

# Debunking Robot Rights Metaphysically, Ethically, and Legally

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## 1 Introduction

For some ethicists, the question of AI ethics must extend beyond consideration of what robots and computers may or may not do to persons. Rather, persons have some ethical duties to robots—up to and including recognizing “rights”. David Gunkel hailed this Copernican shift in robot ethics debates as “the other question: can and should robots have rights?” [34]. Or, to paraphrase John F. Kennedy’s classic challenge: Ask not what robots can do for you, but rather, what you can, should, or must do for robots.

In this work we challenge arguments for robot rights on metaphysical, ethical and legal grounds. Metaphysically, we argue that machines are not the kinds of things that could be denied or granted rights. Ethically, we argue that, given machines’ current and potential harms to the most marginalized in society, limits on (rather than rights for) machines should be at the centre of current AI ethics debate. From a legal perspective, the best analogy to robot rights is not human rights but corporate rights, rights which have undermined the US electoral process, as well as workers’ and consumers’ rights. The idea of robot rights, we conclude, acts as a smoke screen, allowing theorists to fantasize about benevolently sentient machines, while so much of current AI and robotics is fuelling surveillance capitalism, accelerating environmental destruction, and entrenching injustice and human suffering.

Building on theories of phenomenology, post-Cartesian approaches to cognitive science, and critical studies, we ground our position in the lived reality of actual humans in an increasingly ubiquitously connected, controlled and surveilled society. What we find is the seamless integration of machinic systems into daily lives in the name of convenience and efficiency. The last thing these systems need is legally enforceable “rights” to ensure persons defer to them. Rights are exceptionally powerful legal constructs that, when improvidently granted, short-circuit exactly the type of democratic debate and empirical research that is necessary in our increasingly technologized world [27]. Conversely, the ‘autonomous intelligent machine’ is a sci-fi fantasy, a meme that functions to mask the environmental costs and human labour which form the backbone of contemporary AI. The robot rights debate further mystifies and obscures these

problems. And it could easily provide a normative rationale for permitting powerful entities developing and selling AI to be absolved from accountability and responsibility.

Existing robotic systems (from chatbots to humanoid robots) are often portrayed as fully autonomous systems, and that is part of the appeal for granting them rights. However, these systems are never fully autonomous, but always human-machine systems that run on human labour and environmental resources. They are necessarily embedded in social systems from their conception, to development to deployment and beyond. Yet, the “rights” debate too often proceeds from the assumption that the entity in question is somewhat autonomous, or worse that it is devoid of exploited human labour and not a tool that harms the disenfranchised and minoritized. Approaching ethics requires reimagining ethics from the perspective, needs, and rights of the most marginalized and underserved. This means that any robot rights discussion that overlooks underpaid and exploited populations that serve as the backbone for “robots” as well as the environmental cost of creating AI, risks being disingenuous. As a matter of public policy, the question should not be whether robotic systems deserve rights, but rather, if we grant or deny rights to a robotic system, what consequences and implications arise for people owning, using, developing, and affected by the actual robots?

The time has come to change the narrative, from “robot rights” to the duties of the corporations and powerful persons now profiting from sociotechnical systems (including, but not limited to, robots). Damages, harm and suffering have been repeatedly documented as a result of the creation and integration (into the social world) of AI systems. Rather than speculating about the desert of hypothetical machines, the far more urgent conversation concerns robots and AI as concrete artifacts built by powerful corporations, further invading our private, public, and political space, and perpetuating injustice. A purely intellectual and theoretical debate is at risk of obscuring the real threat here: that many of the actual robots that powerful corporations are building are doing people harm both directly and indirectly, and that a premature and speculative robot rights discourse risks even further unravelling our frail systems of accountability for technological harm.

The rise of “gun owners’ rights” in the US is but one of many prefigurative phenomena that should lead to deep and abiding caution about fetishization of technology. The US has more gun violence than any other developed country, and endures frequent and bloody mass shootings. Nevertheless, the US Supreme Court has advanced a strained interpretation of the US Constitution’s Second Amendment to promote gun owners’ rights above public safety. We should be very careful about robot rights discourse, lest similar developments empower judiciaries to immunize exploitive, harmful, and otherwise socially destructive technologies from necessary regulations and accountability.

## 2 Robot rights: the debate

For many outside the small circle of robot rights discourse, the very idea of debating whether (future) artificially intelligent entities should be granted or denied rights might seem bizarre, fanciful, or even obscene. Nevertheless, within the narrow corners of AI ethics/machine ethics/robot ethics, the notion of robot rights<sup>1</sup> occupies one of the most ferocious debates.

The idea of robot personhood, and closely aligned ideas of robot rights, has been a long-standing, if fringe, position. It was directly advocated by Sohail Inayatullah [41], and discussed in the early 1990s by legal scholar Lawrence Solum [67]. Numerous scholars have discussed the possibility and propriety of granting robots some form of legal rights [34]. Arguments for robot rights tend to come in two broad forms. One set of arguments is built around the idea that humans will be more virtuous and respectful to one another if they are required to respect certain machines (e.g., those that use sensors to gather data about their environment, process that information, and execute certain actions in a given environment). This set of arguments, focused on how granting rights to inanimate objects may cultivate certain dispositions, skills, and capacities in human beings, was directly addressed in earlier work by two of the authors of this piece (Birhane & van Dijk [11]).

Another set of arguments focuses on robots themselves, rather than their effects on persons. Some scholars argue that there is a mix of qualities of present and/or future robots that merits the type of respect that legal systems usually offer in the form of rights to do certain actions, or to prevent others from doing certain actions. This and similar sets of arguments constitute the main concern of this article. But to address it properly, we must carefully examine what “robots” entail and the “rights” at issue.

### 2.1 The Robots at Issue

Both the artificially intelligent entity in question and the reasoning for granting/denying rights varies. Clarifying the “robot” in question is critical. Actually existing robots include machines constructing cars on assembly lines; robots meant to simulate animals (for example, “robot dogs” manufactured by companies like Boston Dynamics (for war and business) and once manufactured by Sony (the Aibo, for home entertainment); humanoid robots (like the soon-to-be-discontinued Pepper); service delivery robots (such as Starship and other drones); and a catch-all category of machines with sensors, information processors, and actuators and machine learning models. Given the limited capacities of all these machines, claims for rights for them are hard to understand. None is sufficiently distinguishable from, say, a pacemaker or a toaster, to merit special

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<sup>1</sup>Robots include humanoid robots, “AI assistants” and household gadgets such as Siri, Nest, Roomba, social bots, and ML/AI models in our broad definition. For a detailed discussion of the definitional issues raised by the term robot, see Richards & Smart, How Should the Law Think About Robots, in Robot Law [15]

consideration beyond what is given to those objects. And this consideration decidedly does not include rights.

As a practical and immediate matter, the question of granting rights to current machines (not the conscious and super intelligent futuristic type but the ubiquitously integrated algorithmic systems) signals a grave danger. To grant these machines rights seems to hinge on an argument of complexity: in large-scale AI systems it is no longer clear whether the humans in charge of these systems can still be held responsible for the deeds of their ‘autonomous’ systems. And so, the argument would go, we need a way of holding the machine itself responsible. We think however that such a strategy does much more harm than good, since it deflects responsibility from the human owners, creators, operators, and/or beneficiaries of the machine. Moreover, what does it mean to grant rights to large language models that produce conspiracy theories, lies, and social stereotypes [6]; computer vision systems that harvest data without awareness or consent of the data subject and produce models that perpetuate harmful stereotypes [10]; physical robots that could take on all the roles of drones and other technology that now hyper-surveils marginalized communities [2, 1]; algorithmic systems that threaten privacy [72, 68]; bots that spread disinformation [14, 40]; and generally speaking AI systems that are created at a massive environmental and labour cost [20, 32] all of which disproportionately impact individuals and communities at the margins?

A somewhat different form of advocacy for robot rights is rooted in a version of anticipatory philosophizing and futurist premises. The argument goes: science and technology are advancing rapidly enough to ensure that, within our lifetimes, some machines will so convincingly emulate human action, expression, and interests that human beings will (and should) feel obliged to respect these machines to some extent. If robots exhibit a set of humanlike qualities, then there is no reason not to grant robots rights.

