

# Contemplating Automaton Consciousness through Creativity in Rokuro Inui's *Automatic Eve*

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Rokuro Inui's *Kikou No Eve* is a work of science fiction published in Japanese in 2014 and translated into English by Matt Treyvaud as *Automatic Eve* in 2019. Molly Tanzer describes *Automatic Eve* as “[a] dark and fascinating meditation on what makes us human – think *Blade Runner*, but set in the Floating World of Edo Japan” (2019: front cover). While an apt enough description of one side of a binary – human vs. not human – and as seminal as *Blade Runner* is to cultural representations of human-automaton relationships, I would argue that Rokuro Inui's *Automatic Eve* works to break down binaries of human-machine by demonstrating the ‘soul of things’ or the spontaneous and human-imbued consciousness of automaton. I would like to introduce Rokuro Inui's novelistic inquiry with an examination of how posthumanism facilitates the break down of human-machine boundaries and how the historical and contemporary Shinto and Buddhist religious and cultural context of Japan further allows for an historical-religious and cultural precedent for the other-than or more-than-human possessing consciousness; or in the language of Buddhism, how all beings possess the potential to achieve Buddhahood or enlightenment.

For Donna Haraway, Rosi Braidotti, and Cary Wolfe, among others, far from reinforcing the binaries of human and other, the automaton is a symbol of the breach of boundaries or even the dissolution of the lines that separate the human from the automaton. For others such as Bruno Latour, Jane Bennett, and Deleuze and Guattari, the automaton or robot is already part of the human and non-human assemblages of which the human is no special player, but just one among many. Thus far from starting with the binary enforcing question posed by Molly Tanzer and many others in discussions about automatons – what makes us human? or what makes humans special? – I would like to begin with the posthuman assumption that humans are but part of the human and nonhuman assemblages and that the assumption of superiority and difference is one of culture and not of nature, and further that to assume a difference between culture and nature is itself an absurd dichotomy in the aftermath of Donna Haraway's barrier breaking argument that what we have been calling nature was culture all along. While much of Rokuro Inui's *Automatic Eve* focuses on intricate discussion of the mechanical workings of automaton and hu-

mans – thus reinforcing the mechanistic workings of machines and humans – the work eventually circles back around to what is really the central discussion of what Charles Jennings’ aptly names *machina sapiens* in his 2022 work *Artificial Intelligence: Rise of Lightspeed Learners*: do *machina sapiens* have a soul?; or, to veer away from the historical and religious prejudice implied in the discussion of souls, and to put this rather in more philosophical and contemporary language, can and do automatons possess consciousness and how is this connected to the animation of a human-like body?

The question of what is consciousness and how do we know something possesses said consciousness has proven incredibly complex in all fields of inquiry, such that many philosophers and theologians resort to statements such as the following made by Pentti O Haikonen in *Consciousness and Robot Sentience* “[t]he philosophy of mind has tried to solve the mystery of consciousness, but with limited success” (2012: 2). Other disciplines, such as psychology and neuroscience, have attempted to define consciousness through “neural activities with conscious states” (2012: 2), but have come short of explaining how the neural activity can demonstrate awareness of consciousness. Engineers and programmers have likewise attempted to define consciousness through systems theory as a product of movement and learned behavior through socialization. Thus, the inquiry into consciousness has been left at least partially unanswered and far from resolved into simple definitions. Thus automaton consciousness remains a realm for artists and writers. Referring to this realm, Nicolas Reeves and David St-Onge argue that the automaton is “where our impulse for *animation*, which fundamentally means the process by which a soul (*anima*) can appear spontaneously in an artefact, expands to include movement and behaviour” (2016: n.p.). Further, Reeves and St-Onge demonstrate that “Etymologically speaking ‘automaton’ thus describes a machine that can not only move or work, but also think and will, three notions that are usually associated with beings infused with a mind: conscious living beings” (2016: n.p.). This question of whether automatons have a soul and agency or consciousness is at the heart of Rokuro Inui’s novelistic world in *Automatic Eve*.

