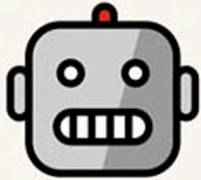




PERSON

THING



ROBOT

A MORAL AND LEGAL  
ONTOLOGY FOR THE  
21ST CENTURY AND BEYOND

DAVID J. GUNKEL



# Person, Thing, Robot



# **Person, Thing, Robot**

**A Moral and Legal Ontology for the 21st Century and Beyond**

**David J. Gunkel**

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## Preface

Robots are a curious sort of thing. On the one hand, they are designed and manufactured technological artifacts. They are things. And like any of the other things that we encounter and use each and every day, they are objects with instrumental value. Yet on the other hand, these things are not quite like other things. They seem to have social presence, they are able to talk and interact with us, and many are designed to mimic or simulate the capabilities and behaviors that are commonly associated with human or animal intelligence. Robots therefore invite and encourage zoomorphism, anthropomorphism, and even personification.

So are robots things, technological objects that we can use or even abuse as we decide and see fit? Or is it the case that robots can or even should be something like a person—that is, another subject who would need to be recognized as a kind of socially significant other with some claim on us? These questions, which have been a staple in science fiction since the moment the robot stepped foot on the stage of history—quite literally in this case as the word *robot* was initially the product of a 1920 stage play by Czech playwright Karel Čapek—are no longer a matter of fictional speculation. They are science fact and represent a very real legal and philosophical dilemma.

Resolving this seems pretty simple. All that is needed is to assemble the facts and evidence, develop a convincing case, and then decide whether to categorize robots as one or the other. This is not just good reasoning: it's the law. In fact, the binary distinction separating who is a person from what is a thing has been the ruling conceptual opposition in both moral philosophy and jurisprudence for close to two thousand years. When the Roman jurist Gaius (130–180 CE), in a treatise he titled *Institutes*, explained that

law involved two kinds of entities, either persons or things, he instituted a fundamental ontological division that has been definitive of Western (but not just Western) moral and legal systems. In the face of another—another human being, a nonhuman animal, a tree, an extraterrestrial, a robot, and so on—the first and perhaps most important question that must be addressed and resolved is “What is it?” Is it another *subject* similar to myself, to whom I would be obligated? Or is it just an *object* that can be taken up, possessed, and used without any further consideration or concern?

Consequently, all that is needed is to decide whether robots are things or persons. It sounds easy enough. But as detailed in the course of this book, it is much easier said than done. In fact, the robot does not quite fit in or easily accommodate itself to either category. Being neither an objectivized instrument that is a means to an end nor another kind of socially significant subject, the robot resists and confounds efforts at both reification and personification. It therefore frustrates and complicates the prevailing order—the mutually exclusive either/or—that has helped us make sense of ourselves and others by distinguishing who is to be recognized as a moral and legal subject from what remains a mere object or thing.

But this is not just about robots. It is ultimately about us. It is about the moral and legal institutions that human beings have fabricated to make sense of all that is. It therefore is about and concerns the fate of a myriad of *others* who we live alongside and that dwell with us on this exceptional and fragile planet. What is seen reflected in the face or faceplate of the robot is the fact that the existing moral and legal ontology is already broken or at least straining against its own limitations. And what is needed in response to this dysfunction is not some forceful reassertion of more of the same but a significantly reformulated moral and legal ontology that can scale to the challenges of the twenty-first century and beyond. Confronting and responding to this will undoubtedly be as terrifying and exhilarating as any of the robot uprisings that have been imagined in science fiction, because getting it right will require nothing less than a thorough rethinking of everything that we (and who is interpellated by or implicated in this first-person-plural pronoun will itself be an important component of what needs to be investigated) thought was right, natural, and beyond question.

What follows does not make any pretensions to providing a ready-made alternative. The existing ontology—the dichotomous model that divides persons from things—took hundreds if not thousands of years to be fully

developed, codified, and instituted. It therefore seems reasonable to assume that a new moral and legal ontology—especially one that can respond to and take responsibility for the diversity of beings—will require the same kind of time, effort, and attention. For that reason, the objective of this book is more modest than what one might gather (or even expect) from a cursory reading of its title. Instead of delivering a brand-new, ready to use out of the box moral and legal ontology, it seeks to set the stage for that work, providing a structure and framework for what will be, and what needs to be, a deeply collaborative effort that invites and draws on the wide range and diversity of human knowledge, experience, and reflection. This book, then, is more of an invitation to work together in shaping a shared vision for the future than it is a determination and prescription for that future. It is the point of departure for what will need to be a shared journey and is not (not yet, at least) the destination.