We will engage this second, futuristic account of robots in later sections of this paper. But before we even take up this claim in all seriousness, it is important to note that this is a major concession, a way of acting in an exceedingly hermeneutically charitable way to robot rights advocates. Assuming the potential beneficiary of “robot rights” to be far more advanced than current machines is the key argumentative move that makes robot rights conceivable at all. However, that concession may well itself obscure more than it reveals, since it presumes an autonomy and distinctness of the robotic that has been absent in the history of human-computer interaction and is likely to be so far into the future as well given that machines are *always* human-machine systems. Indeed, close inspection of the actual material foundations of AI reveals that advocacy for robot rights is much closer to advocacy for corporate or capital rights that subordinates the most exploited, than it is to labor or human rights.

Machines are *never* fully autonomous but always human-machine systems that rely on human power and resources in order to function. Automation and the idea of automata, from its early conception, relied on a clever trick that erased the labourers toiling away in the background the people performing crucial tasks for a machine to operate [43, 65, 69]. Surveying the historical

genealogy of mechanical calculations, Daston [23] emphasizes that far from relieving the mental burden, automation, shifted the burden to other shoulders (often women who were paid little), maintaining the ghost in the machine.

Seemingly autonomous systems are profoundly human-machine systems. And furthermore, as demonstrated by Bainbridge’s seminal work on the automation of process and vehicle control on aircraft automation, “the more advanced a control system is, so the more crucial may be the contribution of the human operator” [3, p.775]. Bainbridge’s concept of the ironies of automation, gets at the heart of intentionally hidden human labour in an appeal to portray machines as autonomous. In reality as Baxter et al., [4] building on Bainbridge’s classic work make explicit, “[T]he more we depend on technology and push it to its limits, the more we need highly-skilled, well-trained, well-practised people to make systems resilient, acting as the last line of defence against the failures that will inevitably occur.” [4]. Nearly 40 years later, Bainbridge’s point remains. Effective automation of control processes necessarily requires humans at various steps; developing, maintaining and stepping in when ‘autonomous’ systems inevitably experience failure [35, 4]. Similarly, today’s ‘autonomous’ vehicles still depend on human “safety drivers” and the need for human input is unlikely to disappear entirely although it might change form [71].

Seemingly autonomous AI relies not only on high-paid, high-skilled engineers and scientists but also underpaid, undervalued, and less-visible labour which go by various names including *ghost work*, *microwork*, and *crowd-work* [42, 32]. From labeling images, identifying objects in images to annotating data, such human labour “help AI get past those tasks and activities that it cannot solve effectively and/or efficiently” [71], step in to fill in when AI fails [42] and are automation’s ‘last mile’ [32]. Such work constitutes the backbone of current AI – without it, AI would cease to function. Yet, from Amazon’s MTurk, to Clickworker, AppJobber, to CrowdTap, such labour often goes unrecognized in the AI pipeline. People doing such work, in most cases are not formally considered as formal employees but independent contractors further adding to their precarious working conditions.

Furthermore, putting the exploitative structure of microwork aside, data that is currently fueling AI systems is often sourced in questionable manners; it is often uncompensated and unregulated. The models built on such data furthermore amplify societal and historical stereotypes (negatively disproportionately impacting marginalized communities down the line as AI systems trained on such dataset are often used in decision making). The deep learning revolution that transformed image detection, identification and recognition, for example, is only possible through continued mass scrapping of user uploaded images, all sourced and used to build AI systems without consent or awareness of image owners [10]. Of the major large scale datasets currently used to train and validate computer vision models, none is sourced consensually (see Birhane and Prabhu [10] for more).

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<sup>2</sup>The Tiny-Images dataset has since been withdrawn following Birhane and Prabhu’s [10] work (<https://groups.csail.mit.edu/vision/TinyImages/>).

Table 1: Large scale image datasets containing people’s images.

Dataset	Number of images (in millions)	Number of categories (in thousands)	Number of consensual images
JFT-300M	300+	18	0
Open Images	9	20	0
Tiny-Images <sup>2</sup>	79	76	0
Tencent-ML	18	11	0
ImageNet-(21k,11k,1k)	(14,12, 1)	(22,11,1)	0
Places	11	0.4	0

(Table taken from Birhane and Prabhu [10])

To summarize, advanced machines never emerge from a vacuum as fully autonomous systems, but are always human-machines systems whose development will implicate environmental destruction, resource extraction, and human exploitation without careful planning and implementation to assure otherwise. Furthermore, current ubiquitous AI and robotic systems are first and foremost tools that normalize surveillance, automate injustice and threaten privacy all while concentrating power in the hands of the wealthy and benefiting those already powerful institutions and corporations [45, 9]. The very idea of discussing the “rights” of robots that emerge out of this extremely unequal, exploitative, and in many respects brutal political economy, is nonsensical at best and dangerous at worst. Instead, the focus should be on redressing the myriad problems such systems continue to cause, particularly on women, racial and ethnic minorities, the socio-economically disadvantaged, and LGBTQ+ communities and otherwise marginalized groups.

It is a cruel parody of justice to presume that Saudi Arabia’s potential grant to the robot “Sophia” [64] a license to drive, is in some way prefigurative or promoting some later action to grant that kingdom’s women rights. Nor would “rights” for a cleaning robot in the U.S. do anything to help the hundreds of thousands of janitorial workers now suffering in exploitive working conditions. Indeed, some of them are probably already, unwittingly or in an uncompensated way, providing data to such robots. Giving a robot a “right to observe” the persons’ it is being programmed to replace is no blow for social justice; it is in fact its opposite, short-circuiting debates about data control that should be robust [59].

It is ironic that an intellectual school and movement so reliant on the rhetoric of emancipation, as the robot rights community is, would end up centering and elevating the power and privileges of capital and corporations. Yet this is not a surprising outcome. Multinational corporations (MNCs) have mastered the “code of capital” [63] to advance their interests in multiple venues. Investor-State Dispute Settlement (ISDS) provisions in Bilateral Investment Treaties (BITs), for example, can guarantee MNCs returns in ways that unravel much-needed environmental, occupational safety, and health regulation, all based on the MNC’s “right” to enjoy expected returns from their investment. The U.S. Citizens United v. FEC (2010) decision gave corporations near *carte blanche* opportunities to promote their views and preferred candidates in elections, spawn-

ing even more self-aggrandizing judicial interventions to freeze into place existing power inequalities [60]. Similarly, the rhetoric of “robot rights” is another means to skillfully advance capital’s interests. Indeed, since robots are often capital themselves, “robot rights” may all too often amount to the type of “capital rights” only dreamed of by ambitious libertarians.

## 2.2 Defining the Rights at Issue

There is a slipperiness in the robot rights discourse that should be clarified at the outset. For the purposes of this paper, a “right” is a legally enforceable power to do some action, or to prevent others from doing an action. We realize that there is a rich Hohfeldian literature on rights, powers, privileges, and immunities, and we could bring up short some advocates for robot rights by pointing out that what they are advocating would be better categorized as belonging to one of the other Hohfeldian categories. However, to avoid becoming embroiled in terminological disputes, we will proceed on the very broad popular understanding of “rights” that is characteristic of the mainstream of robot rights discourse.

At its most doctrinaire, robots rights discourse posits no essential difference between humans, desks, computers, rivers, robots, language models, etc. This position is, of course, contestable. But even if one entirely agrees with this metaphysical position, it has *no implications* whatsoever for what the law should do about robots. That should be a much more situated and empirically driven analysis—exactly the type of legislative and regulatory analysis that “rights claims” cut short. To give one example to foreshadow our later legal discussion: the European Commission might develop a comprehensive regulation of search results, but if the European Court of Justice followed U.S. courts on free expression law, it might declare the entire regulation invalid for violating Google’s, or the search engine’s, “free expression” rights. One should hope that merely “embodying” the search engine in a metal machine, with appendages and “eyes,” would not make the court’s putative reasoning in such a case more valid.