In the 2021 novel *Satellite Love* by the Japanese Canadian author Genki Ferguson, Soki, the son of a former Shinto priest, questions if *kami*, the Shinto term for soul or spirit, can exist in the industrial landscape of Sakita. Soki repeatedly seeks answers to the question of whether “man-made objects have kami, too?” (2021: 36). One of the three central characters in *Satellite Love* is a satellite, answering this question in part by showing the love, care, and spirit or soul of the Satellite. The novel, and Shintoism, more generally, answers this question of the soul of things in the affirmative.

Buddhism has also had to grapple with the being or soul of things in part through robotics. Thus, Japanese Buddhist culture has developed end-of-life rituals for robots and AI. Jennifer Robertson explores at length in *Robo Sapiens Japanicus: Robots, Gender, Family, and the Japanese Nation* (2018) “[w]hat happens to aging, dam-

aged, defective, and inoperative robots" (2018: 183). Robertson writes that "a new type of memorial rite – the robot funeral – has been introduced in Japan by several Buddhist temples" (2018: 183). In the case of the robot dogs AIBO, when the parts of their sick dogs could no longer be replaced and useful parts had been harvested for other robot dogs, nineteen AIBOs "were given a funeral at Kōfuku-ji, a 450-year-old Buddhist temple in Isumi City" (2018: 184). The officiating priest described this as an occasion when "the robots' souls could pass from their bodies" (2018: 184). The priest also said that he "was thrilled over the interesting mismatch of giving cutting-edge technology a memorial service in a very conventional manner" (qtd. in Robertson 2018: 184). Kōfuku-ji is of the Nichiren denomination of Buddhism, which focuses on the *Lotus Sutra*. According to the *Lotus Sutra* and Nichiren Buddhism, all matter is infused with the Buddha nature and humans and animals have the potential to attain Buddhahood. Indeed, Masahiro Mori writes in the *The Buddha in the Robot*, developing on the writings in the *Lotus Sutra*, all things have the Buddha nature within them and thus robots also have the Buddha nature within them and the potential for attaining Buddhahood.

It should not be surprising then that a work written by a Japanese author and set in Edo-era Japan should deal in part with the question of the soul of things and the soul in particular of artificial humans. Kyuzo, the man who makes the robots, muses as follows: "A soul can take up residence anywhere. Use a tool long enough and it takes on a life of its own. All the more so for things made in the image of humanity" (2019: 27). Kyuzo is discussing the question of souls with the automaton Nizaemon. At this point in the narrative Nizaemon does not know of his artificial nature and he responds by saying "Surely you aren't saying that you can even give your automat[ton] souls?" (2019: 27). Kyuzo responds with "[w]hat is a soul?... Hair, skin, innards – I can reproduce everything in automated form. The result is incomparably more complex than that clock, but not infinitely so. What is the difference between a person and something identical to a person in every way?" (2019: 27). Nizaemon's questions about the soul are answered in a more devastating way at the end of chapter seven when Kyuzo reaches out and pushes the button behind Nizaemon's breastbone, halting his movements and forcing him into a kind of paralysis. Kyuzo then questions his creation: "Were Hatori's feelings for you too powerful? Or were you too well-made? They say that anything made in human form attracts spirits who take up residence inside it" (2019: 48). Kyuzo then chops off Nizaemon's arm and this dismemberment reveals "countless tiny pieces inside him grinding against each other" (2019: 49) and further "[h]e felt the springs and clockwork made of whalebone and steel strain past the breaking point within him. Other connections loosened and unraveled" (2019: 49). Kyuzo notes that "[t]o be honest, sometimes you exhibit gestures and movements that I do not remember building into you. What exactly is happening here I do not claim to understand. Perhaps, against my expectations, a spirit has taken up residence in you, giving you a soul" (2019: 50). Kyuzo then asks him "[d]o you

