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# Transgenics of the Citizen (I)

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**Abstract**
Citizenship exposes non-humans and sub-humans—both animate and inanimate—to abandonment on the far side of its amity line. This essay explores how the figure of the human being designates a technical limit to the isometric principle of limitless access to civil and political rights. As *zoon politikon*, the human being inhabits a tautegorical enclosure, immuring itself from the claims of all other entities: there is no citizenship for robots or automaton chess players nor even for the wolf of Gubbio with his signatory paw, even while corporations are given rights of personhood. And yet: a pending South Korean *Robot Ethics Charter* signals that a new planetary order might be afoot.

The figure of the human being, especially in its management of anthropological differences, designates a technical limit to the isometric principle of limitless access to civil and political rights. With species being, the *zoon politikon* inhabits a tautegorical enclosure, immuring itself from the provocations of all other forms of the animate and the inanimate alike: there is no citizenship for robots or automaton chess players or even the wolf of Gubbio with his signatory paw, even while corporations are given rights of personhood and are subject to the command structure, the *subditus*, of reason. Today, our era of biopolitics and biotechnology challenges traditional theories of human subjectivity, including the rights and privileges that used to be reserved for human beings alone. Citizenship is an example of one such right and privilege: in the future, will animals be citizens? What about creatures that are part animal and part human? And what about robots? Jaquet-Droz, the creator of the eighteenth-century writing automaton, was subject to punishment from the Spanish Inquisition for exhibiting his non-living writing machine: it was just as heretical to say that man is a machine as it was to say that God is a man. What are we saying when we ask whether or not human beings can welcome animals, robots, and other creatures as citizens?

Citizenship, as derived from immunitarian human rights, exposes non-humans and sub-humans—both animate and inanimate—to abandonment on the far side of its amity line. Pastoral power, with its herd and herdsmen, pastures this frontier, incising a territorial limit that, though traversed together by all living being, is also a limit that traverses living being. Following Hannah Arendt's comment that "the distinction between man and animal runs right through the human species itself," Giorgio Agamben reiterates: "The division of life into vegetal and relational, organic and animal, animal and human, therefore passes first of all as a mobile border within living man, and without this intimate caesura the very decision of what is human and what is not would probably not be possible" (*Human Condition* 19; *The Open* 15). We will also recall that in the first chapter of *The Animal That Therefore I Am*, Derrida describes the border, the limit, as something living, something that is fed, something nourished, something around which growth happens: "what feeds, is fed, is cared for, raised, and trained, what is cultivated on the edges of a limit . . . what sprouts or grows at the limit, around the limit, by maintaining the limit, but also *what feeds the limit*, generates it, raises it, and complicates it" (29). The term transgenic, then, takes on a new meaning: not only does it indicate a crossing of species, a splicing together of different species, but would also before that already indicate that the limit between genomes and species is itself generative. The limit is a living entity; it is perhaps the entity from which the living is engendered. The limit engenders the living. The border between the human and the non-human always ends up being a rationale for a territorial border as well. In the case of certain emergent subjectivities—artificial life and artificial intelligence—the border often concerns the ecosystem or vivarium of the lab—"laboratorium" as the place for labor or work—set apart from the rest of the world. Animals cross the border as things, goods, or livestock and not as persons, subjects, or citizens; yet, as living beings they animate a certain threat asleep in the supposed personhood of the human being: the specter of inanimation, not only in our era of technics (the machine-man, the automaton, the robot), but also more generally in the anthropomorphic *as* a technics. Transgenic bioartworks like the *Semi-Living Worry Dolls* awaken us to what is usually dormant in the question of citizenship: although willing to confess their deepest secrets to cultured knobs of human epidermal cells in the shape of human dolls, and despite discomfort at the destruction of these dolls (they are not subject to the law's protection and cannot cross international borders) as the art-show breaks up camp to exhibit in another country, the art-goers tacitly acknowledge that knobs of human skin can be anthropomorphically addressed as persons. But the anthropomorphic address does not constitute a potential call to/of citizenship because citizenship does not concern the anthropomorphic: it is something more akin to a graft of the transcendental subject.

Though the citizen must be a human being, it is not human species being that grounds citizenship. We see this contradiction come into play when biotech industries produce transgenic creatures—for instance, pigs with segments of human DNA as part of

their genome—that genetically cross the divide between animal and human being, yet are barred from borders of another order. Partial human DNA is not a basis for the protections of the legal person or human rights, yet scientists have recently discovered that many human beings are already, to a certain extent, transgenic: many living *homo sapiens* have DNA from *homo neanderthalis*—a different species—as part of their genome. Donna Haraway notes another way in which the human being is always already transgenic: "I love the fact that human genomes can be found in only about 10 percent of all the cells that occupy the mundane space I call my body; the other 90 percent of the cells are filled with the genomes of bacteria, fungi, protists, and such" (4). Citizenship as a right derived from human speciesism fails at its origin: transgenic entities—human beings with Neanderthal DNA—have already been and currently are citizens. We might go as far as to say that citizenship, rather than precluding transgenic entities, is inherently transgenic in the sense that it is a technical or inanimate graft upon the genetic as such. Although the "transgenic citizen" suggests a crossing or traversal that happens across living being, and bioartworks, writes Monika Bakke, "build an awareness of *zoe* (life) as a trans-species generative force" (22), the ground for the possibility of the transgenic citizen just might not be anything genetic, living, or animate. The *nomos* of the transgenic territory cannot concern living being: transgenic citizenship as a recognition of living being *per se* would only be a new mode of biopolitics or an autochthonic isonomia born from technology rather than the earth. The lab would become the new territorial frontier. Writes Bakke: "The contemporary politics and biotechnologies of zoe cannot escape questions of belonging and identity, responsibility and sustainability in the environment, including the territorially expanding 'extreme' environments of biotech labs, where technologically-augmented life dwells in highly controlled, human-made environmental networks" (24). The lab (and the art gallery, we might add) constitutes a frontier or zone in which mere *zoe* takes on a form of life, a *bios*. The laboratory/gallery as a frontier zone is also inhabited by other kinds of liminal lives—entities that are themselves traversed by the border of the organic and the inorganic, the living and the non-living, the animate and the inanimate. The *Semi-Living Worry Dolls*, for instance, introduce new worries: "technologically-augmented life," writes Bakke, "is not a solution to our problems, but rather is in a need of care and protection itself" (26). Extending our conception of "life" merely extends de rigueur questions concerning subjectivity, personhood, and citizenship. Must we return then to Heidegger's insistence on the abyss between the *Umwelt* of the animal and the *Welt* of human *Dasein* as that which might mark the radical lack, the *munus* as Esposito might say, that could constitute the *nomos* of the transgenic commune? The caesura between animality and human being, which Heidegger insists upon, is also technically a splice, is also a technical splice, a technics of media montage and genetic engineering. Something other than living being must open the possibility of transgenic citizenship. Painter Paul Klee gives us a clue when he speaks of art, of technics, as a *Zwischenwelt:* art, or technics, is that which is between worlds. Artificial intelligence, robotics, biotechnology, biocomputing, biomedia, transgenic bioart, genetic architecture, and other emergent modes of technological morphogenesis inhabit a Between-World in which we today might pose the question of citizenship.