At the most extreme, a robot could be granted full human rights; more moderately, it could be granted some version of animal rights; and finally, it might be accorded the “rights” enjoyed by, say, a valued tree, an endangered species, or a wilderness area<sup>3</sup>. Of the three approaches, the “full human rights” option is the most troubling, and politically and socially menacing. The usual argument runs as follows: if sentient machines with capacities for sentience, pain, intentionality and so on can be created, then there is no reason not to grant such machines certain rights. As one of us has argued elsewhere [62], outside a behaviorist imaginary that reduces action to mere stimulus and response, there is no good reason to credit the supposed experience, qualia, or perception of a machine as equivalent to our own. Nevertheless, some advocates for robot rights appear committed to the idea that their own attachment to imagined machines

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<sup>3</sup>The analogy to nature is made in [31], drawing on critical environmentalist literatures.

requires the rest of the world to share their projection.

Others advocate for rights for robots in an attempt to reject human supremacy and biological essentialism. The main idea here is that there is nothing special about biological bodies and that oppression may be suffered by nonhumans including (and especially) machines. These arguments rest on a fundamental misunderstanding of human being that has come to conceive of humans in machinic terms (an argument we detail in section 3). Furthermore, as we (Birhane & van Dijk [11]) have argued elsewhere, these arguments constitute at best “a First World philosophical musings, too disengaged from actual affairs of humans in the real world. In the worst case, it may contain bad faith — the white, male academic’s diminutive characterization of actually oppressed people and their fight for rights, by appealing to ‘reason’.” One dispiriting example of a similar elision appeared recently in a discussion of anthropologists, published last year. The dialogue in question was:

Noboru Ishikawa: To me, plantations are just the slavery of plants.

Anna Tsing: I agree.

Donna Haraway: And microbes. Haraway et al., [36].

The comments were widely criticized [54], and for good reason: even if we highly value plants and the living world generally, it is deeply troubling to analogize their mistreatment with the horrors and world-historical crime of slavery. As sociologist JP Pardo-Guerra [58] put it, “In trying to flatten ontologies, forms of oppression and suffering that are central to the global, colonial plantation were completely decentered from whatever epochal discourse they were trying to explore.” Those who would, today, express condemnation or alarm at the “slavery” of robots commit a similar category mistake, simultaneously misappropriating and diluting the moral outrage that slavery of persons properly evokes.

In the following sections, we examine some of the main rationale behind the arguments put forward for granting rights to robots followed by our responses to each.

### **3 The machines like us argument: mistaking the map for the territory**

We are now finally in place to discuss the techno-optimistic fantasy that imagines sentient robots to exist in the future. Central to the “treat robots like persons” argument is the premise that if we can build a human-like machine in principle, there is no reason not to grant such a machine rights. These arguments often rest on hypothetical thought experiments consisting of futuristic imagination and misguided analogy. They envision a near (and/or far) future where machines might be sentient, feel pain, and have desires and wants—or at least simulate such conditions and interests. The argument then goes; if and/or when we get to that point, then it would be unethical not to grant rights like ours to these machines.



Such lines of arguments are advanced by philosophers, scientists and technologists alike. Richard Dawkins, for example, justifies the need to consider the moral status of artificial intelligence as: “[T]here is nothing in our brain [...] that could not in principle be reproduced in technology. [...] I see no reason why in the future we shouldn’t reach the point where a human-made robot is capable of consciousness and of feeling pain.” Dawkins [70] (starting from 0:24). There is also no reason in principle why the entire earth could not be reproduced using elements gathered from space; nevertheless, few if any serious thinkers advocate that we invest energy in doing so, given how distant the prospect of success is. The failures of the Human Brain Project should similarly caution against easy assumptions about future replication of humans in silico [77].

The Google engineer Ray Kurzweil poses a somewhat more formidable challenge than Dawkins. He focuses us less on alleged identities between putatively sentient robots and humans, than on our alleged obligations as members of a political community to respect the views of those who believe in robot rights. As he argues:

If an AI can convince us that it is at human levels in its responses, and if we are convinced that it is experiencing the subjective states that it claims, then we will accept that it is capable of experiencing suffering and joy. At that point AIs will demand rights, and because of our ability to empathize, we will be inclined to grant them. Kurzweil [47]

The very idea of the possibility of ‘sentient robots’ rests on completely misguided and simplistic notions of human consciousness, intelligence, cognition and behaviour. It rests on simplistic thinking that reduces sentience to a feature, a capacity of a system that would somehow appear when the system ticks all the criteria boxes. Not only does it betray the fact that there is no clear understanding or consensus of what consciousness is but it also moves the whole discussion into this abstract philosophical space where “speculating about what it really is” becomes the goal. Because at the practical everyday level of human interaction we know very well that a robot will never be sentient. And that humans are.

This reductionist thinking about intelligence, cognition, and emotions is not unique to the philosophers, scientists and technologists alike who want to grant rights to robots, but a stubborn persistent misconception that is also a core feature of traditional cognitive science. We can only presume to build machines *like us* once we see ourselves as *machines first*. The thinking follows, both humans and robots are physical systems, machines; one biological and the other made of metal and silicon but material nonetheless. It must be the particular configuration of matter in the biological system (the human) that gave rise to experience, emotion and so on. It follows then, if we can figure out this particular configuration, we should in principle be able to recreate it in machines.

Such reductionist traditional cognitive science rests on a deep misconception and a fallacy that mistakes the map for the territory. Throughout history we

have compared ourselves metaphorically with the most advanced technology of the time, and all too often distorted reality in the process, or promoted unintended and noxious ideological aims. The mid-17th century Danish anatomist Nicolas Steno saw the brain as a collection of cavities through which animal spirits flow. A century later when electricity was in vogue, the brain was seen like a galvanic battery. And by the mid-19th century, nerves were compared to telegraph wires [18]. After mid-20th century advances in computing, we have come to think of the brain as a computer, an information processing machine.

Metaphors are pervasive and we don't seem to do away with them generally. Metaphors illuminate understanding one kind of thing in terms of another [48]. But metaphors can also do more harm than good when we forget they are, in fact, *only* metaphors. Oftentimes, we do forget, sometimes intentionally when such ignorance serves to help advance our agenda. As Lewontin succinctly put it: “[W]e have become so used to the atomistic machine view of the world that originated with Descartes that we have forgotten that it is a metaphor. We no longer think, as Descartes did, that the world is *like* a clock. We think it *is* a clock.” Lewontin [51].

Mistaking the map for the territory is one of the persistent problems in AI. Limited understanding of the complex nature of intelligence as well as over-optimistic and overconfident predictions about AI, as old as the field itself, are undermined by various fallacies and are obstacles to actual progress in AI [55]. Among these fallacies are ‘intelligence is all in the brain’ (which we come back to below) and the fallacy of wishful mnemonics, as well as careless use of words towards AI and robots, including attribution of “learning,” “seeing,” “feeling,” and other qualities based on a misguided apophenia [55]. AI and robotics systems do not understand, intend, volve, empathise, feel, experience and so on, (as these are activities that require sense-making and precarious embodied existence), yet through the use of these heuristic modes of summarizing patterns of action, human-like qualities are attributed to machines. Although this fallacy is not unique to robot rights advocates, it is a particularly pervasive one.

To conceive of robots as ‘human-like machines’, implicitly means to first perceive human being in machinic terms: complicated biological information processing machines, “meat robots,” shaped by evolution. Once we see ourselves as machines, it becomes intuitive to see machines as ‘like us’. This circular metaphorical trick is key to reducing the complex, relational, intersubjective, embodied, non-determinable, non-totalizable, fluid, active and dynamic being into a set of features or a process that could be implemented by the physical brain.

We are sense-makers that relate to others and the world around us in terms of significance and meaning. “Sense making is always under way.” [24, p.219]. We continually relate to others, interpret their gestures and expressions, understand what has been unsaid (as well as what is said), as living being with ongoing interactions with others and the world around us. We face challenges, tensions, problems, and opportunities that constrain or enable our actions and behaviours. Outlining the precarious, socially embedded and situatedness of human being, Weizenbaum wrote “no other organism, and certainly no computer,

can be made to confront genuine human problems in human terms.” The idea of creating a human-like machine (even in principle) not only is a project that rests on misconception of what human being is but also a “fraud that plays on the trusting instincts of people.” [75, 62].