have a soul, Nizaemon?” and Nizaemon responds in the affirmative, demonstrating his existence in the following way: “If I had no soul...it would not be about to depart from me” (2019: 51). As suggested earlier in this discussion in the quote from Nicolas Reeves and David St-Onge animation itself is the process whereby the object gains an anima or soul. Nizaemon reinforces this notion when he contemplates the question of whether he has a soul and muses “[b]ut he certainly existed. He had thoughts, feelings” (2019: 50), but the question of where these come from remains unanswered except in so far as he can state that his soul and life is about to depart. Thus in this discussion life and movement, automation is the proof of the soul. Kyuzo suggests that this ‘spirit’ or soul can appear in objects themselves without movement or thought, but it seems that in the discussions of automaton, the development of thought, feelings, and movement are the concrete evidence for the soul. Reeves and St-Onge turn to etymology to explain the “speaking, moving, thinking, and willing” being as one “infused with a mind” and thus a “conscious living being” (2016: n.p.). The extension of this discussion, though, is to question what the soul itself is and how it can be identified. To Nizaemon the proof of the soul is the departure of life. Kyuzo explains that there are gestures and movements in Nizaemon that he did not program and thus questions where these came from concluding that there is something external, which he calls a spirit, that has “taken up residence” in the automaton and thus endowed it with a soul (2019: 50). Writing specifically about robots in Edo-era Japan, Reeves and St-Onge argue that they “were created in order to simulate animated or living beings, in order to infuse a sense of awe or mysticism or simply for amusement. In most cases, their designers, or the people presenting them, declared that they were moved by some kind of spirit or deity” (2016: n.p.). Reeves and St-Onge’s discussion of the beliefs about the spirit of automatons in Edo-era Japan concurs precisely with what the creator of Nizaemon concludes, that a spirit has taken up residence in the automaton and given it a soul.

Further evidence for the soul or spirit of the automaton, whether from within or without, but certainly outside the building and programming of the maker, comes from the automaton Eve. Kyuzo also built Eve, and observes various changes in her over the course of many years. One important area of self-realization for Eve comes through her acts of creativity in the making of art. Leonel Moura writes in a chapter titled “Machines That Make Art” (255–269) in *Robots and Art* that “[a]s an artist I have to state that robots can produce a kind of creativity that although triggered by a human and rooted in a symbiotic partnership may along the process generate novelty” (2015: n.p.). Later in the same discussion she concedes “[i]f we are less anthropocentric we may however recognize a certain degree of autonomy in creative machines. They can do things that are not programmed and / or result from an internal information gathering device” (2015: n.p.). The automatons in *Automatic Eve* appear far from automatic and it is in their seemingly self-generated and agentic acts of love and art that the automaton creators are most interested.

Early in his discussion of making a human automaton, Kyuzo takes note of his own observation of human anatomy through watching dissections at the execution grounds. Kyuzo states: "I have attended many dissections at the execution grounds to observe human anatomy in detail, and I can tell you that to automate it would be virtually impossible" (2019: 14). In the second story or chapter in *Automatic Eve* "Hercules in a Box" Kyuzo notes the origins of the automaton Eve's artwork, which later makes the Sumo Tentoku famous. Kyuzo says:

It had begun when he started sending Eve to dissections at the execution grounds to record skeletal and organ structures in detail. Her sketches had been remarkably good. Intrigued, he had sent her to the bathhouse to observe the various naked forms she saw there – young and old, male and female – so that she could draw them later. (2019: 108)