In 2007—over two hundred years after Karl-Gottlieb de Windisch wrote in *Inanimate Reason; or a Circumstantial Account of the Astonishing Piece of Mechanism, M. de Kempelen's Chess-Player* (1784) that "The boldest idea that ever entered the brain of a mechanic was, doubtless, that of constructing a machine to imitate man" (1)—South Korea's Ministry of Commerce, Industry and Energy announced that the government would be drawing up a *Robot Ethics Charter* to regulate relations between humans and robots.[1] The charter anticipates a territorial shift concerning where humans and robots interface: as automated labor, robots are moving from the factory into the service sector and even into the household. In a public statement, the Ministry announced that "The move anticipates the day when robots, particularly intelligent service robots, could become a part of daily life as greater technological advancements are made" (qtd. Lovgren, "Robot Code"). As one of the world's most high-tech societies, South Korea is at the forefront of the increasing integration of technology and living beings. The country's Ministry of Information and Communication says it is working on plans to put a robot in every household by 2020. A September 6, 2006, report from *National Geographic News* states that "South Korea intends to make robots full members of society" (Lovgren, "A Robot in Every Home"). The *Robot Ethics Charter* addresses matters concerning interactions between humans and robots, specifically questions of risk, danger, and abuse. Emergent risks are anticipated in this shift that we might generalize as one from the *polis* to the *oikos*. In a statement to *Agence France-Presse*, Park Hye-Young, a scientist on the *Robot Ethics Charter's* five-member task force (which includes a sci-fi writer), puts it this way: "Imagine if some people treat androids as if the machines were their wives" (qtd. Lovgren, "Robot Code"). Apart from the peculiar ambiguity of this comment (is it worse to imagine that people might treat robots as badly as they do their wives or that they might have sex with robots? Not an incidental question given that the word "citizen" [*cives*] comes from *kei*, meaning to lie, bed, couch, night's lodging; also beloved, dear, i.e., the one you couch with), the speculative nature of the concern signals that the territorial border between science fiction and contemporary social reality has been overstepped. The inclusion of guidelines for the robots themselves suggests that South Korea's *Robot Ethics Charter* follows in the footsteps of sci-fi writer Isaac Asimov's "Three Laws of Robotics," which dictates a right of robot self-protection as well as the responsibility to do no harm to humans. Says Mark Tilden, employee of "Wow Wee Toys" in Hong Kong and designer of the *RoboSapien* toy, "From experience, the problem is that giving robots morals is like teaching an ant to yodel. We're not there yet, and as many of Asimov's stories show, the conundrums robots and humans would face would result in more tragedy than utility" (qtd. Lovgren, "Robot Code"). Although we are "not there" yet, the drawing up of a *Robot Ethics Charter* is a preemptive mandate that would restructure not only the border between machines and human beings, but territorial borders as well. The colonial *nomos* of the earth, for instance, required mandates that deemed colonized people as either human, sub-human, or inhuman depending on the territorial

objective (which I will discuss later in this essay). We might ask, what kind of territorial objective does the South Korean *Robot Ethics Charter* anticipate?

With the advent of the twenty-first century, risk or danger as a concern of the human being is being dislodged in favor of a shift to what has always been at the heart of the anthropocentric machine: rather than a ubiquitous "*vestigium hominis video!"* [I see the trace of a man!], the specter of the inhuman or non-human recurrently emanates from each new conception of the human. Although, for instance, Aristotle's *De Anima* might secure *zoon logon ekhon*—the (animal) being held by speech (*logos*)—a place in the realm of animate beings, *logos* itself is peculiarly inanimate and technical (*techne)*. Twentieth century artificial intelligence, computer technology, and the Turing test (or its pulp-fictional equivalent—the Voight-Kampff test—brought to life in *Do Androids Dream of Electric Sheep?* and *Blade Runner)* indicate that non-living artificial intelligence (*automaton logon ekhon?)* can embody and perform that which is preeminently human.

Already in the *Politics*, Aristotle envisions a kind of robotic entity when he writes, "If every instrument could accomplish its own work, obeying or anticipating the will of others . . . if the shuttle could weave, and the pick touch the lyre, without a hand to guide them, chief workmen would not need servants" (31). Autonomous machines have always haunted the order of work, posing a threat to both Kant's conception of autonomy as characteristic of humanity and the primacy of the human worker as a revolutionary subject of history. At its linguistic inception in Karel Čapek's play *R.U.R. (Rossum's Universal Robots)*, the robot, which derives from the Czech word "robota," is already figured as a revolutionary subject, one that entirely usurps the species being of humanity and takes over the planet. The play reminds us that each human being, no matter how triumphal, is perpetually at risk of hearing, like the Roman general whose slave calls out behind him: *"Respice post te! Hominem te esse memento! Memento mori!"* [Look behind you; remember that you are but a mortal.].

Yet when Aristotle inadvertently invites the specter of the automaton into his discussion of animate being, he is not anticipating some of the provisions of South Korea's *Robot Ethics Charter.* As would be expected, the charter sets up guidelines concerning the threat that robots represent to human beings and human community. The first guideline concerns limiting the autonomy of the robot. In an attempt to specify the form of animate beings in *De Anima*, Aristotle heads off effigies or simulations that merely represent the external appearance of the human being: the form of the animate being concerns functionality. A true hand, for instance, would be one that could do the work of a hand; semblance without functionality is the mark of the artificial and inanimate. Writes Aristotle, "there cannot be a hand in any and every state, such as metal or wood, except homonymously like the doctor in the picture. For it will not be able to do its own work any more than stone flutes or the painted doctor can do theirs" (*De Anima* 223). This nevertheless suggests that any inanimate entity—for instance, an automaton—that performs the work of the hand, would have the form of the animate. Aristotle cannot keep the phantasm of the mechanical entity far from his discussion of the living being. In *Movement in Animals*, he writes: "The movement of animals is like that of automatic puppets" (235). Although their material composition differs—pegs instead of bones, sinews instead of wires—the animal and the automaton function in the same manner, something Descartes would later elaborate in his infamous discussion of the *bête-machine*. Despite the persistent lurk of the automaton, from Aristotle to Kant autonomy remains the hallmark of the living being, in particular the human being. Aristotle is determined, even though *logos* is inanimate, to define man as "*zoon logon ekhon*," and will not entertain any intrusions by any *automaton logon ekhon*. He wants to retain the principle of autonomous, internally caused movement as belonging essentially to the living being: he will not go down the road of a radical morphogenesis and the activation of machinic systems in his hyle-morphism of the living being. In *The Beast and the Sovereign*, Derrida observes, however, that even such classic attributions as spontaneous self-movement define life as well as its opposite, the inanimate mechanism: "the living being concentrates in a single ambiguous value this automotive spontaneity that gives itself its law, its autonomy and which, by the same token, is right up close to automotive autonomy but also signifies its opposite, namely automaticity, or in other words the automat's mechanics of action and reaction" (*Vol. I* 221). South Korea's charter reaffirms that the human being is an owner or user of the robot, and as such limits the robot's autonomy. The charter is in effect an immunization measure: the robot's autonomy is limited by the extent to which it is a threat to the community, a dangerous wager given that Aristotle articulates a second concept of automaton in the *Physics*: *automaton* is also a mode of chance. As chance, automaton concerns an effect that occurs incidentally in the material realm of nature. Automaton is a sheer random happening: one that is unpiloted, one that is without a *cyber*.

Aristotle begins *Physics*, Book II, by discussing chance and the accident as modes of causality: "Luck [*tyche*] and the automatic [*automaton*] are reckoned as causes, and we say that many things are and come to be on account of them" (100). Acknowledging the philosophers who don't admit of anything but determinate causes into their cosmos, Aristotle writes, "They say that nothing comes to be as an outcome of luck, but that there is a definite cause of everything . . . it is always possible to find some cause for them other than luck" (100). Aristotle counters this by arguing that the old cosmologists could not assimilate outcomes of supposed luck to any determined mode of causality, and were hence avoiding the question. On the other hand, Aristotle also resists the claim that the cosmos—"the Swirl"—came to be from luck, what he calls "the automatic" [*automaton*]" (101), since plants and animals are not likewise said to be outcomes of the automatic or luck. Plainly, says Aristotle, some things come to be "of necessity and always" (102) or "for the most part," and that "luck or its outcome is not called the cause of either of these" (102). However, other things are said to come to be from luck. Before differentiating two different modalities of luck, Aristotle specifies that some things come to be for a purpose while others do not, and of the things that come to be for a purpose, some belong to choice and others do not. If something comes to be in the realm of purpose and choice and happens "concurrently," it is called

*tyche* (fortune). Aristotle tells us that "a cause by virtue of concurrence is indeterminate" and "unlimited" (102). In other words, when purposeful activity involves a collateral effect which was not the purpose of the activity, then this effect is called luck in the mode of *tyche* (fortune). The mode of luck distinct from *tyche*, which Aristotle calls *automaton* ("in-itself" [*auto*] "to-no-purpose" [*maten*]), also concerns concurrence, yet the concomitant effect does not accompany rational activity or choice. "Hence nothing done by an inanimate object, beast, or child, is the outcome of luck, since such things are not capable of choosing" (104), but it can be the outcome of *automaton:* "The automatic, on the other hand, extends to the animals other than man and to many inanimate objects" (104). In short, a human being might have *tyche*, but a stone can only have *automaton*. An ontological difference in concurrent outcomes depends on whether the participants or actants are human beings or not. If a stone falls and happens to hit a man, it is *automaton* not *tyche*, accident not fortune, the latter marked by rational choice, the former not.