Critics might say that bodies are not unique to humans and shouldn't matter whether they are carbon or silicon based. However, this stems from the limited understanding that equates embodiment to being a physical object. Mere physical body does not denote embodiment. Living bodies are vastly different from machines. Through the process of self-individuation, living bodies continually create a distinction between themselves and their environment where none existed before they appeared and none will remain after they are gone. Living bodies are not static organisms that passively sit around waiting to be influenced by their environments like much of the cognitivist tradition envisages. Living bodies are fluid, networked and relational beings with values, shifting moods and sensitivities. “Living bodies have more in common with hurricanes than with statues.” [24]. Living bodies laugh, bite, eat, gesture, breathe, give birth and feel pain, anger, frustration and happiness. They are racialized, stylized, politicized and come with varying ableness, positionalities, privilege, and power.

A machine, on the other hand, is something that can be achieved once a given process is complete, that is, it is understood such that it can be implemented [8]. People, as complex adaptive systems, are open-ended, historical and embedded in dynamic and non-linear interactions. There is no perfect or accurate representation or model of cognition, intelligence or emotion as such a model would require capturing cognition, intelligence, or emotions in their entirety. The reason being that compressing a complex system into an algorithm or a model without reducing its complexity is impossible. This means the perfect model of a complex system would have to be as complex and unpredictable as the system itself. In other words, the best and simplest representation of a complex system is the system itself [17, 44]. Human cognition, intelligence, consciousness, etc then cannot be reduced and captured in an algorithm in their entirety. Even for fields such as Artificial life (which come from awareness of the complexities we raise here), concerned with generating artificial systems—via computer simulations, robotic agents, or biochemical processes—that behave like living organisms [49], non-determinability and unpredictability is singled out as the key characteristic of humans that differentiates them from artificial beings. “[T]hings appear as intrinsically meaningful for living beings because of their precarious existence as adaptive autopoietic individuals.” [28].

At this point it is *crucial* to emphasize that by differentiating humans from machines, we are not defining what a human is, which goes against the very argument that we have been making which is that human beings are open-ended, unfinalizable and non-totalizable and therefore not definable once and for all. Defining, on the contrary, suggests finalization, complete understanding, and closure which reduces what a human is to a list of characteristics. To the contrary. We are pointing out the pervasive misunderstanding that equates the map (machines) with the territory (human being) underlying robot rights advocacy.

## 4 Misappropriating Posthumanism

For some proponents of robot rights, posthumanism provides a philosophical perspective on how change is enacted in the world. As a conceptualization and historicization of both agency and the “human,” it is different from those conceived through individualistic humanism. Whereas individualistic humanist perspectives frequently assume humans to be the critical drivers of change and history, a posthumanist perspective assumes agency is distributed through dynamic processes of which the human participates but does not completely intend or control. Posthumanist philosophy constitutes the human as: (a) physically, chemically, and biologically enmeshed and dependent on the environment; (b) moved to action through interactions that generate affects, habits, and reason; and (c) possessing no attribute that is uniquely human but is instead made up of a larger evolving ecosystem. There is little consensus in posthumanist scholarship about the degree to which a conscious human subject can actively create change, but the human does participate in change.

Posthumanism includes a “de-centering” of the human from the center of moral concern, to be joined by plants, animals, machines, and other entities. Many posthumanists are devoted to calling out to the devastating effects of arrogant human centeredness to the ecology of our planet (Latour). Other forms of post-humanism seem to take that same arrogance to the next level, envisioning accelerationist, transhumanist, or anti-humanist drive to move beyond present humans. This divide between posthumanism-as-environmentalism, and posthumanism-as-human-obsolescence, is critical: whereas the latter does often lead to rights for presumed-to-be-superior-to-humans, far-future robots, the former, more plausible view provides no firm foundations for robot rights.

It is helpful to unpack this “posthumanism-as-human-obsolescence” perspective. Some accelerationists believe that it is not just human arrogance, but humans as such, that are in the way of saving the planet. On this view, humans, by their very nature, are simply too selfish, short-sighted, or fragile to address crises like climate change, or endure the rigors of, say, interplanetary travel. And so the future will result in artificial replacement of biological humans by something ‘better,’ beyond the merely human. This is one version of a broader movement of posthumanism-as-human-obsolescence; a sense that human beings simply are not that special or worthy of regard, whether due to moral infirmities, cognitive shortcomings, or fragility [46]. If the mind could be downloaded into a metal pellet, for example, and then run on robotics, that would be a much more resilient form of “embodiment” for these post-humanists. And if it could be done, perhaps such pellet-copies of persons would deserve some “rights” against destruction, as anticipated in the cyberpunk novel *Altered Carbon*, in a memory-based version of historical preservation law. In our view this is actually the arrogance of Baconian humanism taken to the next level (not to mention how the notions of memory, mind and embodiment rest on complete misunderstanding as explained in the previous section). The metaphor of the thinking machine is used in one big sweep to first take away attention from the actual cause of ecological crisis: human materialist-capitalist aggression and arrogance

embodied in Western science and technologies, and then doubling down on this very attitude to envision a futuristic technological Golem by which humans can resurrect themselves from the ashes of the humanist debris as a “post-human” superhuman. A superhuman which is, of course, only a metaphor for the *echt* version of the same human that was causing all the trouble in the first place [16, 66].

A viewpoint that seems more plausible, is a softer form of posthumanism-as-environmentalism<sup>4</sup>. On this view, moral, ethical, and political theory must move beyond considering the earth as a mere “standing reserve” [38] to fulfill human needs. When translated into rights discourse, this environmentalism would, for instance, balance the rights of hunters to food against the rights of animals to avoid being eaten; or the rights of off-road-vehicle users to motor through a national park against the rights of the rocks, soil, plants, and animals of the park to avoid being run over.

The problem comes when post-humanist promoters of robot rights rhetorically equate robots, animals, rivers and trees as “non-humans,” or argue that the proper unit of analysis is all of these entities at once. How, they ask, can one deny robot rights and not run into biological chauvinism, merely privileging carbon-based entities over silicon, plastic, and concrete? Why deny non-humans ‘like’ rivers, robots, trees and dogs, the rights we grant ourselves? However, this argument is flawed, on both ontological and ethical levels. It is based on a relativistic skepticism about the difference made by history and particular form of embodiment.

To begin with, post-human philosophy like that of Latour has a very sophisticated view on agency that does not entail robot rights. The arguments that most robot right defenders evoke are instead based on attributing to the machine rather “humanist” qualities (the seemingly rational actor with emotions, thoughts, a personal identity, that is, a person, a ‘someone’). Latourian agency, proposes a radical perspective of agency in which such qualities become problematic constructs to begin with. In such a networked perspective on agency, even the concrete speed-bump has agency: meaning: it is part of the networked cause of why a car driver slows down in the street. And the point Latour wishes to make is that this cause lies *not purely* in the free, rationally deciding

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<sup>4</sup>It should be noted that [31] has suggested a bridge between the posthumanism-as-human-obsolence and posthumanism-as-environmentalism positions, in the introduction of his *Rights for Robots*. After relating a number of ways in which robots and AI either are replacing or could replace humans, he observes that, “The two trends—the development of machines made to look and act increasingly like humans, and the movement to recognize the legal rights of nonhuman ‘natural’ entities—along with the two existential crises—the increasing presence of robots in work and social arenas, and the consequences of climate change and acknowledgment of humanity’s role in altering the ‘natural’ environment—lead us to revisit the question that is the focus of this book: under what conditions might robots be eligible for rights?” [31, p.4]. Gellers’ inclusion of scare quotes around “natural” appears to adumbrate a larger goal of his project: erosion of the categories of given and made, or natural and artificial, in order to promote the granting of the type of rights or respect offered to the former, to the latter. Unfortunately, that is a self-undermining aspect of his project; one cannot coherently use the potential or actual rights of nature as a rationale for robot rights, while simultaneously questioning the distinctiveness, utility, and validity of the category of nature.

mind internal to the human driver. The fact that human action is not fully attributable to some kind of inner, Cartesian mind, but is distributed over the situated materiality of a person's embodied being-in-the-world - is fully in line with the enactive perspective we are committed to. One may in fact proceed to discuss what would be the implication of a Latourian post-human philosophy for the notion of rights, for example in the legal domain (if I break the car on the speed-bump, who can I sue?). The first thing to note is that this discussion is not evident, or easy, and it is not 'just' a matter of putting liability on the speed bump itself. The fact that a speedbump has agency in the Latourian sense does not mean one can (or should be able to) sue it in court, and Latour would be the last to argue so. Even more absurd is the idea of "bump rights" to supersede or outweigh whatever human interests are affected by the bump <sup>5</sup>.