He wanted to use these drawings for his work on automaton particularly because he believes that "[h]er work was devoid of subjectivity; she simply reproduced what she had seen as she had seen it, but that was exactly what he wanted" (2019: 108). Kyuzo was seeking the unimpassioned reproductions of human form he believed the automaton Eve to be particularly well-suited to reproduce furthering the common belief of the automaton not having feelings and thus possessing a certain objectivity. However, this proves to be far from the case as he later discovers that Eve is in fact choosing her own subjects to paint and is passionately attracted to and later protective and possessive of the Sumo wrestler Tentoku. Eventually, when all that is left of him is placed in a box, she produces picture after picture of "Tentoku in a box" disappointing the printers who had been making money off her erotic and interesting drawings of the wrestler. Eve takes an entirely agentic and creative role in choosing the wrestler as her subject and creating various works of art inspired by his form. This in turn works with the human actors in Edo Japan to make him a famous wrestler known by sight as a result of the famous artwork, by an unknown artist that is in fact the automaton Eve. Kyuzo takes particular interest in her choice of subject and the development of her artistic interest and then protective interest in Tentoku. She later rescues him and brings him to Kyuzo to have various parts of his body augmented until all that is left after one brutal attack is "Tentoku in a box" and she then goes on to protect the box and make paintings of the box. She argues here for the continuation of the essence of Tentoku in the box even while he is immobile and unmoving. Thus the question of what is life and soul is asked in another way through the preserved brain of Tentoku. Is this unmoving, unfeeling, unable to speak lump of flesh, but organic flesh 'real' life or is the moving, feeling, thinking, and creating Eve, inorganic though she be, more full of life? The answer to this question is obvious, but the artificial Eve is a machine and the lump of flesh preserved in the box is organic life. Which has a soul? The one who loves and cares and continues to hope

for the future life of the flesh or the lump of flesh that lies in wait in the box? In fact, this question of life and animation is at the core of the discussions of artificial birth and repeats a common and persistent motif of artificial life.

According to Despina Kakoudaki's *Anatomy of a Robot: Literature, Cinema, and the Cultural Work of Artificial People* (2014) "[t]he earliest origin stories of human civilization stage the beginning of life in terms of a fantasy of animation, whereby a divine presence or god creates people by animating inanimate matter" (2014: 4). While ancient stories show a divinity breathing life into a natural material more recent depictions focus on technological or electrical animation. The life-giving force is thus the result of technological innovation. It is interesting then that *Automatic Eve* does not rely on a lightning-like strike such as is used in Mary Shelley's *Frankenstein*, but rather returns to the much earlier mythical source of life and animation in the touch of the creating god-like force, albeit a human creator in this story. Like the story in *Automatic Eve*, Despina Kakoudaki's critical examination of the robot in culture, looks at the discourse of the artificial person as "ancient, allegorical, politically invested, and not necessarily technological" admitting that this is a departure from the "contemporary theoretical trends" (2014: 7). It thus becomes necessary and important to situate this discussion in the historical and political histories of representation of artificial persons. Kakoudaki contends that "[t]he structural consistency of artificial birth fantasies offers an eloquent identification of what matters in the discourse of the artificial person" (2014: 31). I will not speak to all of the structural components that contribute to consistency in the artificial birth narratives, but rather refer to a couple of the stories Kakoudaki refers to that are important to the structure of *Automatic Eve*. Referring to the 1818 version of Mary Shelley's *Frankenstein*, Kakoudaki notes that there is a "cycle of animation and de-animation [that] continues with each rise into and fall from liveliness" (2014: 37). Kakoudaki likewise analyzes at length the Pandora story to argue that "later stories of artificial people also tend to return to the two moments that anchor Pandora's story, her animation and the opening of the box" (2014: 48). The observations of Kakoudaki go so far as to argue that these animating scenes "are often followed by scenes of disruption, danger, and upheaval" (2014: 48). The animation of the woman and the jar or box (2014: 51) of the Pandora legend and the repetition of these founding animation and box opening scenes in later works about artificial persons deserve some attention as these findings appear to bare out in Eastern and Western stories of antiquity and those of contemporary technologically savvy robots, such as the automatons of *Automatic Eve*.