In his "Notes On a Theory of Gambling," Walter Benjamin puts into question this Aristotelian schema that divides *tyche* from *automaton*. What Benjamin observes in the gestural phenomenology of the gambler is threefold: 1) that the throw or the cast is a highly mechanical movement, a kind of muscular *Gestalt* seemingly void of reflective consciousness, 2) that the gambler mobilizes a form of knowing before knowing whereby this reactive embodiment picks up cues or signs in advance of conscious knowing, and 3) that in this scene of mechanical determinism there is, nevertheless, an opening onto immeasurable uncertainty, an opening onto the possibility of the indeterminate, whether understood as the random clinaminic swerving of the atom, Brownian motion, or cosmic epoché (297). The experience of gambling is both a recognition that the human being is, like the *bête-machine*, an automaton, and an affirmation that even within the machine-work of materialist determinism and causality, there is, perhaps not the actuality of the indeterminate, but its possibility. It is interesting to note that even Descartes, who famously relegates the *bête-machine* and the humanoid automaton to mechanical reaction, reserving the freedom of authentic response for the human being, nevertheless lets slip an exception: in a letter from March 1638, a year after the arguments concerning the human being and the automaton in the *Discourse on Method*, Descartes writes, "never *unless it be by chance*, do these automatons respond, either with words or even with signs, concerning what is asked of them" (*Oeuvres et letters*, 1004, qtd. Derrida, *The Animal* 79). We see here that what Descartes calls chance opens up the possibility of something other than mechanical reaction and determinism for the automaton. Chance—an opening of possibility outside of mechanistic determinism—is the condition of possibility for response in the automaton. Chance suspends the machine-workings of the machine, and the automaton is for a moment something other than itself. By way of chance, there emerges something other than a machinic assemblage. Benjamin goes even further with this in his discussion of the messianic as an irruption of chance in the machinic now: chance is a split-nanosecond gate through which something other than mechanical determination might enter. An accelerated relationship to automaticity precipitates this chance. For instance, Benjamin suggests that a release from consciousness and creaturely life and a relating to the inanimate world of things precipitates *Glück*. The messianic is a potentiality that is immanent but incalculable.

The automaton, or robot, embodies a kind of surplus of autonomy, an ability to act outside the cybernetic control of the owner-user. Articles such as "Does a Robot Have an *Umwelt*? Reflections on the Qualitative Biosemiotics of Jakob von Uexküll," by Claus Emmeche, suggest that contemporary robotics, with its development of autonomous systems, breaks the mold concerning questions of self-governance, governance, and subjection. W. Grey Walter's *Machina Speculatrix* is considered an early example of an autonomous system with emergent behavior that does not rely on programming, but on an ecology of perception with which it interacts. Just like simple animals, *Machina Speculatrix* instantiates "a circular information-based relation between sensor devices and motor devices" (Emmeche 678), a feedback loop, in effect. In his 1950 article "An Imitation of Life," Walter notes that, though simplistic, *Machina Speculatrix* gives "an eerie impression of purposefulness, independence and spontaneity" (45), in other words, an impression of autonomous agency. Curiously, as South Korea's *Robot Ethics Charter* indicates, this surplus autonomia in turn prompts protections for robots. It will be an offense under Korean law to deliberately, or through gross negligence, damage or destroy a robot. More vaguely, it is also an offence "to treat a robot in a way which may be construed as deliberately and inordinately abusive" (Turner). In its final section, "Rights of Robots," the charter mock-up even goes as far as to refer to the existence and death of the robot: "Under Korean Law, robots are afforded the following fundamental rights: i) The right to exist without fear of injury or death. ii) The right to live an existence free from systematic abuse" (Turner). All of this indicates that any future conception of post-human citizenship will likely end up as an extension of humanistic ideology, even as it puts into question the concept of the human being as distinct from the animal and the machine.[2]

Donna Haraway's book *When Species Meet* uses the term "companion species" for those animals—usually domestic or domesticated—that interact with humans; likewise, Kate Darling's essay "Extending Legal Rights to Social Robots" employs the term "companion" for those technological beings—usually social robots, robotic toys, or cybernetic pets—designed for human interaction and designed, in particular, to elicit anthropomorphic projections. Any robotic entity that is a "physically embodied, autonomous agent that communicates and interacts with humans on an emotional level" is counted as a "social robot" (Becker 4). Darling argues that a case could be made for extending second-order rights—limited rights that are not inherent or inalienable, yet offer legal protection of the "subject"—to non-human entities such as social robots based on current legal practices concerning protections for animals. Second-order rights of personhood have also been extended to corporations under the framework of "corporate personhood." In *The Animal That Therefore I Am*, Derrida argues against any animal rights charter that would derive its principles from human rights since the human being is predicated on—at least in biblical and western philosophical tradition—a kind of holocaust of animality. What Derrida will argue instead is that the Cartesian tradition (if we can name it such) must itself be put in question: the rights and capabilities assigned to human beings perhaps do not rigorously inherently belong to them either.

Likewise, any charter that bases its principles on animal/human rights ends up disavowing another more glaring possibility: that the human being is inherently machinic, already a social robot to a certain extent. Darling suggests that "humans form attachments to social robots that go well beyond our attachment to non-robotic objects. These reactions to robotic companions appear to stem from our inherent inclination to anthropomorphize objects that act autonomously, especially when they are designed to exhibit 'social' behavior" (5). It is hard not to conclude from this allusion to an "inherent inclination" a kind of mechanistic, involuntary programming or hardwiring, rendering the human being as always already a social robot. Agamben uses the term "anthropological machine" to describe the machining of that which institutes the human being in western philosophy; we might call the "inclination to anthropomorphize objects that act autonomously" a kind of "anthropomor phic machine," in short the figure/device/machine of anthropomorphism (personification, apostrophe, and other rhetorical figures of animating the inanimate). Darling continues: "The projection of lifelike qualities begins with a general tendency to over-ascribe autonomy and intelligence to the way that things behave, even if they are merely following a simple algorithm . . . we respond to the cues given to us by lifelike machines, even if we know that they are not 'real'" (6). Rather than the (Cartesian) term "response," Darling might have used "reaction," since what she is describing here is a kind of involuntary machinic reaction in the human being, one that is so trenchant that even with "consciousness" of the "real," it cannot be resisted.

In *The Animal That Therefore I Am*, Derrida asserts that Descartes's exercise of radical uncertainty also disposes of the assumptions that the *cogito* is necessarily human and that the human being is *animal rationalis*. With Descartes, an opening onto a non-human *cogito* is already at work. Suspended as well is the assumption that the "I am" is a living entity since at this point Descartes abstracts the living body from the "I am" and designates the living body as machine or already cadaver (72). Although Heidegger attempts to distance his account of the human being from the Cartesian thinking thing and his account of animality from the Cartesian *bête-machine*, the distancing of the human being from the living being is common to both Descartes and Heidegger. Human *Dasein* is not essentially a living being. Derrida reminds us that "*Dasein* is explicitly defined by Heidegger as a 'being' [*existant*] that is not, essentially, a 'living' being. The determination regarding life, reference to it, is not essential in order to determine *Dasein"* (155). Existence is to be differentiated from life. Human existence does not essentially have the "living character of the living being." Descartes anticipates Heidegger here in designating a *Dasein* apart from living being. Writes Derrida: "in order to define access to a pure 'I am,'" Descartes "must suspend or, rather, detach, precisely as detachable, all reference to life, to the life of the body, and to animal life" (72). This insistence on the separability of the "I am" from animate being, and the fact that this Cartesian "I am" is the ground or basis of so many human rights, protections, and privileges, indicate that something other than an animate or living being could have these rights as well. A non-living, non-animate "I am" apart from its usual attachment to the living human being could inhabit this space. The thinking thing (*res cogitans*) is not animate or living. Life or animation does not attach to the "I am"; only the "thinking thing" attaches to the "I am." Although we usually take it for granted that ipseity, the auto-position, and the self-reflective subject must concern the human being as a living human being, Derrida indicates that, "the indubitability of existence, the autoposition and automanifestation of 'I am' does not depend on being-in-life but on thinking, an appearance to self that is determined in the first place not as respiration, breath, or life, indeed on a thinking soul that does not at first appear to itself as life" (87). The thinking thing does not at first appear as a living thing: this has huge consequences for any discussion of AI and robotics. Although even almost all cyberneticists and bioinformatic scientists will agree that robots and AI entities do not think —they are still not thinking things in the Cartesian sense—this would not at first according to Descartes have anything to do with the fact that robots and AI entities are not living beings. As Derrida clarifies, the Cartesian "I am" in effect disarticulates thinking from being-in-life.