To be sure, there are some examples of particular inanimate features of the built environment, or human artifacts, having special status at law. Moral rights guaranteed to copyrighted work pursuant to the Berne Convention, for example, are often interpreted to prevent the destruction or desecration of recognized works of art [29]. Similarly, historical preservation laws may make it very difficult, or impossible, for a building owner to significantly alter aspects of the building's appearance. Nevertheless, neither of these protections are treated as rights of the building or art itself. Rather, the artist exercises her or his moral rights. And the community that interprets and enforces historical preservation laws is the actor in that situation, pursuing certain political and aesthetic goals rather than asserting rights.

But more importantly, to return to the misguided intersection of posthumanism and robot rights: one cannot on the one hand embrace post-human language about 'non-human' agency, and then at the same time bring in, via the backdoor, a quite anti-Latourian, Cartesian image of a human mind (a person with emotions, experiences, a lifeworld, a history, etc, in the everyday sense that we understand other humans), project that image onto a robot (as in typical science fiction and in many of the rhetorics of AI researchers is done), and then discuss that 'artificial person's' rights on the basis of sentiments that are at the core quite humanist.

Furthermore, one might embrace post-humanism head-on, still argue that animals, rivers and trees are not the same kinds of non-humans as robots are. We can go a long way with post-human thinking if it seems to be directed at repositioning humans in the greater context of planet earth, that is, recognizing our predicament as one of many lifeforms dependent on subtle equilibria in complex ecosystems [19]. From that humble perspective it may indeed be viable to create law that protects animals, rivers and trees against the oppressive

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<sup>5</sup>For example, the "talking door" scene of Philip K. Dick's [25] *Ubik* is a famously uncanny evocation of what it might mean to live as a human in a world populated with objects with a seeming will and agenda of their own. It is difficult to see such an imagined future as a blueprint for emancipatory forms of rights and recognition. The flip side of algorithmic agency in such a society of control is the AI Edgar Allen Poe in Richard Morgan's *Altered Carbon* (one more robot played by a human in the TV series). However, here again the idea of rights seems misconceived, as the helpful Poe is at bottom an information tool which can simulate (but not persuasively assert) human rights and interests.

tendencies of humans, because, in the end, even if only because our short-term egocentric tendencies may eventually kill the very ecosystem that sustains us. The robot, on the other hand, is the very anti-thesis of this movement, it is the paragon of human technological domination over the earth. As a technological artifact it is designed to recreate and automatize precisely the kind of Baconian thinking that sees humans as rational dominators of nature - exactly the type of reasoning that post-humanism tries to break away from. The robot is not 'another non-human' like animals, rivers and trees that we should protect: the robot is the thing we need to strictly limit, and often eliminate, in order for us to break free from traditional humanism and dominionism [76], in search of a humanism that can live with the wider world in harmony.

Subsequently, invoking post-humanism, specifically by robot rights promoters, smacks of rhetorical overreach. The kind of thinking that goes along with post-humanism may lead to subtle ideas about the agency of rivers or responsibility of (architects and builders of) speed-bumps, but this is a long shot from concluding that one should therefore attribute to robots the kinds of rights and agency that we have.

More concretely, robot rights proponents have yet to grapple with the enormous environmental damage caused by the AI and robotics they cherish. AI is not just algorithmic models and datasets but includes the wider social, political, cultural and environmental infrastructure. As Crawford [20] argues, from personal assistants such as Siri to the mobile devices and laptops to "self-driving" cars, AI cannot function without minerals, elements, and materials that are extracted from the earth. "AI system, from network routers to batteries to data centers, is built using elements that required billions of years to form inside the earth." [20, p.31]. Crawford lists 17 rare earth elements including lanthanum, cerium and praseodymium, which are making our smart devices smaller, lighter and improve performance. But extracting, processing, mixing, smelting, and transporting these elements and mineral comes at a huge environmental destruction, local and geopolitical violence, and human suffering. For example, half of the planet's total consumption of lithium-ion, a crucial element for Tesla Model S electric car battery, is consumed by Tesla <sup>6</sup>.

Thus it is jarring to see advocacy for robot rights presented as a natural outgrowth of environmentalist thought, when, "[i]f we visit the primary sites of mineral extraction for computational systems, we find the repressed stories of acid-bleached rivers and deracinated landscapes and the extinction of plant and animal species that were once vital to the local ecology" [20, p.36]. The creation of AI then can be felt in the "atmosphere, the oceans, the earth's crust, the deep time of the planet." [20, p.36]. Although much of the energy consumption by AI models is a closely guarded secret, Lotfi Belkhir and Ahmed Elmeligi [5] estimate the tech sector will contribute 14 percent of global greenhouse emissions by 2040 (see also, [13, 26]). The "thought" of AI is incredibly resource inten-

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<sup>6</sup>"[O]nly 0.2 percent of the mined clay contains the valuable rare earth elements. This means that 99.8 percent of earth removed in rare earth mining is discarded as waste, called 'tailings,' that are dumped back into the hills and streams, creating new pollutants like ammonium" [20, p.37]

sive: “Training a single BERT base model (without hyperparameter tuning) on GPUs was estimated to require as much energy as a trans-American flight” [6]. Given the increasingly material and environmental cost affecting the climate and ecosystem, we argue putting AI in the same category as the environment under the banner of ‘non-human’ entities, is a grave category error, akin to putting Donald Trump in the category of civil libertarian freedom fighter because both fought “censorship.”

## 5 The legal perspective

Many legal scholars have developed creative arguments for recognizing certain rights of robots themselves, or of the persons and corporations who manufacture, own, and control them. At least three broad categories of rights are at issue. First is a right of physical integrity—the sense that a robot, like a recognized work of art protected by the “moral rights” (a copyright law term of art) recognized under the Berne Convention, should be preserved from destruction, or even from damage. This “freedom from” damage, rather than “freedom to” act, is the easiest to defend, but is still unconvincing when framed as the right of the robot, rather than the property right of its owner or controller. More problematic are alleged rights of robots to speak, marry, own property, vote, or contest discrimination. This section reviews both the alleged positive and negative rights of robots, focusing on specifically legal arguments.

Legal scholars Michael Fromkin and Zak Colangelo [30] cleverly derive a reasonable expectation of robot owners that their machines are to be left unmolested, by considering the proper scope and limits of self-defense against robots that could either harm or spy on humans. Responding to reports of a property owner who shot down a drone overflying his property, as well as many other incidents and possibilities, they conclude that “the best way to create a balance—to ensure that drones are not unduly attacked and that people are only duly worried about what drones are doing—is to standardize how drones—and other robots as well—declare their capabilities and intentions, thus changing what fears are legally and morally reasonable.” Colangelo and Fromkin focus on the property rights of the robot’s owner, for, as they note, “in law, at present, a robot has the same rights as a sock.” The owner has no right to expect others to freely permit a robot to invade their property and personal space. However, it is not hard to extrapolate from Fromkin and Colangelo’s proposal a reciprocal duty to respect others’ property that should bind those who encounter robots that have credibly given notice that they are not threatening. Mark Lemley and Bryan Casey [50] take a similarly measured approach, suggesting that owners of robots have a basic due process right to be properly compensated before government damages or destroys them.