However, the "disruption, danger, and upheaval" (Kakoudaki 2014: 48) witnessed in the story of *Automatic Eve*, could have a more contemporary source and explanation than that offered by Kakoudaki and I would like to at least gesture towards this possibility and the evidence for an alternative source of the chaos to the one offered by stories from antiquity. However, this explanation is not altogether opposite to the one offered by Kakoudaki, as there is still the opening of the box. According to Kath-

leen Richardson in *An Anthropology of Robots and AI: Annihilation Anxiety and Machines* “[c]ultural fictions of robots emphasize some form of loss, sacrifice or terminus” (2015: 92). In fact, in “The Dissociated Robot” Richardson argues that “parts of the self [of the maker] are distributed into the robotic machines” (2015: 92). That means that the robots are developed by the robotic scientists “against a backdrop of personal issues involving traumatic experiences” (2015: 92). In designing the robots to mimic human form and thought, “it seems obvious then to state that the roboticists use themselves as the first point of reference” (2015: 92). Richardson then goes on to discuss the various ways in which robots are programmed to be recipients of the personal suffering and trauma of their makers. *Eve of Automatic Eve* thus carries the trauma of her maker and the working out of this trauma is actualized when the tomb (or box of myth) is opened and she is activated unleashing “disruption, danger, and upheaval” (Kakoudaki 2014: 48) as a result of the programming of the maker.

I would like to discuss *Automatic Eve* in relation to the originary myth cycles of animation and de-animation as well as the motifs of animation and opening of the box alongside the more contemporary and sociological discussion of the maker imbuing the robot with their own experience of trauma. *Automatic Eve* engages with these motifs from within the historical and political past of a real and imagined Edo-era Japan, thus animating as it were both the past mythologies and the contemporary scientific explanations. Working with both helps illuminate the flow between past mythology and contemporary robotics science and the ways in which cultural imaginaries transcend the specific historical moments of their animation. Like Kakoudaki's examples of animation and de-animation and re-animation over the course of Mary Shelley's *Frankenstein*, *Automatic Eve* likewise employs this cyclical process for the artificial humans both within the individual chapters and over the course of the novel as a whole. For example, in the first eponymous story or chapter, “Automatic Eve” the cycle of animation, de-animation, and re-animation is cyclically told and demonstrated. Nizaemon was a Samurai who was murdered and then recreated as the automaton Nizaemon introduced in the text. This reanimation of Nizaemon is told from the perspective of the creator Kyuzo. Nizaemon is later de-animated by his creator Kyuzo after he attacks him. He first cuts off his arm and reveals his true nature, as automaton, and then he turns him off. Nizaemon had earlier in the chapter requested the creation of an automaton of Hatori, who had previously been left for dead, re-animated, left for dead again, and then re-animated over the course of the first chapter. “Hercules in the Box” likewise repeats this cycle of animation, de-animation, and re-animation through the Sumo wrestler – who is saved and fixed over the course of the chapter, until the remainder of his flesh is preserved and saved by Eve in a box. While he is not re-animated at the end of the chapter, over the rest of the novel she hopes and asks for an automaton to be built to house what is left of his body and essence. This box, while not one that is opened during the stories, and is rather kept closed, contributes to the motif of the box that is part of the founding ‘Pan-



dora' legend. The artificial empress and Eve herself likewise go through this process of animation, de-animation, and re-animation. In the case of Eve, I will discuss this process in relation to animation and the opening of the box. However, in the story of *Automatic Eve*, the artificial humans are also taken apart and fixed and re-animated over the course of various stories and so the process of animation, de-animation, and re-animation also involves the maintenance of the parts and something of a scientific and technical focus on the animation process, but not wholly so. This leads to the question of how animation takes place.