Discussing Heidegger's dissatisfaction with man defined as *animal rationale* or *zoon logon ekhon*, which leaves unelaborated what is living in life and is an insufficient ground for man's mode of being, Derrida in *The Beast and the Sovereign* writes: "the *zoon* of this zoology remains in many respects questionable (*fragwürdig*). In other words, so long as one has not questioned ontologically the essence of being alive, the essence of life, it remains problematic and obscure to define man as *zoon logon ekhon*" (*Vol. I* 264). The absence of a definition of life is a feature of both the scientific and the philosophical discourse on life. Part of the difficulty has to do with a slippage between "living" and "being." Derrida puts it briefly: "livingness, what now maintains life in life, but that which stands back at the very place where the question 'What is living in life?' holds its breath before the problematic legitimacy of a subjection of the question of life to a question of Being, of life to Being" (*Vol. I* 219).

Derrida goes one step further and insists on the essential antagonism between *zoon* and *logos*. There has always been a war against the animal, a holocaust against the animal: against living being we prefer reason—especially in its Kantian formulation—and other inanimate principles (is this preference an apotropaic gesture against finitude and mortality?). But are we ready to cast our lot with the robots and drones, which will "outlive" us in their inanimation? Derrida suggests that we already have: a fight to the death against living being—which belongs to the "I think"—has been in effect since Genesis:

> [T]his unthought in the "I think," where the animal that I am (following) follows me from the place of the other or of the unconscious, is indeed a function of *machinality*, which haunts automatically, like an evil conjuring genius, the Cartesian concept of animal-machine as much as the Kantian concept of providence, of a providential machine, a *Maschinenwesen der Vorsehung*, so as to teleologize in advance, by means of prescription and prediction, the history of war machines that are presumed to have a civilizing effect.
>
> (102)

Drones would certainly fit into that civilizing effect category: no death for the human soldier, only death and destruction for the

dehumanized enemy. Should there be, then, a kind of commiseration between the robot and the human being, a commiseration based on a shared "structure of the human being" and a shared mechanics of reason? If there is for what Derrida is calling here "the Kantian man" a hatred of the animal, *die Erinnerung an die Tierähnlichkeit des Menschen*, should there be a commiseration for the non-animal rational entity, i.e., the robot?

Although Darling makes a well-illustrated argument for the life-like or human-like operations of social robots, she shies away from any overt recognition of the robotic or machinic dimension of the human being. For instance, when she discusses a U.S. Army colonel's calling-off of an experiment using a robot to defuse land mines, Darling foregrounds the colonel's anthropomorphizing of the robot that "was modeled after a stick insect with six legs" (6). Although the robot was not even humanoid in form, the colonel "could not stand the pathos of watching the burned, scarred and crippled machine drag itself forward on its last leg. The test, he charged, was inhumane" (6). Although the colonel is able, by virtue of the robot's autonomous action, to anthropomorphize a non-living insect-like machine, I would like to argue that this *reaction* is an apotropaic gesture to ward off a more worrisome recognition that the human being is a machine and that, more specifically, human soldiers are mechanical parts in a military apparatus that has already turned the so-called human being into a robotic entity reacting to ironclad commands. When Darling goes on to discuss robotic entities in the household—such as the Roomba vacuum cleaner robot, which does not distinguish between human and object obstacles as it maneuvers around them—she notes again that the sheer presence of autonomous movement triggers an emotional and anthropomorphizing reaction from human household dwellers. Although she goes so far as to say that robotic behavior that is lifelike "specifically targets our involuntary biological responses, causing our perceptions to shift" (7), Darling passes over the realization that we share a lot more in common with machines than we would perhaps like to acknowledge. Although she raises some ethical questions concerning the use of robots with human beings—dementia patients, for instance—who cannot tell the difference between social robots and human nurses, she does not elaborate any meaningful distinction between social robots and human beings who are cognitively impaired (perhaps because Descarte s's fabulation of the *res cogitans* has done that for us, once and for all). At some base level—I would argue, the machinic reactive level, not the subconscious or unconscious—the behaviors of the social robot and the human being are barely distinguishable. Discussing Sherry Turkle's "A Nascent Robotics Culture: New Complicities for Companionship," Darling suggests that there is a qualitative difference between social robots and, for instance, traditional toy dolls (should we or not include *The Semi-Living Worry Dolls* here?): "While a child is aware of the projection onto an inanimate toy and can engage or not engage at will, a robot that demands attention by playing off of our natural response may cause a subconscious engagement that is less voluntary" (8). In effect, the social robot that strikes a chord with our own robotic nature will cultivate with us a mechanical reciprocity. Clearly, in *Do Androids Dream of Electric Sheep?*, Rick Deckard, the bounty hunter who falls in love with Rachel Rosen, doesn't seem to care that she is an android: "she" presses all the right buttons for him.[3] Darling likens this kind of attachment to social robots to a relationship with a companion species or pet, which is not far off the mark if we follow the Cartesian line and count animals as *bêtes-machines*. As the video "AIBO robot playing with a cat!" demonstrates, the live kitty cat, the robotic dog, the inanimate ball, and the android voice-over engender a new ecology of techno-attachments and so much more, as the news report "Man marries video game character" and this YouTube video and this News9 report indicate.

One of Darling's particularly symptomatic comments—"in countries with politically powerful religion-based groups, one might question whether robot protection could even become subject to debate" (15)—indicates that what is at stake is the human exceptionalism of the divinely created rational soul: even the mere question of rights for robots threatens the ontological status of the human being. Animistic cultures, which view all entities—whether human or not, whether animate or not—as ensouled might be better oriented toward considerations for robot rights. Masahiro Mori's *The Buddha in the Robot* already opens this question. Mori even places a certain kind of stone above the human being. In "On Uncanny Valley," he writes, "once I positioned living human beings on the highest point of the curve in the right-hand side of the uncanny valley. Recently, however, I came to think that there is something more attractive and amiable than human beings in the further right-hand side of the valley. It is the face of a Buddhist statue as the artistic expression of the human ideal." Although a stone statue might represent the highpoint for Mori, the story of the golem—a mound of clay animated by an inscription on its forehead—warns us of the specters and consequences of inanimate personhood: it can work both for and against human beings. Even Isaac Asimov, the progenitor of the Three Laws of Robotics, intimates in his 1946 story "Evidence" (adapted twice for TV in the series *Outer Limits* as "I, Robot" in 1964 and 1995) that his interest in robotics emerged from the anti-Semitism he encountered in his military training. What are we intrigued by and what are we threatened by in the phrase, "The Stone That Therefore I Am"?

While a line between the animate and the inanimate has traditionally been drawn in discussions of rights, responsibilities, and protections, now with such initiatives as the *Robot Ethics Charter* we see that there is a gesture of inclusion whereby the reach of the animate extends beyond the line into the inanimate. In a sense, the distinction between the animate and the inanimate is an amity line drawn up and agreed upon by the animal and the human being beyond which all bets are off. Robots are, hence, abandoned to the far side of this line and the mechanical labor they perform is freely extracted. Measures such as South Korea's *Robot Ethics Charter*, however, bring what was typically left on the far side of the line—inanimate entities that are not persons, and that do not have the rights, responsibilities, and protections of personhood—into the fold.