The second strand of robot and AI rights arguments in law, focusing on speech, tend to be more expansive than the literature on a presumption of continued existence absent some good reason for dismantling. Toni Massaro and Helen Norton [53] have advanced one of the most legally sophisticated



cases for this position. In the article “Siri-ously?,” they advance an audience-focused theory of freedom of expression. Rather than focusing on the autonomy or flourishing of speakers, such a theory instead concentrates on the rights of listeners. From this perspective, the key actors in public discourse are those that “produce information useful to natural persons who seek to participate in public discourse. That a computer, not a human, produces the useful information should not matter.” (Massaro & Norton [53, p.1169]. Nevertheless, they are still focused on the human in their argument. As they conclude, “because a primary basis for protecting speech rests on the value of expression specifically to human listeners, free speech protection for strong AIs that attends to the value (and dangers) of such speech to such listeners does not rob the First Amendment of a human focus.” [53, p.1192]. In other words: just as the First Amendment might invalidate laws banning pens, because of the expression they enable, so too might it invalidate a ban on sound-emitting robots. But to call this invalidation a recognition of the right of the robot would be as implausible as identifying “pen rights” in the case of an invalidated pen ban. The robot is a tool, not an independent rights-bearing entity.

Nevertheless, in a Google-sponsored white paper, Eugene Volokh and Donald M. Falk [73] make an even more expansive argument in the course of arguing for free expression rights for firms that own and operate search engines. They tend to focus on speech in the abstract as the object to be respected and maximized, rather than any particular entity’s rights:

First, Internet speech is fully constitutionally protected. Second, choices about how to select and arrange the material in one’s speech product are likewise fully protected. Third, this full protection remains when the choices are implemented with the help of computerized algorithms. Fourth, facts and opinions embodied in search results are fully protected whether they are on nonpolitical subjects or political ones. Fifth, interactive media are fully protected. Sixth, the aggregation of links to material authored by others is fully protected. Seventh, none of this constitutional protection is lost on the theory that search engine output is somehow “functional” and thus not sufficiently expressive. And, eighth, Google has never waived its rights to choose how to select and arrange its material. Volokh and Falk [73, p.7]

Given its immediacy, the right to “speak” was one of the earliest claims for rights made on behalf of those operating or creating AIs, robots, and automated entities [7]. Google was one of the first companies to assert that search results (almost entirely algorithmically generated) should be protected by First Amendment law [12]. Lower courts have recognized that right, and many cyberlibertarians would hail such results as a triumph—prohibiting, for example, an authoritarian administration from forcing the firm to disappear results leading to its critics. However, as a practical matter, the seminal case(s) where Google asserted this right involved business torts, where a company asserted

that it had been ranked unfairly. Had it been adopted in Europe, such a logic easily could have scuttled the European Commission’s successful antitrust case against Google, since the remedies in the case require the company to present information in ways it does not wish to communicate.

In any case, whatever one’s views on the propriety of corporate speech protections, the bottom line here is that it is difficult to frame a coherent case for any robot or AI itself to have rights. The rights claims arise in a social context. To the extent any of them are or will be vindicated, the proper beneficiaries of the rights are the persons or corporations targeted by the censorship, not the search engine.

## 6 The Troubling Implications of Legal Rationales for Robot and AI Rights

Legal discourse about rights is distinctive from ethical, metaphysical, and philosophical discourse about rights, though it also informs (and is informed by) ethics and philosophy. For a pragmatic attorney, rights talk *must* “cash out” in some actionable claim in courts of law, or before administrative tribunals. Envisioning how such rights claims would actually redistribute resources and respect in society quickly demonstrates some disturbing implications of even the most anodyne advocacy for robot rights.

For example, several advocates for robot rights claim that they are expanding the circle of human concern, from persons, to features of the natural environment, to features of the built environment. However, even the prospect of heightened concern for (let alone rights for) a robotic police force is extremely disturbing to many advocates for minoritized communities. Consider, for instance, U.S. Congressman Jamaal Bowman’s response to a police robot recently inflicted upon New Yorkers by a police department that has been widely condemned as having engaged in racist practices [37].

We scream defund the police so we can allocate those resources towards something that focuses on true public health and public safety. Protesting all summer, for Black lives, we were under assault. People living in poverty, struggling, struggling to put food on the table, keep a roof over their head, take care of their kids, afford child care. All this going on. And now we got damn robot police dogs walking down the street. What the hell do we need robot police dogs? This is some RoboCop shit, this is crazy. (Bowman in [56])

Now imagine one of the advocates for, say, a robotic right not to be “harmed”, destroyed, or turned off, trying to reason with Bowman. “Don’t you see, if we just respect this robotic police dog, we’ll eventually grow in moral concern for all?” Or, worse: “Do not feel you have any entitlement to break a leg off the policing robot if it subdues you, even if you are innocent. That would be akin to animal abuse.” These types of responses would be condescending at best, and

cruelly indifferent to the real social setting of robot rights assertions at worst. Yet they are the potential implications of many of the ethical and philosophical commitments to robot rights explored in the sections above.

More troubling outcomes are likely if advocates for humanoid robots claim human rights for them or program them to imitate a desire for such rights. Consider, for instance, the right to communicate online. Lawyer John Frank Weaver [74] has argued that “all the constitutional speech protections that humans enjoy in the United States” should “apply to A.I., robots, and Twitterbots, whether they are Russian intruders or Microsoft mistakes.” The proliferation of bots has already overwhelmed and drowned out actual human speech in several contexts, spamming hashtags and otherwise impeding communication and collective will formation. The larger purposes of free expression are to enable human autonomy, and to allow humans to democratically self-govern. These purposes are not served by expansions of free expression rights to bots (often built by already-powerful entities) that would permit them to dominate communicative spheres.

Matters deteriorate even further if we consider possible applications of free expression rights for, say, insect-sized drones that can project images, films, or speeches to individuals. The right of humans to peaceful enjoyment of public spaces may be gone forever, as persons struggle to fight off a near-constant “communication” of advertisements and other messages. Nor should advocates of robot rights forget the rather robust rights to record that many humans have been granted by courts (*Glik v. Cunliffe*, 2002). These rights have been granted in the context of human limitations—the common sense presupposition that few, if any, persons will be creepy and persistent enough to stalk others with a cell phone camera. Attach the same camera to a drone, however, and all bets are off. Privacy may be a thing of the past [57].

In the abstract, the contemplation of robot rights seems extraordinarily cosmopolitan and open-minded—part of a progress of history toward including more entities as entitled to moral concern. However, as with debates over the expansion of social rights, there must be an acknowledgment of the costs of such rights, including the responsibilities they may impose on natural persons while absolving powerful bodies behind tech of responsibility and accountability.

Whatever the science fictional appeal of speaking robots, no one should romanticize manipulative bot-speech. The logical endpoint of *laissez-faire* in an automated public sphere [61] is a continual battle for mindshare by various robot armies, with the likely winner being the firms with the most funds. They will micro-target populations with “whatever works” to mobilize them (be it truths, half-truths, or manipulative lies), fragmenting the public sphere into millions of personalized, private ones. It does not represent a triumph of classic values of free expression (autonomy and democratic self-rule); indeed, it portends their evaporation into the manufactured consent of a phantom public [39, 52]. Undisclosed bots counterfeit the basic reputational currency that people earn by virtue of their embodiment [62].

Gunkel [33] has tried to refocus the robot rights debate from whether machines can acquire human-like capabilities, to a concern about how “anthro-

pocentric criteria” may “not only marginalize[] machines but [have] often been mobilized to exclude others—including women, people of color, and animals.” [33]. The question, though, is whether to abandon the human as a locus of special concern, or to recognize that past exclusions of persons were grave injustices that should not be trivialized by comparing them with the putative exclusion of robots from the relevant circle of concern and respect.