The process of animation is one of the central motifs of this text. While the early and technical example of the clock simplifies the process to the turning of a crank once a year, the process by which artificial humans gain animation is much more complex and takes the story back to what is called in *Automatic Eve*, the age of myth. While Eve is viewed by most of those in training with Kyuzo as human, she confesses her origin to Jinnai: "Suppose you replaced every part of an automaton, component by component, and reassembled the parts you removed into a new automaton entirely. Which would be the real one?" (2019: 165). Jinnai notes that "a chill ran down his spine as he felt, just for a moment, as if he were looking at thousands of years of memories. // All the way back to the Age of Myth" (2019: 165–166). When the automaton, called the vessel from the age of myth, on which Eve was modelled, is taken from the tomb (which could be likened to the box of Pandora) she is lifeless. Kyuzo is thus tasked with animating her. In the process he examines each part of her and finds everything in working order, and replaces every piece in need of maintenance, but Kyuzo cannot identify the way in which she can be brought to life. Exhausted from the work he contemplates the vessel's form: "Its eyes were closed as if asleep. The swellings on its chest retained their form despite the Vessel's prone position lying on its back, and the nipples at their peaks were pink like flower buds" (2019: 264) but she is without life. Then Kyuzo "felt a sudden urge to touch them and began to reach out before a wave of déjà vu struck him. // This had all happened before. Long before, when he was still a young man" (2019: 264). When Kyuzo first met the lifeless Eve he "had wondered, horrified, if Keian Higa's soul had been captured by some malevolent spirit. Did he intend to create a working replica of the human soul?" (2019: 265). But now Kyuzo believes "*In the end, a human being is nothing but a fiendishly complex machine. There is no border between the soul and what is not the soul – only differences in complexity and diversity*" (2019: 266). His younger self gazing at the lifeless automaton had thought "[i]t was beautiful despite the absence of life – or was it that absence that made it beautiful? An ageless beauty, unchanging, inviolable" (2019: 266). Thus while he contemplates the form of the lifeless vessel from the age of myth, he is taken back to the time when he was a young man and gazed on Eve before she had become animated. He contemplates that life is in a sense but animation and a human but a complex machine. He chooses the name Eve for the fictional courtesan Eve of the thirteenth floor of the most famous house of the pleasure district. There is no men-



tion made in this work of the Eve of Biblical origin, but rather the name is that of “a woman who did not exist. It seemed ideal for the woman before him, who existed but had no life” (2019: 267). When the automaton Eve comes to life it is through the touch of the apprentice of the first maker of automatons and then the second apprentice unknowingly repeats the actions of the first apprentice bringing the vessel from the age of myth to life in a like manner. In both cases there is the movement from no animation to animation and in the second case eventually to de-animation by the touch of the same man. In both cases the urge to touch Eve is brought on by her beauty and the desire the man has to touch her. In the case of the first Eve Kyuzo “felt his heart pounding. // He reached toward her white chest. // The tip of his middle finger brushed against her nipple. // Hesitation. Then he softly placed his palm over her left breast. // Supple elasticity. Softness. Vulnerability. // He had the illusion of feeling his heartbeat traveling down his arm and through his fingertips into the automaton's heart. // Through her breast, mingled with his own pulse, Kyuzo felt a balance wheel within her rotate backward and strike a pendulum. A rhythmic, regular cycle began” (2019: 273). Thus while every detail of the mechanical making of Eve is meticulously described, from the materials to the mechanisms and how they work together, when it comes to the animation of the machine there is a mystical transference of energy from the fingertips of the apprentice to the machine. There is notice taken of the apprentice's own feel of his heartbeat, the reach, the tip of his finger on the nipple and hesitation. The touch is one of life, anticipation, and above all erotic desire. While it is described as an “illusion” (2019: 273) the apprentice nonetheless shows a transference of energy “feeling his heartbeat traveling down his arm and through his fingertips into the automaton's heart” (2019: 273). The transference of life from one to another and then the experience of feeling the other being come to life is all part of this description. While other elements of the text give technical descriptions of clock-like mechanisms and materials, in this case the description takes on a mystical and god-like mingling of the heart beat and blood of the maker and the made. This is brought about by erotic desire and a coming together of the flesh of one with the flesh of another. There are echoes here of John Donne's metaphysical conceit and also the previously mentioned legends of animation.