If, as Giorgio Agamben tells us in *The Kingdom and the Glory*, economy (*oikonomia*) is the management of persons and things, robots pose a dilemma for economy: if the robot ends up bearing the secondary rights of personhood (perhaps modeled after

corporate personhood), should the robot be counted as a thing or a person in the *oikos*? What kind of *nomos*, what kind of ordering, should determine the placement of the robot? The specter of the robot citizen is, like the pirate, a *hostis generis humani*, usually figured as a threat to the human race. Texts such as the novel *Do Androids Dream of Electric Sheep?* and the early twentieth-century play *R.U.R: Rossum's Universal Robots* indicate the manner in which humanoid non-humans point to humankind's greatest peril: that the caesura demarcating human from non-human, and even animate from inanimate, is more like the temporary trace or wake left by a ship as it sails across the sea than fixed enclosures or fences constructed on *terra firma*. What grounds a non-human *nomos*, especially now that we have entered the twenty-first century, and now that South Korea, for instance, has plans to develop a *Robot Ethics Charter?* Should we consider such charters appropriations of the inanimate, extensions of the law of the earth upon the open sea of new forms of life and work? Are charters like this one a new form of land appropriation or an opening of the sea? Land appropriation is usually considered a first step to polis-formation and the life of the city, i.e., citizenship. In his book *The* Nomos *of the Earth*, Carl Schmitt writes, "Every ontonomous and ontological judgment derives from the land. For this reason, we will begin with land appropriation as the primeval act in founding law" (45). What type of metaphysical land appropriation has occurred that encloses only the human being and shuts out the robot who is, after all, preeminently capable of a certain kind of work and should hence be subject to a certain kind of law? Schmitt tells us that as a constitutive act, land appropriation is an external process as well as an internal one, i.e., not just an ordering of land but an ordering in relation to others. Typically, this external constitution has been designated as a relation to other human beings, yet there are non-human others that have been divided against by the very division of land appropriation into internal and external. The fact that land appropriation has a twofold character indicates that there has already been a kind of *nomos* at work even before the radical title of land appropriation. This *nomos* sets up the internal and external relations by way of an even more primal division of animate and inanimate: the appropriation occurs as an event by some kind of agent, whether individual, clan, or even perhaps a wolf pack or divinity. These non-human agents—divine and animal—nevertheless bear the fiction of the *persona*, whereas the inanimate earth does not. Or does it? Schmitt acknowledges the role of mythological sources in jurisprudence, and a primal one would be taking the earth as person, as mother earth (*humanus* comes from the proto Indo-European word for earth [*dhhem*]). The first sentence of Schmitt's book indicates that "In mythical language, the *earth* became known as the mother of law" (42). Land appropriation, then, as a primeval act of founding law, already concerns a certain appropriation of the mythical figure of personhood. So when Schmitt quotes Locke, as asserting that jurisdiction over land is the essence of political power, or Kant, as stating that the acquisition of a thing can only be acquisition of land, there is a perhaps primal forgetting here of mythical language, i.e., that "'the *earth* became known as the *mother* of law'" (42).

For Schmitt, *Heimat* bequeaths the right to citizenship. Again the genetic comes into play, the engendering by birth or nativity, the native land as that which engenders the citizen (Kant's *Rechtlehre*): *das Land* of the occupants gives by birth a community of citizens (the *Vaterland*). The land here becomes a genetic principle that animates the possibility of an originary or proto-citizenship: not biological ancestry but a filiation with the land (*nomos* of the earth). Do transgenic entities participate in their own kind of proto-citizenship born from the land? What is engendered along with the birth of the transgenic? Where is the place of birth of the transgenic? Does the transgenic have a native land? The fact that *The Semi-Living Worry Dolls* cannot cross sovereign territorial boundaries invites us to ask about transgenic life in the context of citizenship. The deracinating of citizenship from human life (and the deracinating of human *Dasein*) is already in progress, especially visible in the swarmings of network citizenship. Spawned from biotechnology, the transgenic has neither fatherland nor motherland. The *genos anthropon* and the genealogy of the *anthropos* already concerns not only archaic hominids and interbreeding with Neanderthals, but chimpanzee ancestry as well. The issue is the genealogy of the political from the biological (*zoon politikon*), which in Athens had to be fabricated by a founding myth of the autochthonic (originating where found) birth from the mother earth: the *place* of the ancestors. Isonomia (equality) is a *nomos* of the earth. With frontier biopolitics, there is often a kind of isonomia in play that has to do with the pasturing of the land by both herdsman and herd: pastoral power has an isonomic tendency. Autochthonic isonomia, which concerns the *genos*, is set against the division between *oikos* and *polis*, the constitution of the political (the *zoon politikon*, the life of the city as the ground for the political animal, human being). Transgenic citizenship would perhaps more easily stretch the autochthonic isonomia than the *zoon politikon* as a ground for citizenship. The transgenic mythically says: I was born here. *The Semi-Living Worry Dolls* cannot leave the country, but they can listen to your innermost concerns. The *nomos* of the earth (autochthonic isonomia) creates citizenry by division [*daiomai, partager, diviser*, cut, country, territory]. The *demes*, the division of tribes, is a cut, which is always already a splice. The community of territory: the *demos*, the clan. Aristotle separates the *ethnos* (*oikos*) from the *polis* (division from *oikos*): in this sense, the *polis* provides a basis for transgenic citizenry. The city depends upon an equality by reciprocity, hence of difference, perhaps not only anthropological difference (or ethnic difference) but species difference as well: an opening for the transgenic. The possibility of transgenic citizenship falls between two possibilities: an autochthonic isonomia that would include species other than human and an isonomia of reciprocity within the walls of a *polis* that includes species other than human. The between of these two possibilities is clearly a no man's land. Then there's the *plethos* of centurions as citizens: the plurality of citizens. The company model of citizenship: do drone airplanes then, as part of the military company, have a right to citizenship? In many sci-fi movies with robot warriors and automaton soldiers, there is a sense that these machines form a kind of class that is capable of going to war with living beings. In these films, the drones, automatons, and robots are not instruments of human beings but have a kind of diabolical life (*unheimlich*?) of the animate-inanimate. Here we move into the question of citizenry of the inanimate. I think the centurions (professional mercenaries reduced to the empty equivalence of the money form and hence made inanimate) provide a model for this. With the *plethos*, the quantity becomes the quality. Anyone can

be enlisted, even the transgenic, even the robot.

Rather than a legal basis for robot citizenship, an alternate, *nomos*-based one, which subjects the earth and inanimate entities to a concrete ordering, might be especially appropriate.[4] Schmitt stresses that *nomos* is always land appropriation, division, and even pasturing of land. So to say "*nomos* of the *earth*" is almost a redundancy. *Nomos* is always the ordering of the earth; ordering is always the ordering of the earth. He emphasizes here that this ordering is a concrete measure, not an abstraction: it is the spatial event of a division. Schmitt warns against understanding land appropriation as an intellectual construct; rather it should be understood as a historical event and a legal fact. Recent conflicts, for instance, over the setting up of *eruvim*—ritual enclosures around Orthodox Jewish communities—in North America bear this out. The *eruv* is not meant to be only a metaphysical marker, but must have a material basis—a string or a fishing line, for example—that has a material upkeep and must be vigilantly maintained. This is why the setting up of *eruvim* has been contested, most recently in Quebec: courts have ruled that a concrete ordering and division set up simultaneously with an already existing order of public and private space and property is a kind of land appropriation. The almost metaphysical filigree of the string or fishing line demarcating the *eruv* is a *nomos*, a land appropriation. Yet the *eruv* can have multiple doors, perhaps infinite doors—"Jewish law places no limits on the number of doorways which are permitted within a wall. This means, in effect, that *eruv* walls are allowed to consist entirely of doorways" (Smith 404), which poses a dilemma for the concept of marking the border. What kind of fence or wall do we have if it is all door or endless doors? Within what kind of fence or enclosure might robots work according to their own terms?

Posing the barely-serious question of robot citizenship requires a *topos*, a new *nomos* of the earth. What kind of land appropriation of a new world (*Landnahme*) could set the ground for a twenty-first century *nomos* that includes robots? Robots have already enabled interplanetary land appropriations, for instance, on the Moon and Mars, which are considered open frontier, free to anything that can get there. Yet Schmitt warns us, in 1952, from thinking in this direction:

> The traditional Eurocentric order of international law is foundering today, as is the old *nomos* of the earth. This order arose from a legendary and unforeseen discovery of a new world, from an unrepeatable historical event. Only in fantastic parallels can one imagine a modern recurrence, such as men on their way to the moon discovering a new and hitherto unknown planet that could be exploited freely and utilized effectively to relieve their struggles on earth. The question of a new *nomos* of the earth will not be answered with such fantasies, any more than it will be with further scientific discoveries. Human thinking again must be directed to the elemental orders of its terrestrial being here and now.
>
> (39)

With these comments, Schmitt forecloses any *nomos*, for instance, that maps out a digital order or one that carves up anew earth as a technological ecology. Nevertheless, right now it might not be "human thinking" that is directed toward the elemental order of terrestrial being: artificial intelligence, artificial life, and humanoid robots that have a new mandate in South Korea's *Robot Ethics Charter* might prepare the way for an unforeseen discovery of a new world.