To put this more concretely, consider worldwide conflicts over same-sex marriage rights. Promoters of robot rights may argue that just as a person’s ability to marry the person’s longtime partner, regardless of gender, is an emancipatory project, so too is the ability of a person to marry a robot. But these are not similar ambitions, and to compare the one with the other is to trivialize the larger project of equality for sexual orientation and gender identity minorities. Indeed, the religious right has in the past used exactly the type of flattening or relativistic rhetoric characteristic of robot rightists to dismiss the cause of gay marriage, likening it to a person trying to marry their dog or “box turtle,”<sup>7</sup> in the strange formulation of one US Senator’s office. This is not to say that dogs or box turtles do not deserve fair consideration and even devotion—indeed, that is far more compellingly the case than imaginable for any machine, given our shared biological substrate and the resulting fragility and vulnerability we as persons share with animals. As Hartmut Rosa argues, nature (along with art and history) is a particularly important source of resonance and meaning for persons. It is insulting and degrading to persons engaging in social justice struggles for proper care and concern for the environment, to equate putative “robot” assertions of rights, with their far more worthy and better philosophically grounded efforts.

What about a right not to be harmed? MIT robot ethicist Kate Darling has proposed that “treating robots more like animals could help discourage human behavior that would be harmful in other contexts” [22]. For example, kicking a robotic turtle may be an early sign of sociopathy. Rules against it would perhaps lead to more pro-social behavior. However, complicating the hierarchy of machine, animal, and human could also lead to some inhumane outcomes. The Society for the Prevention of Cruelty to Animals (SPCA) purchased a K5 Knightscope robot to patrol its grounds, in part to keep homeless persons away. Rebellious would-be campers retaliated by tying a tarp around the robot, covering its sensors with barbecue sauce, and knocking it over. An SPCA spokeswoman lamented how much her employer, a non-profit, had to spend on security. That lament was greeted with a tide of derision online. The SPCA had apparently failed to consider whether a relentless robotic gaze on its grounds might be cruel to persons.

But what if the robot were deemed to deserve something like animal rights, or even animal welfare protections? The rebellious campers might be charged with animal cruelty and face jail time. However, the types of rights and interests protected by laws against animal cruelty do not really exist in this situation: the

<sup>7</sup><https://dallasvoice.com/cornyns-staff-is-still-trying-to-set-the-record-straight-about-his-2004-box-turtle-reference/>

robot cannot feel, and has no phenomenological engagement with the world remotely similar to that of humans and those animals protected by animal welfare laws. That is one reason why humans are permitted to walk freely on the sidewalk, whereas the same right should not be given to robots (which are better classified once again as our tools, not our partners: as vehicles and properties in need of a license). The San Francisco Department of Public Works has warned that unauthorized operation of a robot on sidewalks risks a daily fine [21], and it is correct to do so: humans can feel real pain if run over by a robot, but the same stakes are not there for robots themselves (which cannot feel anything, and cannot be harmed by being turned off or reduced to scrap metal). All these practical problems are yet more vindications of Lawrence Solum [67]’s prescient cautions in 1992. It would be deeply unwise to confer legal personhood on robotics and AI. As over 280 European experts have concluded, ”creating a legal status of electronic ’person’ would be ideological and non-sensical and non-pragmatic.”

## 7 Conclusion: The Enduring Irresponsibility of AI Rights Talk

The rhetoric that treats machines as entities that can be othered, oppressed, harmed, or discriminated against often fails to comprehend (or is willingly ignorant of) the fact that machines are first and foremost tools used by powerful entities (government bodies and big tech alike) to harm, surveil, oppress and discriminate against society’s most vulnerable.

To answer the question posed at the beginning of this article—is it time to stop asking what machines can do for us, and to ask instead what we can do for machines—the answer is no. Indeed, the question only makes sense from a position of privilege, where one is not daily experiencing, say, the surveillance of a drone, the harassment of a security guard robot, the overwhelming military superiority of a hegemonic power, spamming by bots, and any number of other actual and potential infringements of human liberty and welfare by machines.

Despite so much injustice and harm mediated by robotic systems, we can still imagine and envision a future that is kinder, more humane, and more just, and robotic technologies can certainly play a role in such future. Nonetheless, rights for robots, or even the idea of rights talk, is not the way to it; it is the opposite. While robot right defenders try to argue that rights for robots helps marginalized groups, helps save the planet, and would on the whole be ethically just (assuming a future sentient robot), we have argued that the opposite is true: robot rights represent corporate power at the cost of the marginalized, and the idea of granting rights to a future sentient robot legitimizes a kind of techno-optimist thinking which, much like the current fad of commercial space travel, actually undermines rather than promotes sustainability. Instead, if a just future and relationship with our technologies is the goal, what we need is the necessary legislation for accountability for the technological spheres now

dominated by powerful corporations. The historical and current crises of racial subordination, economic inequality, and climate change should be the impetus for such legislation. Machines must be developed to address these crises, rather than treated as having any type of ethical or legal status themselves.

## References

- [1] AJUNWA, I., CRAWFORD, K., AND SCHULTZ, J. Limitless worker surveillance. *Calif. L. Rev.* 105 (2017), 735.
- [2] ARNETT, C. Race, surveillance, resistance. *Ohio St. LJ* 81 (2020), 1103.
- [3] BAINBRIDGE, L. Ironies of automation. In *Analysis, design and evaluation of man-machine systems*. Elsevier, 1983, pp. 129–135.
- [4] BAXTER, G., ROOKSBY, J., WANG, Y., AND KHAJEH-HOSSEINI, A. The ironies of automation: still going strong at 30? In *Proceedings of the 30th European conference on Cognitive Ergonomics* (2012), pp. 65–71.
- [5] BELKHIR, L., AND ELMELIGI, A. Assessing ict global emissions footprint: Trends to 2040 & recommendations. *Journal of cleaner production* 177 (2018), 448–463.
- [6] BENDER, E. M., GEBRU, T., MCMILLAN-MAJOR, A., AND SHMITCHELL, S. On the dangers of stochastic parrots: Can language models be too big? In *Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency* (2021), pp. 610–623.
- [7] BENJAMIN, S. M. Algorithms and speech (2013). *University of Pennsylvania Law Review* 161 (2013), 1445.
- [8] BIRHANE, A. The impossibility of automating ambiguity. *Artificial Life* 27, 1 (2021), 44–61.
- [9] BIRHANE, A., KALLURI, P., CARD, D., AGNEW, W., DOTAN, R., AND BAO, M. The values encoded in machine learning research. *arXiv preprint arXiv:2106.15590* (2021).
- [10] BIRHANE, A., AND PRABHU, V. U. Large image datasets: A pyrrhic win for computer vision? In *2021 IEEE Winter Conference on Applications of Computer Vision (WACV)* (2021), IEEE, pp. 1536–1546.
- [11] BIRHANE, A., AND VAN DIJK, J. Robot rights? let’s talk about human welfare instead. In *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society* (2020), pp. 207–213.
- [12] BRACHA, O., AND PASQUALE, F. Federal search commission-access, fairness, and accountability in the law of search. *Cornell L. Rev.* 93 (2008), 1149.

- [13] BREVINI, B. *Is AI Good for the Planet?* Polity, 2021.
- [14] CALO, M. R. Robots and privacy,(2011) in robot ethics: The ethical and social implications of robotics, lin, p., bekey, g. and abney, k. eds, 2020.
- [15] CALO, R., FROMKIN, A. M., AND KERR, I. *Robot law*. Edward Elgar Publishing, 2016.
- [16] CHIANG, T. Silicon valley is turning into its own worst fear. *BuzzFeed News* (2017).
- [17] CILLIERS, P. *Complexity and postmodernism: Understanding complex systems*. Routledge, 2002.
- [18] COBB, M. *The idea of the brain: The past and future of neuroscience*. Hachette UK, 2020.
- [19] CONNOLLY, W. E. *The fragility of things*. Duke University Press, 2013.
- [20] CRAWFORD, K. *The Atlas of AI*. Yale University Press, 2021.
- [21] CUTHBERTSON, A. Robot wages war on the homeless, the homeless fight back. <https://www.newsweek.com/robots-wage-war-homeless-homeless-fight-back-746762>, 2017. Last accessed on August 5, 2021.
- [22] DARLING, K. Extending legal protection to social robots: The effects of anthropomorphism, empathy, and violent behavior towards robotic objects. In *Robot law*. Edward Elgar Publishing, 2016.
- [23] DASTON, L. Calculation and the division of labor, 1750-1950. *Bulletin of the German Historical Institute* 62, Spring (2017), 9-30.
- [24] DI PAOLO, E. A., CUFFARI, E. C., AND DE JAEGHER, H. *Linguistic bodies: The continuity between life and language*. MIT press, 2018.
- [25] DICK, P. K. *Ubik*, vol. 26. Hachette UK, 2010.
- [26] DOBBE, R., AND WHITTAKER, M. Ai and climate change: How they're connected, and what we can do about it. *AI Now Institute, Medium, October 17* (2019).
- [27] DWORKIN, R. Rights as trumps, theories of rights, edited by Jeremy Waldron, 1984.
- [28] FROESE, T., AND TAGUCHI, S. The problem of meaning in ai and robotics: still with us after all these years. *Philosophies* 4, 2 (2019), 14.
- [29] FROMER, J., AND SPRIGMAN, C. *Copyright Law: Cases and Materials*. Jeanne C. Fromer & Christopher Jon Sprigman, 2019.

