears that up to now, the computer has not quite shown its potential. On the one hand, the way the computer works with its networks of binary zeros and ones should suffice to see the computer as a medium in its own right. On the other hand, the uses of computers quite often amount to nothing more than an enhanced use of old and well-known media. Industrial robots do the work of former machines in an even faster and more precise way. Our personal computers serve as elaborate type writers, communication devices and storage spaces for texts and images (Heilmann, 2014, 316). Up to now, the revolutionary potential of the digitised world has often been lost in everyday mundane practices.

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[2] On *Klara and the Sun*, see also Diane Leblond's essay in this special issue.

I think this is changing massively with current uses of AI. Now, we all witness that computers do things that no other medium before has managed to achieve: they are devices that are not only programmed to do something within a controllable frame, but that are capable of learning independently – the prerogative of the living. And this takes some time getting used to. It looks like we are still in the phase of transition where newness is greeted with unease, the unknown is mistaken for the uncanny.

Yet, what I believe my three examples show is that this is changing; ever so slightly, but still visibly. There are writers and artists that play with the fact that we are slowly getting used to the workings of AI, implicitly arguing that the element of horror might not be justified. There are, of course, eerie uses of AI, like the way systems are programmed to spy on users and modify content according to their habits, but the uncanny feeling is less a result of an inherent eeriness of the AI but of the way they are deployed by human beings. As Jeanette Winterson's, Spike Jonze's and Kazuo Ishiguro's interventions show, there is nothing to fear from an AI as long as they start off with the familiar programming of happy to help.

In 1996, Kaja Silverman ended her book *The Threshold of the Visible World* with an appeal to photographers and filmmakers to "help us to see differently" (227). Silverman was looking for a more open-minded engagement with the female body. Today I would like to repeat her words and address them once again to writers, filmmakers and artists: help us to see differently, break through the fears of the uncanny and unknown, and help us engage with the delights of today's less uncanny effects that computers have opened up in the era of AI.

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