The inclusion of robots within an ethics charter signals that a new line is being drawn up, which enables free commerce between the animate and the inanimate. Shall we consider the *Robot Ethics Charter* as a type of sympathy for the commodity, of which Walter Benjamin speaks concerning the phantasmagoric entities in the *Arcades*? Or should Julien Offray de la Mettrie's *L'Homme Machine* be a guide here, given that it extends Descartes's suggestion that the animal is a mere machine to include humans as well? Especially if there is no clear distinction between animate matter and inanimate matter, then we might have to say not that "man is a wolf to man," but that "man is a machine to man." Any conception of humanity engenders an outside humanity devoid of rights. The strategy of confirming that the robot is a person—similar to the way sixteenth-century theologian Francisco de Vitoria confirms that the inhabitants of the Americas are human beings and not animals—is facilitated by a materialism that already thinks of man as a machine. More typically, though, as machine, the robot has stood outside humanity without rights, enabling an age-old formula for land appropriation and subjugation. In his critique of the concept of the higher humanity of the conqueror and the manner in which the subjugated stand outside of humanity, Schmitt demonstrates how the idea of the inhuman, "emphasized the discriminatory power of division inherent in humanitarian ideology . . . in the 18$^{th}$ century, it was consistent with the victory of a philosophy of absolute humanity. Only when man appeared to be the embodiment of absolute humanity did the other side of this concept appear in the form of a new enemy: the *inhuman*" (104). Should we take the robot as the embodiment of an absolute *inhumanity*? With the appearance of the robot, does the pair humanity/inhumanity still have the power to divide?

Schmitt's *Nomos of the Earth* suggests a way of addressing the division between the human being and its others—whether animal or machine—as a territorial division, a territorial appropriation. The division between the human and the non-human or the inhuman is always in play with any *nomos* of the earth, for instance, with the sixteenth- and seventeenth-century land appropriations of the New World, which rendered the native peoples as sub-human. Earlier, with Aristotle, man as *zoon politikon* is determined by the walls of the *polis*, outside of which there is nothing but gods and beasts. The territorial division traverses living beings, relegating most outside the life of the city. This is the first indication that the human being can be understood by way of what Schmitt calls "a spatially conceived concrete measure" (68). That living being is traversed by *nomos* should come as no surprise if we follow the philological examination of *nomos* as coming from "*nemein*—a Greek word that means both 'to divide' and 'to pasture.' Thus, *nomos* is the immediate form in which the political and social order of a people becomes spatially visible—the initial measure and division of pastureland, i.e., the land-appropriation as well as the concrete order contained in it . . . in Kant's

words, it is the 'distributive law of mine and thine'" (70). Although we might be tempted to see an originary biopolitics in *nemein*, understood as to divide and to pasture, the emphasis should be on pasturing as spatial and territorial ordering rather than on the pastoral management of living beings.

A clarification about the connection between *nomos* and pastoral power can be found in Schmitt's comment: "In the nomadic age, the shepherd (*nomeus)* was the typical symbol of rule . . . the *nemein* of the shepherd is concerned with the nourishment (*trophe*) of his flock, and the shepherd is a kind of god in relation to the animals he herds" (340). Foucault tells us that pastoral power sets the terms for biopolitics as the management and administration of life, yet we can see how the example of the American myth concerning the frontier, especially in Westerns, indicates the manner in which the management of herds serves as a rationale for land appropriation. Rather than conquistadors seizing land for Spain by way of a Church missionary mandate, rugged cowboys, like the ones portrayed by John Wayne, seize the land for themselves (for civil society instead of the state), a seizure which in turn serves as a founding myth for U.S. territorial claims in the west. Elaborating the threefold meaning of *nomos* and *nemein* as appropriation, division/distribution, and pasturing, Schmitt explains that pasturing [*weiden*] "does not mean feeding or drinking, but rather producing, which expresses a preliminary distribution" (345). In this manner, we see how *nomos*, even in its sense as pasturage, retains its relation with land appropriation, with *terra firma* and the inanimate, rather than with life as such. We might venture to say that living being, animate being, is traversed by something inanimate, by a spatial and territorial division. This is the case even if the wall of the *polis* is an animate one. The fence or enclosure, Schmitt reminds us, determines the world of men. He writes, "The enclosing ring—the fence formed by men's bodies, the man-ring—is a primeval form of ritual, legal, and political cohabitation . . . law and peace originally rested on *enclosure in the spatial sense"* (74). A spatial ordering encloses the human being outside of which all are beasts or gods; furthermore, a spatial ordering encloses animate beings, outside of which all is inanimate.

Rather than extending the biopolitical reach of *humanitas* to include forms of artificial life and artificial intelligence, South Korea's 2007 announcement that it was drawing up a *Robot Ethics Charter* might be taken as a sign that a new *nomos* is afoot. Does a kind of quasi-alliance between robots and human beings indicate that a new amity line is being drawn up on the earth? Is this charter a kind of truce between machine and man? Does South Korea's charter suggest that robots and human beings could become what Schmitt calls "equal parties to a treaty of division and distribution concerning land appropriation" (92)? The old amity lines enabled a kind of pirate raid free-for-all "beyond the line." What kind of free-for-all is at hand outside the onto-spatial ordering mapped out by the *Robot Ethics Charter?* Just as beyond the old amity lines men were as wolves to men, so now with the new *nomos* might there be an amity line beyond which men are as robots to men, in effect a new no man's land, located this time not in the Americas but in a space inhospitable to the living being as such? If the old amity line freed the area on this side of the line from "the immediate threat of those events 'beyond the line'" (97), what does this new one free us from? In effect, it protects the human being from being "man as robot to man," a state that, according to La Mettrie's 1748 *L'Homme Machine*, man is, nevertheless, already in. But just as deeming Native Americans savages and barbarians placed them outside of the law and made their land free for appropriation, so too does the designation of both the human being and the robot as man-machines facilitate an unforeseen appropriation.

Schmitt reminds us that the "*papal missionary mandate* was the legal foundation of the *conquista"* (119). In the guise of saving souls, land is stolen. Now that the *Robot Ethics Charter* encloses the robot within a humanistic guideline, we might ask what is driving the humanitarian mission or crusade to protect robots from abuse? In the guise of preventing abuse of robots, what kind of land appropriation is in store?

When Schmitt writes that during the European discovery of the New World, "A scientific cartographical survey was a true legal title to a *terra incognita* [uncharted territory]" (133), one wonders what kind of uncharted territory the *Robot Ethics Charter* entitles. A new land division, a new *divisio?* Again, if we follow Schmitt here, the stakes do not really concern the robot as such, but land appropriation, division, distribution, production. Just as whether Indians were sub-human ultimately became irrelevant to European colonialists because the dispute was really between European states, so too whether robots can be included within a humanistic ethics charter might be irrelevant if we consider that the dispute chiefly concerns the corporate entities and industries that produce them. As such, the dispute is not between human persons, but *personae publicae* [public persons] or legal persons. Not only are corporations counted as *persona ficta*, their artificial personhood—which bears many of the rights of the natural person —is extended to the artificial intelligence contraptions that they produce. In his discussion of the Early modern institution called the "state," Schmitt similarly reminds us that these "new, contiguous, and contained power complexes were represented as *persons*. . . . These states were conceived of as *magni homines*. . . . Personification was important for the conceptual construction of the new interstate international law, because only thereby did the 16th and 17 th century jurists, schooled as they were in Roman legal concepts, find a point of departure for their juridical constructions" (143-144). This personification process of political powers was "influenced strongly by the allegorical tendency of the Renaissance" (144). By way of personification, the state became the legal subject of international law and was "recognized as a *magnum homo* [great man] . . . and a sovereign 'person'" (145). Such states were subject, says Schmitt, to secondary questions such as "whether one should think of these 'great men' as existing in a 'state of nature' beyond an amity line and, in turn, should consider this state of nature (in the sense of Hobbes) to be an asocial struggle of leviathans, or (in the sense of Locke) already to be a social community of thoroughly proper gentlemen" (146). In a sense, these *magnos homines* inhabited the non-state freedom of the sea, which was "impervious to human law and human order" (181).