- [30] FROOMKIN, A. M., AND COLANGELO, P. Z. Self-defense against robots and drones. *Conn. L. Rev.* 48 (2015), 1.
- [31] GELLERS, J. C. *Rights for Robots: Artificial Intelligence, Animal and Environmental Law (Edition 1)*. Routledge, 2021.
- [32] GRAY, M. L., AND SURI, S. *Ghost work: How to stop Silicon Valley from building a new global underclass*. Eamon Dolan Books, 2019.
- [33] GUNKEL, D. Can machines have rights? [http://gunkelweb.com/lectures/Gunkel\\_ASU\\_transcript2013.pdf](http://gunkelweb.com/lectures/Gunkel_ASU_transcript2013.pdf), 2013. Last accessed on August 5, 2021.
- [34] GUNKEL, D. J. The other question: can and should robots have rights? *Ethics and Information Technology* 20, 2 (2018), 87–99.
- [35] HANCKE, T. Ironies of automation 4.0. *IFAC-PapersOnLine* 53, 2 (2020), 17463–17468.
- [36] HARAWAY, D., ISHIKAWA, N., GILBERT, S. F., OLWIG, K., TSING, A. L., AND BUBANDT, N. Anthropologists are talking about the anthropocene. *Ethnos* 81, 3 (2016), 535–564.
- [37] HARCOURT, B. E. *The counterrevolution: how our government went to war against its own citizens*. Basic Books, 2018.
- [38] HEIDEGGER, M. The question concerning technology. *Technology and values: Essential readings* 99 (1954), 113.
- [39] HERMAN, E. S., AND CHOMSKY, N. *Manufacturing consent: The political economy of the mass media*. Random House, 2010.
- [40] HOWARD, P. N. *Lie machines*. Yale University Press, 2020.
- [41] INAYATULLAH, S. The rights of robot: inclusion, courts and unexpected futures. *Journal of Future Studies* 6, 2 (2001), 93–102.
- [42] IRANI, L. The cultural work of microwork. *New Media & Society* 17, 5 (2015), 720–739.
- [43] JONES-IMHOTEP, E. The ghost factories: histories of automata and artificial life. *History and Technology* 36, 1 (2020), 3–29.
- [44] JUARRERO, A. Dynamics in action: Intentional behavior as a complex system. *Emergence* 2, 2 (2000), 24–57.
- [45] KALLURI, P. Don't ask if artificial intelligence is good or fair, ask how it shifts power. *Nature* 583, 7815 (2020), 169–169.
- [46] KURZWEIL, R. *The age of spiritual machines: When computers exceed human intelligence*. Penguin, 2000.



- [47] KURZWEIL, R. Robots will demand rights—and we’ll grant them, 2015.
- [48] LAKOFF, G., AND JOHNSON, M. *Metaphors we live by*. University of Chicago press, 2008.
- [49] LANGTON, C. G. *Artificial life: An overview*. Mit Press, 1997.
- [50] LEMLEY, M. A., AND CASEY, B. Remedies for robots. *The University of Chicago Law Review* 86, 5 (2019), 1311–1396.
- [51] LEWONTIN, R. *Biology as ideology: The doctrine of DNA*. House of Anansi, 1996.
- [52] LIPPMANN, W. *The phantom public*. Transaction Publishers, 1925.
- [53] MASSARO, T. M., AND NORTON, H. Siri-ously? free speech rights and artificial intelligence. *Nw. UL Rev.* 110 (2016), 1169.
- [54] MCKITTRICK, K. Plantations are just the slavery of plants analogy. <https://twitter.com/demonicground/status/1370462540036198402>, March 2021. Last accessed on August 5, 2021.
- [55] MITCHELL, M. *Artificial intelligence: A guide for thinking humans*. Penguin UK, 2019.
- [56] NEWSWEEK. Jamaal bowman rips nypd for spending money on robot police dog. <https://slate.com/technology/2018/01/robots-deserve-a-first-amendment-right-to-free-speech.html>, 2021. Last accessed on August 5, 2021.
- [57] NOURBAKSH, I. R. *Robot futures*. Mit Press, 2013.
- [58] PARDO-GUERRA, J. P. Plantations are just the slavery of plants. <https://twitter.com/pardoguerra/status/1370776413696008195>, March 2021. Last accessed on August 5, 2021.
- [59] PASQUALE, F. To replace or respect: Futurology as if people mattered. *Boundary 2—an International Journal of Literature and Culture* (2014).
- [60] PASQUALE, F. First amendment freeze play: Bennett’s strategy for entrenching inequality. *U. Pa. L. Rev. Online* 164 (2016), 215.
- [61] PASQUALE, F. The automated public sphere. In *The Politics of Big Data*. Routledge, 2017, pp. 110–128.
- [62] PASQUALE, F. *New Laws of Robotics*. Harvard University Press, 2020.
- [63] PISTOR, K. *The code of capital*. Princeton University Press, 2019.
- [64] REYNOLDS, E. The agony of sophia, the world’s first robot citizen condemned to a lifeless career in marketing. *Retrieved* 6, 27 (2018), 2019.

- [65] SADOWSKI, J. Potemkin ai. *Real Life* 6 (2018).
- [66] SHIVANI, A. Oculus grift: Capital as the cutting-edge ai app. *The Baffler*, 37 (2017), 168–179.
- [67] SOLUM, L. B. Legal personhood for artificial intelligences. *NCL Rev.* 70 (1992), 1231.
- [68] SOUTHERLAND, V. The intersection of race and algorithmic tools in the criminal legal system. *Maryland Law Review, Forthcoming* (2020).
- [69] TAYLOR, A. The automation charade. *Logic Magazine* 5, 1 (2018).
- [70] THINK, B. Does conscious ai deserve rights? [https://www.youtube.com/watch?v=ETVr\\_1pIM00](https://www.youtube.com/watch?v=ETVr_1pIM00), July 2020. Last accessed on August 5, 2021.
- [71] TUBARO, P., AND CASILLI, A. A. Micro-work, artificial intelligence and the automotive industry. *Journal of Industrial and Business Economics* 46, 3 (2019), 333–345.
- [72] VÉLIZ, C. *Privacy is power*. Random House Australia, 2020.
- [73] VOLOKH, E., AND FALK, D. M. Google: First amendment protection for search engine search results. *JL Econ. & Pol’y* 8 (2011), 883.
- [74] WEAVER, J. F. Why robots deserve free speech rights. <https://www.newsweek.com/jamaal-bowman-rips-nypd-spending-money-robot-police-dog-some-robocop-s-1584259>, 2018. Last accessed on August 5, 2021.
- [75] WEIZENBAUM, J. *Computer power and human reason: From judgment to calculation*. WH Freeman & Co, 1976.
- [76] WHITE, L. The historical roots of our ecological crisis. *Science* (1967), 1203–1207.
- [77] YONG, E. The human brain project hasn’t lived up to its promise. *the atlantic*, 2019.