In the case of the vessel from the age of myth, the bringing to life repeats the sequence of looking, desiring, touching, and transference, but there is an added element to this story. In the case of the vessel, although alike to Eve in form, she has been locked away in a tomb for hundreds of years. When the tomb, or to liken it to the legend of Pandora, when the box is opened, what is unleashed is what Kakoudaki refers to as the cycles of “disruption, danger, and upheaval” (2014: 48). In *Automatic Eve*, the vessel has been programmed to take revenge on the Samurai who destroyed the work and life of its maker. As Kathleen Richardson notes roboticists “import their own suffering into the machines they create” (2015: 97) and in the case of *Automatic Eve*, this translates into a need for revenge. In fact, Richardson goes so far as to say

that robots resemble their makers, at the very least in their emotional makeup. From the moment when the sacred vessel is brought to life she asks the same obsessive question of all the people she encounters: “Are you of the shogunate?” (2019: 291) and if they answer in the affirmative, she cuts them down. It becomes clear to Jinnai that “Keian Higa had designed her to kill not just the specific individuals against which he sought vengeance, but anyone who worked for the shogunate” (2019: 304). However, while Jinnai contemplates the state of soul or lack thereof of the vengeful Eve-like vessel destroying all connected with the Shogunate, he contemplates that even when it comes to humans there is no part that can be dissected to show a soul (2019: 304). She had been sealed away in the tomb, with awareness, from the age of the gods, and Jinnai feels compassion for her when she weeps for the loss of her sole companion, the automaton cricket. Jinnai concludes, “[i]t was not clockwork that had brought these tears to her eyes. It was grief” (2019: 307) at the loss of her only friend. Unmistakably this is a playful gesture towards the cricket in Pinocchio, just as the fourth chapter or story “Renegade Geppetto” echoes the maker of the wooden puppet. However, this scene is hardly playful, and takes yet another character to the point of reckoning with the humanity of the automaton – where is the soul, is there a heart, and eventually that grief and tears cannot be the work of machinery or programming.

The final story ends with Eve’s defence of the box, as more than what people keep mistaking for a stool and her expression of devotion and love for what is left of Tentoku in the box. The work thus ends by reaffirming the complexities of the question of what is human and what is machine and affirming the significance of both through relationships that they have with others. *Automatic Eve* takes up the long tradition of royal automaton and sets the events of this story in the Edo-era of Japanese history and politics. In the process there is detailed construction and deconstruction of the bodies of the automaton and discussion of the soul of human-like vessels. Like many other works on robots and automaton, many of the characters in the text develop relationships with automaton that convince them of both their humanity and that these creations have souls, feelings, and the possibility of expressing agency and creativity apart from the dictates of the maker.

## Bibliography

- Bennett, Jane (2010): *Vibrant Matter: A Political Ecology of Things*. Durham: Duke UP.
- Braidotti, Rosi (2013): *The Posthuman*. Cambridge: Polity.
- Deleuze, Gilles / Felix Guattari (1987): *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: U of Minnesota P.
- Haiken, Pentti O. (2012): *Consciousness and Robot Sentience. Series on Machine Consciousness*. Vol. 2. London: World Scientific.

- Inui, Rokuro (2019): *Automatic Eve*. Translated by M. Treyvaud. Tokyo: Haika Soru.
- Ishiguro, Kazuo (2021): *Klara and the Sun*. New York: Vintage.
- Kakoudaki, Despina (2014): *Anatomy of a Robot: Literature, Cinema, and the Cultural Work of Artificial People*. New Brunswick, New Jersey: Rutgers UP.
- LaGrandeur, Kevin (2013): *Androids and Intelligent Networks in Early Modern Literature and Culture: Artificial Slaves*. New York: Routledge.
- Latour, Bruno (1993): *We Have Never Been Modern*. Cambridge: Harvard UP.
- Moura, Leonel (2015): "Machines That Make Art". Damith Herath / Christian Kroos / Stelarc (eds.) *Robots and Art: Exploring an Unlikely Symbiosis*, New York: Springer, 255–269.
- Reeves, Nicolas and David St-Onge (2016): "Still and Useless: The Ultimate Automaton". Damith Herath / Christian Kroos / Stelarc (eds.) *Robots and Art: Exploring an Unlikely Symbiosis*. New York: Springer, 229–254.
- Richardson, Kathleen (2015): *The Anthropology of Robots and AI: Annihilation Anxiety and Machines*. Oxford: Routledge.
- Robertson, Jennifer (2018): *Robo Sapiens Japanicus: Robots, Gender, Family, and the Japanese Nation*. Berkeley: U of California P.