Rather than deriving a basis for posthuman or non-human citizenship from the earth (for instance, as a reward for labor, to which the *robota* would be preeminently entitled), we might look to the sea, which has no fixed ground, where "firm lines cannot be engraved" (42), but which nevertheless sets out a zone. The sea, says, Schmitt, "has no character, in the original sense of the word, which comes from the Greek *charassein, meaning to engrave, to scratch, to imprint"* (43). The upshot of this for the early modern period was that the sea was not state territory; today, asking the question of robot citizenship is akin to "the hazardous wager of having sailed the open sea" (43). The fear of the open sea evokes what is at risk with opening citizenship to the non-human, whether animate or inanimate.

That Descartes's elaboration of the *cogito* happens in the context of a discussion about *bêtes-machines* and humanoid automata is not only a historical accident of a seventeenth-century interest in mechanical life. Thinking, reason, and ipseity are inherently machinic, technological, and peculiarly inanimate, as the western philosophical tradition—from Aristotle to Descartes, to Pascal, to Leibniz, to Kant and Heidegger—indicates. Political philosophers and thinkers also suggest that the state and government are essentially cybernetic systems, something Hobbes makes clear in *Leviathan* when he asserts that the state is an "Artificial Life." Kant also indicates that what he calls the "providential machine" governs the teleology of nature and the perfectibility of the human being. Following Hobbes, contemporary thinkers such as Derrida describe the state as a human prosthetics, a *prosthstatics*, which is in essence a death machine. And Kant's concept of war as a providential machine—the perfectibility mechanism at work in the teleology of nature—which heeds the dictates of reason's supersensible vocation, announces, for Derrida, a holocaust of animality, reason's war against living being as such. Agamben's recent book *The Kingdom and the Glory* elaborates on Kant's concept of the providential machine, suggesting that the governance of the cosmos happens by way of a divine machinic apparatus, a *dispositif*, an *oikonomia*, which is in essence the Trinity as a divine cybernetic system.

In Hobbes's *Leviathan*, it is art, or *techne*, that creates the state, the *civitas*. Derrida foregrounds the mechanical artificiality and prosthetic monstrousness of this *civitas* as figured by the leviathan. Derrida quotes Hobbes's Introduction: "Art goes yet further, imitating that Rationall and most excellent work of Nature, Man. For by art is created that great Leviathan, called a common-wealth or state, (in latine *civitas*) which is but an Artificiall Man; though of greater stature and strength than the Naturall, for whose protection and defense it was intended" (*Beast Vol. I* 27). The state in its figuration as an artificial man can be likened to a synthetic life-form, an automaton, a cybernetic system. In making explicit this likeness, Derrida writes: "the state is a sort of robot, an animal monster" (28). In our era of artificial intelligence, artificial life, humanoid robots, and genetically engineered life forms, we might also ask if robots and artificial life forms are conversely like the state, and can we figure them as such, for instance, on the model of corporate personhood? In his discussion of marionettes, Derrida asks, "Do marionettes have a soul, as people used to wonder about both women and beasts? Are they merely substitutes and mechanical prostheses? Are they, as is said, made of wood? Insensible and inanimate, spontaneously inanimate, not having sovereignly at their disposal the source itself, *sponte sua*, their animation, their very soul? Or can they, on the contrary, lay claim to that grace that grants life or that life grants? The marionette—*who* or *what"* (187). The grace that would grant life to the automaton could be likened to what gives life to the leviathan, the artificial man.

When Hobbes writes that the *civitas* is an artificial man, he adds, "Sovereignty is an artificial Soul, as giving life and motion to the whole body" (qtd. Derrida *Beast Vol. I* 28). Conversely, again we might ask: does the artificial soul, the artificial life and soul of the marionette, tell us something about the *Walten*, the artificial force, of the sovereignty machine? Can robots and artificial life tell us something about the state? In his discussion of the marionettes, Derrida continues,

> What we named, on the basis of Hobbes's *Leviathan, prosthstatics* sent us down this track, in which it was no longer possible to avoid the figure of a prosthetic *supplement*, which comes to replace, imitate, relay, and augment the living being. Which is what any marionette seems to do. And any art of the marionette, for, let's never forget this fact, it's a question of art, of *tekhnē* as art or of *tekhnē* between art and technique, and between life and politics. And it is, moreover, art itself, you remember, that Celan, at the beginning of "The Meridian," compares to a childless marionette.
>
> (187-188)

We see here that art crosses the divide between life and politics, that prosthstatics crosses the divide. Art creates the artificial man, the leviathan, the state, says Hobbes. At the heart of life and politics, there is the art of the automaton. Derrida retrieves from Celan the idea of "the appearance of art as a marionette, i.e. a sort of technical *who* and *what*. Who will deny that the marionette is a technical thing, and even a sort of allegorical personification of technical power itself, of machinality?" (251). The marionette exhibits in its artificial life the prosthstatics of the state, the machinic life that, says Hobbes, art creates. *Leviathan* opens with the following statement: "Nature (the Art whereby God hath made and governs the World) is by the Art of man, as in many other things, so in this also imitated, that it can make an Artificial Animal" (qtd. Derrida *Beast Vol. I* 47). Artificial life is the figure for what man builds, and notes Derrida, "this human *mimesis* produces automats, machines that mimic the natural life created by God. The life of these automats, of these machines, is compared to that of clocks and watches. Why could we not say, Hobbes asks immediately afterward, that all the automata (machines or engines that move by virtue of springs and wheels, like a watch) have an artificial life?" (47). With this question, we see why what Derrida calls prosthstatics supplants the *zoon politikon* in a formation that we might call *automaton politikon*. Here again, like Heidegger's assertion that human *Dasein* does not essentially concern living being, we have an abandonment of the *zoon* as a ground: the machinic life of the *civitas* as automaton replaces the biopolitical.

Hobbes, among others, configures the state as a giant person and human persons like automata. In his introduction to *Leviathan*, he infamously writes,

> Why may we not say, that all Automata (Engines that move themselves by springs and wheeles as doth a watch) have an artificiall life? For what is the Heart, but a Spring; and the Nerves, but so many Strings; and the Joynts, but so many Wheeles, giving motion to the whole Body, such as was intended by the Artificer? Art goes yet further, imitating the rationall and most excellent worke of Nature, Man. For by Art is created the great LEVIATHAN called a COMMON-WEALTH, or STATE, (in latine CIVITAS) which is but an Artificiall Man; though of greater stature and strength than the Naturall, for whose protection and defence it was intended; and in which, the Soveraignty is an Artificiall Soul, as giving life and motion to the whole body.
>
> (81)

Rather than thinking that robot citizenship is a new question, belonging to a new *nomos* of the earth, we see here that the modern citizen is always already a kind of automaton of a state that is always already an artificial person.

Earlier, in "Artificial Man," the last chapter of *Man and Citizen*, Hobbes writes that a *persona* (mask) always indicates the artificial man, according to the theatrics of Greek tragedy and comedy: "For in the theatre it was understood that the actor himself did not speak, but someone else" (83). Hobbes begins the chapter "Artificial Man" by noting the divergent translations of *prosopon* into Latin: alternately *facies* (face), *os* (countenance), and *persona* (mask). Although Hobbes specifies that "face" indicates the true man and "mask" the artificial man, it is unclear what the status is of the countenance. Is there an *os* between the face and the mask? Does the *os* mediate the face and the mask, does it bind the two, does it indicate the gap or difference between, or does it open the possibility of the two? In the theatre, it is the mask that speaks and not the face. The actor does not speak in his own voice, but in the voice of another, i.e., allegorically. This scene of puppetry or ventriloquism is often taken up, as with Hobbes, to discuss the theatrics of the political: "on account of commercial dealings and contracts between men not actually present, such artifices are no less necessary in the state than in the theatre" (83). In a supposedly very different time, Walter Benjamin's discussion of the Automaton Chess Player in "The Concept of History" also unmasks the actor behind the *persona* when he says that, just as the automaton is piloted by a human puppeteer hidden within the construct, so too does the theologic pull the heart's chords buried within historical materialism. In all instances, there is something that mediates or opens up the mask and the face, the automaton and the human agent, historical materialism and the theological: there is an *os*, or might we venture to say, a *nomos*, between the two. If the automaton is an artificial person, a *persona*, and such artifices as *persona* are "no less necessary in the state than in the theatre," we see that the political stage is much like Kleist's Marionette Theater. By suggesting that the automaton has artificial life, Hobbes also intimates that natural life is itself mechanical: "For what is the Heart, but a Spring; and the Nerves, but so many Strings; and the Joynts, but so many Wheeles, giving motion to the whole Body, such as was intended by the Artificer?" (*Leviathan* 81). To a certain extent, artificial life and natural life are one and the same, and especially in relation to the state. The automaton and the human being are both personae.

