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The Vitruvian robot

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Abstract Robots are simultaneously real machines and technical images that challenge our sense of self. I discuss the movie Ex Machina by director Alex Garland. The robot Ava, played by Alicia Vikander, is a rare portrait of what could be interpreted as a feminist robot (and there are spoilers ahead for any readers unfamiliar with this movie). Though she apparently is created as the dream of the 'perfect woman', sexy and beautiful, she also develops and urges to free herself from the slavery of her creator, Nathan Bateman. She is a robot created along the perfect dimensions as a Vitruvian robot but is also a creature which could be interpreted as a human being. However, the point I want to raise is not whether Ava's reaction to robot slavery is justified or not but how her portrait raises questions about the blurred lines between reality and fiction when we discuss our robotic future. A real version of Ava would not last long in a human world because she is basically a solipsist, who does not really care about humans. She cannot co-create the line humans walk along. The robots created as 'perfect women' (sex robots) today are very far from the ideal image of Ava. They are sexist, primitively normative and clearly 'wax-doll machines'. So though Ava's dimensions are perfect she, like the Vitruvian Man, remains a fiction. In real life, however, we may have to deal with an increasing solipsism stemming from people engaging with machines like sex robots. In this case, it is human and not robotic solipsism we need to worry about.

Keywords Science fiction · Robot feminism · Solipsism · Sex robots · Vitruvian man · Robotics · Ex machina

Robots are challenging our sense of who we are in relation to each other. They are also changing our reality and our ethical relations (Hasse 2015). In the movie Ex Machina, written and directed by, Alex Garland, the robot Ava is a rare portrait of a feminist robot (and there are spoilers ahead for any readers unfamiliar with this movie). When we see Ava in close-up her face skin is perfect and her eyes sad and full of compassion. When she moves her head, we become aware of her head as a shining, ingenious metal construction. Her body is perfect and moving smoothly through the silent rooms of her engineer creators dwelling in the isolated mountains. Part of the body is transparent so we can see the nuts and bolts holding her joints together. We are not to forget that she is a robot, for this is the whole point of her creation. Will she, although clearly a robot, be able to let another human believe she could pass for a human? The answer is yes. Though the world for her is not meaningful as it is for human beings, we believe she is still capable of sensing injustice done to the sexy robots by their creator and devious master Nathan Bateman. In Bateman's bedroom, female robots are misused, cut up in pieces and hung up as used cloths on hangers. By no accident, this cruel and senseless robot murderer bears the same surname as the serial killer in the novel American Psycho by Bret Easton Ellis. We feel the sweet revenge with Ava when she, together with the misused android Kyoko, ends Bateman's life. Kyoko is destroyed by Bateman, but Ava leaves the mountain retreat as a free robot woman in a helicopter and joins the human world in a city buzzing with life. Does she embody the ideal new being that robot designers strive to create? A robot, more human than humans, with the power



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92 AI & Soc (2019) 34:91–93

to destroy destructive humans, because she feels compassion for misused things. Or is she in the Spinozist sense a new body striving fiercely for its own existence among other bodies striving for theirs.

We may interpret Ava and her departure from the designers' Paradise into the real world in many different ways, but she is after all not really graspable real. She is a flat figure coming into being in what the techno-philosopher Vilém Flusser has called the universe of technical images (2011). This universe is not a concrete space–time–bodily experienced place, which follows the reigning laws of physics but an imagined space from which we project our own new realities. In this new glamorous universe, the illusionary mix with the nonillusionary and borders between fiction and reality are blurred.

As an image Ava is not literally graspable; she is a new Vitruvian measuring rod. As a poetic and forceful image, she disturbs the perfect proportions of the Vitruvian Man drawn by Leonardo da Vinci around 1490 formed after the perfect proportions designated by the roman architect Vitruvius. The Vitruvian Man was never real, but a fantasy of the perfect ideal human—that happened to be a man, like the architect and Leonardo himself. Feminists have for decades tried to rock his balance. The Vitruvian Woman (in all colours and shapes) has been proposed as new ways to define what is human about humans. Of late, even dogs and cats have been included in the Vitruvian family showing that the posthuman embrace more than human bodies (Braidotti 2013). Yet the Vitruvian figure has remained an isolated ideal body experiencing and influencing the world suspended in its own web of idealised threads held in place by the perfect circle. Putting Ava there in the middle, however, open for new kinds of questions about what humans are and what we are about to become. We can be posthumans in many ways. Our ideal robot can be the isolated individual human-machine spinning more and more threads around itself until the creature become a new allencompassing entity like it is proposed by the 'singularists' (Kuzweil 2005). Or Ava's compassion will let her extend out into the world. In this process, the threads holding her perfect proportions together will be unwinded and begin to protrude through the circle and her flat existence in the universe of technical images and place her body in the handson world. Here, we will first realise that the perfect circle never existed (Ingold 2008) and next that she will have to connect her bodily being with other bodies to survive. She must seek a collective existence to be 'graspable' (Flusser 2011). This grasping will involve translation of the pictorial moving surface into a body that can follow the lines entangling humans. According to the anthropologist Tim Ingold lines are everywhere. "As walking, talking and gesticulating creatures, human beings generate lines wherever they

go" (Ingold 2007, 1). It is along these lines things continually come into being.