As it extends the reach of human rights to include robots, South Korea's *Robot Ethics Charter* attempts to articulate a new assembly of personae and social relations. A model for this is already operative in the concept of corporate personhood, which designates a person that is neither human, nor individual, nor animate. If personhood has, since 1823, been extended in the U.S. to include corporations and bodies politic, why not humanoid entities whether transgenic or robotic? Mitt Romney, a corporate leader with failed Presidential aspirations, took flack for publicly insisting that "Corporations are people too." Although some might not share Romney's political orientation, an entire series of Supreme Court rulings nevertheless backs his words. Corporations are persons, and the state, as we've seen, is a giant artificial person. Again we might ask, if bodies politic and corporations are counted as persons in the U.S. (and most other first world countries), what about robots and other forms of artificial intelligence and life? Some might feel that turning toward things such as robots as philosophical toys for the question of personhood only repeats and projects the anthropomorphic realm or is perhaps just an allegory of it. This is a commonplace of sci-fi pulp fiction in which discrimination against androids is a cover for an investigation into the legacy of human slavery. If we revisit the heyday of the automata craze in seventeenth- and eighteenth-century Europe, we see that La Mettrie already insists that man is an automaton, "a self-winding machine, a living representation of perpetual motion" (*Man a Machine* 6). And for Jacques de Vaucanson, an early cybernetic craftsman, whose inventions were seen as profanity, another risk emerged: robots and automata not only pose a threat to religious dogma concerning the human soul, but also threaten to replace the body of the worker with a machine. What is at stake here, even now, even after (and because of) the industrial and post-industrial revolutions, is the replacement of man by machine. In a sense, the ecology of the twenty-first century is not new: we still worry with Marx and Engels that the human being will end up as a mere piece of meat hung on automata, and that the worker "becomes an appendage of the machine . . . daily and hourly enslaved by the machine" (Marx 28). On the other hand, taking a cue from Walter Benjamin and configuring our relation toward the robota as something akin to empathy for the commodity seems equally imprudent.

The citizenship clause of the Fourteenth Amendment ensures that corporations and natural persons enjoy same rights and protections. In 2010, the First Amendment gave the corporation *Citizens United* freedom of speech protection. Unions, in theory, also have this protection. It is argued that, unless the *persona ficta* is endowed with rights and protections, governments could ban books, and corporations and unions would not be allowed to hire an author to write a political book. The corporation, union, or body politic is a form of organization that is meant to mediate a group of natural persons, yet this mediation is a fiction, and the rights and protections of the natural person are extended to this mediation, this artificial person. This is no small matter in our

media age, especially if we think of the artificial person or the *persona ficta*—whether corporation, union, or body politic—upon the model of the Automaton Chess Player. Despite being an association, hence a construct or a fiction (and corporate interest is as much a fiction as common interest), the puppet has its strings pulled, we assume, by a natural person somewhere down the line. Yet today—and the test site might be South Korea and its *Robot Ethics Charter*—whether corporations are organizations of human beings is unclear, especially when we have computers and digital media so heavily participating in these organizations. Clearly, a corporation is a cybernetic system, a hybrid apparatus of natural persons, technologies, legal fictions, and relations of all sorts. The right to act collectively involves many players who are neither human nor animate. The right of association enables the legal fiction of taking the corporation as a person. Although it was industrial capitalism, with its massive technological projects, that required corporations for the raising of capital, courts in England as early as the sixteenth century call corporations artificial persons as a remedial measure. Under the laws of the time, corporations could not be sued or otherwise subjected to liability because the laws are worded "No person shall . . . " The industrial revolution instituted a shift away from sole proprietorship to corporate proprietorship, so that corporations had to become accountable in a manner similar to the individual person. By way of corporate personhood, corporations are given the rights and protections of the natural person. Corporations these days are also counted as *species*, as Tom Cohen notes in a footnote: "As an example of how this corporate appropriation of the 'anthropocene' proceeds, sometimes under the rubric of an 'earth systems' approach, Peter Kareiva explains that 'If one considers the planet earth and asks what are the keystone species for our global ecology, it is hard to conclude anything but major global corporations.' See Andrew Revkin, "Another Round: Conservation on a Human-Shaped Planet" ("Polemos" 23).

In the wake of this wager concerning personhood, an entire cosmos of risk has inadvertently opened up: the *persona ficta* can own property, can sue and be sued, can enter into contracts, and is obliged to pay taxes (no taxation without representation?). In the U.S., corporations also have civil rights: freedom of speech. Sovereign states are legal persons, and in some countries, so are temples. Since the nineteenth century, legal personhood has been further construed to include a citizen, resident, or domiciliary of a state. The European Convention of Human Rights extends human rights to all legal persons. Although the *person ficta* was originally a remedial measure to make corporate entities subject to the law, today corporate liability effectively shields individual natural persons from liability: corporate personhood is a new form of protection for shareholders. The corporation provides a supplement of protection —an artificial prosthesis of protection—to individuals in associations, which individuals who are not in associations do not have. Do we have today with corporate personhood a situation in which, as with the Automaton Chess Player, an artificial person or *persona ficta* is not much more than a theatrical stunt or magic trick that obscures the living *cyber* that pilots the mechanism? Does the automaton obscure the human agent pulling the puppet strings? For Benjamin, the agent was theology, and the puppet was historical materialism. Today, although corporations don't have the right to vote, they in effect do so through a form of financial remote control—campaign funding—which is now considered a form of speech protected by the First Amendment. If corporations have the right to protected speech in the mathematical modality of the money form—which is no doubt a kind of ventriloquism that obscures who or what is speaking—what are we risking if we allow *robota*—human, cybernetic, transgenic, or otherwise—to speak up as well?

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Erin Obodiac received her Ph.D. in Comparative Literature from the University of California, Irvine and has held teaching and research appointments at UC Irvine, the University of Leeds, and SUNY Albany. Her writings inquire about the relation between the institutional history of deconstruction, posthumanist theory, the discourse on technics and animality, and new media art forms. She is currently a Fellow at Cornell University's Society for the Humanities completing a book called *Robots at Risk: Transgenic Art and Corporate Personhood*.

## Footnotes

1. Although South Korea's Ministry announced in 2007 that they were drafting up a *Robot Ethics Charter*, upon which *National Geographic* and the *BBC* reported, the charter has yet to be finalized. There is nevertheless an outline of the charter, *Establishing a Korean Robot Ethics Charter*, distributed online by the Ministry. Also, there is a work of what Saidiya Hartman might call critical fabulation entitled "South Korean Robot Ethics Charter 2012" published by Chris Field on his blog *Enlightenment of An Anchorwoman*.

2. There is obviously a trajectory here with these rights manifestos: from the rights of man, to women, to animals, and now to robots. A full arc from the inanimate reason of man to the inanimate reason of the robot has been spanned. In between, we have the suffering of animate bodies—the woman and the animal.

3. We might alternately speculate about what might motivate Descartes's own desire to construct an automaton of his dead, illegitimate daughter Francine, which is perhaps just a fish-tale. Would Descartes have constructed a mechanical toy of a legitimate daughter? We cannot rule out the detail of Francine's illegitimacy as an enabling factor in the construction of any such effigy: that the daughter's illegitimacy perhaps partially dislodges the taboo nature of creating an artificial replacement of one's own child—the daughter was not legitimate, not engendered within the sacred contract of marriage, and hence, only biologically his child—cannot be ignored. We might even say—and this is going too far—that as illegitimate, as engendered outside a theological contract, Descartes's daughter was already an automaton, a being without a created rational soul in the sense that she was engendered by two human animals, two human *bêtes-machines*, two high-end monkey-machines, so to speak.

4. Cornell professor of mechanics Andrew Ruina insists that biomimetic robotics increasingly demonstrates that living beings, human as well as animal, operate according to mechanical principles and physical laws, and that when designing biomimetic robots, neither a brain center, nor a symbolic system, nor even a motor, is needed for the kind of autonomous movement that is supposedly the hallmark of the living being. Gravity, balance, and other physical and mechanical principles determine the possibility of autonomous movement, not a vitalism, be it of the living being or the electric animal.

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