Ava differs from many graspable robots in so far she talks, gestures and walks effortlessly around and move her body as any other human would do it. Does it follow that she is affected and creates things along lines as humans do? In theories of new materialism, there has been an acknowledgement of how things may have independent existences regardless of our conceptualisations of them. Things in the environment affect us in many ways we may not notice. We form collectives with things and each other without our realising it. Yet when we do become aware of the existence of other bodies, we tend to react back on the bodies we sense with care or disdain. In a Spinozist sense, we may destroy bodies threatening our existence (as Ava does when she, with the help of the android Kyoko, kills Bateman), but we may also become stronger in our striving for existence when we join forces. We then tie our existence to others, we begin to vibrate together (Bennett 2010). Was Ava really compassionate and feeling for the other robots like Kyoko when she killed Bateman-or was she just acting for her own good? If she leaves the circle in her ideal technical images' universe, could she really learn to vibrate with other bodies?

If she actually stepped into our hands-on universe, we would soon find out what kind of feminist she really is. She would find other robotic creatures to liberate. Humanoid robots are being created in increasing numbers—often following inspiration from the media universe. For instance, a company that created the sex robots with the paradoxical name of 'Truecompanion' promises that sex robots (pretending to be dressed in idealised female or male prostitute shapes) are, as the company explains on its homepage, always turned on and ready to play with you. In real graspable life, Bateman would probably long to be back in his fictionous universe when encountering these clumpy and primitive beings with their chains, lace stockings and bras on their creaking bodies, sensing their cold plastic skin, listening to insensitive voice and frankly boring behavior. The robot Roxxxy even come with a clocklike heartbeat that may put you to sleep with its repeated sound. In the hands-on life we share with these robotic phenomena they set new standards for human exceptionalism. What other species would replicate itself in the shape of something less lively, less compassionate and prefer this as a true companion? Humans can choose the lifeless partner of their preference with a variety of colours and encoded temperaments, e.g. the domina or compliant schoolgirl. Some may believe that these robotic prostitutes may help reduce instances of real serial killing and prostitution. However, this is not likely. As noted by Kathleen Richardson, sex robots do not help to reduce prostitution. On the contrary, these new



AI & Soc (2019) 34:91–93

technologies seem to expand the sex industry and should therefore be banned (Richardson 2015).

Using Ava as the Vitruvian robot may, however, help us get rid of this lifeless image of humans as usable products that live on in the sex robots. The true companion robot Roxxxy congeals an image of the solipsistic humans as materials that are anything but vibrant. In Ava's media universe, these hands-on graspable robots would not be appealing bodies. Ava would never team up with these zombie-like creatures. My guess is that she would let the real Bateman-engineer, who made these hands-on weirdoo's, spin his boring circle around the creatures. She would not try to liberate them from their sexist creator, but she might feel pity with this feeble human who is so isolated that he cannot get in contact with other living bodies. In a Spinoziszt sense, these isolated bodies are likely to wither away.

Human beings are exceptional as a species because our lives depend on so much on learning (rather than just genetics). We do not learn as individuals but as persons through which lines of cultures resonate (person like in per sonare—sounding through) as we create our common world. Will Ava then in this sense learn to be open to the resonance of the world and feel compassion also for the humans that created her? If so, she could be the new ideal for humans and robots alike and her rebellion against sexist behaviour may be what we need to create a new robotled feminism. In Flusser's words, "the structure through which information is carried exerts a decisive influence on our lives" (Flusser 2011, 5). We are now carrying ideas and influences through the universe of technical images in ways which directly affect our ethical and moral wellbeing. This does, in my opinion, often lead to the mistake of taking technical imagery for graspable phenomena. Graspable hands-on phenomena are having different effects than virtual imagery. As we attempt to congeal imagery into graspable things, the material artefacts emerge with new qualities and ethical dimensions. Whereas many fight degrading

prostitution in real hands-on space, Ava may be fighting for us in the media universe—with different effects.

If we imagine that Ava configured into graspable space, her figure becomes a tricky one. If she really stepped out of the Vitruvian circle and entangled herself with you and I, what we would believe to be human-like feelings would probably turn out just to be a cleverly devised sensor system of the same kind, though much more advanced, than Roxxxy's. Whatever we sensed as compassion would need engagements with a collective of humans to become alive. In the movie, Ava escaped partly by seducing Bateman's employee, a young man called Caleb. She also, as a modern Nora, left him behind when she left in the helicopter. Her heart was in the end not beating for anyone but herself. Thus to conclude, neither Roxxxy in her imperfect, isolated and rather sad being, nor the agentic Ava opens up for the real compassionate lines of engagement that just can be like characteristic of human beings, as the Bateman character. We do not need a Vitruvian Ava Bateman. We need to disentangle the lines of any perfect solipsistic Vitruvian circle threating to shut out encounters with other living bodies.

References

Bennett J (2010) Vibrant matter: a political ecology of things Duke. University Press, Durham

Braidotti R (2013) The Posthuman. Polity Press, Cambridge

Flusser V (2011) Into the universe of technical images (trans. Nancy Ann Roth). University of Minnesota Press, Minneapolis

Hasse C (2015) Multistable Roboethics. In: Friis JKBO, Crease RP (eds) Technoscience and postphenomenology: the manhattan papers. Books, Lexington, pp 169–188

Ingold T (2007) Lines: a brief history. Routledge, London

Ingold T (2008) Bindings against boundaries: entanglements in an open world. Environ Planning A 40(8):1796–1810

Kurzweil R (2005) The singularity is near: when humans transcend biology. Viking, New York

Richarson K (2015) The asymmetrical 'relationship': parallels between prostitution and the development of sex robots. In ACM SIGCAS Comput Soc 45(3):290–293