In terms of my previous efforts, this book occupies the third position in what will now be the Machine Question trilogy. The first book in the series, *The Machine Question: Critical Perspectives on AI, Robots, and Ethics* (2012), sought to extend previous innovations in moral circle expansion by examining the terms and conditions by which machines of our own making would or could come to be considered moral agents and patients. The second, *Robot Rights* (2018), continued the analysis by examining whether and to what extent these artifacts either can or should have claims to moral status and legal recognition. And this third piece to the puzzle, *Person, Thing, Robot*, investigates how and why these artifacts already do not quite fit within the established order of things, challenging us to rethink and revise the existing moral and legal ontology.

Taken together, what these three books demonstrate is that robots, AI, and other seemingly social and intelligent artifacts are not just one more technological challenge to which we need to apply existing moral and legal thinking. They are and they do much more than that. They provide the opportunity for and provoke the need to reassess and reevaluate all aspects of what comprises and justifies these moral and legal affordances, questioning what is often taken for granted and thereby goes by without notice. This is the unique impact and significance of the machine question. It is a question not just of ethics applied to the exceptional opportunities and challenges of emerging technology. It is a question that concerns the very foundation and integrity of ethics itself.



## Acknowledgments

The researching, writing, and publishing of a book is a communal activity. And, as has been the case with all of my previous literary efforts, this one has also benefited from productive interactions and dialogue with many coconspirators, colleagues, and critics.

The basic idea for the project initially came together in the wake of a debate that was organized and hosted by the Saint Thomas Aquinas Catholic Center of the University of Colorado, Boulder, in February 2020 (just as the COVID-19 pandemic was beginning to gain traction). The title for the event was “What is Personhood in the Age of AI?,” and it pitted me against theologian Jordan Wales. That exchange and the transcript of our prepared remarks, which was eventually published in *AI & Society*, planted the seed for what has now grown and developed into this text. My gratitude to the Aquinas Center, for organizing the debate and graciously hosting the event; Jordan Wales, for his remarkable insights and engaging inquiries; the audience in Boulder, who had all kinds of interesting comments and important questions that they shared with us; and John-Stewart Gordon, who encouraged and helped facilitate publication.

The book began coming together in the fall of 2021 with the encouragement and support of my editor at the MIT Press, Philip Laughlin. Philip has now edited five of my books, and I am so very grateful to have had the fortune to work with him and the MIT Press. He not only provided crucial advice about the project and its approach, as he always does, but also sought out four incredibly insightful and useful reviewers. The reviewers were positive but devastatingly honest, and the text has truly benefited from their remarkable insights and critical feedback. I do not know who they are, but I am so very grateful for the work they did to help me think through some of the more difficult aspects of the material.

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The revised manuscript, which was completed in April 2022, was graciously read by three friends and colleagues: Mark Coeckelbergh, Joshua Gellers, and Joshua Smith. I am as grateful for their enduring generosity and support as I am for the critical feedback and challenging questions that they always provide. I have learned so much from them, their own work, and the conversations we have had over these past several years. Editing of the manuscript was overseen by Kathleen A. Caruso and copyediting was provided by Melinda J. Rankin. Finally, none of this—the reading, the writing, and the publishing—would be conceivable without the support of my colleagues at Northern Illinois University, which has been my institutional home for over twenty years, and my family in Chicago. It is because of their enduring love and support that all of this is even possible.



# 1 Introduction

Ethics, in both theory and practice, is an exclusive undertaking. In confronting and dealing with others—other human beings, nonhuman animals, the natural environment, and technological artifacts—we inevitably make a decision that has the effect of dividing things into one of two types, arranging an exclusive distinction that separates those others who we are obligated to respect from what remain mere things. As eighteenth-century German philosopher Immanuel Kant (2012, 40) described it: “Beings whose existence rests not indeed on our will but on nature, if they are non-rational beings, still have only a relative worth, as means, and are therefore called *things*, whereas rational beings are called *persons*, because their nature already marks them out as ends in themselves, i.e., as something that may not be used merely as means, and hence to that extent limits all choice (and is an object of respect).”

But even if you’ve never heard of Kant, this just sounds intuitively correct. We go out into the world and deal with others, knowing there’s a difference between other persons to whom we owe respect as ends in themselves and those things that are mere objects with instrumental value as a means to an end. As Roberto Esposito (2015, 1), who arguably wrote the book on this subject, explains: “If there is one assumption that seems to have organized human experience from its very beginnings it is that of a division between persons and things. No other principle is so deeply rooted in our perception and in our moral conscience as the conviction that we are not things—because things are the opposite of persons.”

Not only does this distinction have deep roots, but it works.<sup>1</sup> And that’s the problem. Because it works—and has worked so well—the line dividing things from persons is often taken for granted, assumed to be the

natural state of affairs, and therefore is not questioned. It only stands out and becomes evident in those moments when it is challenged or even just momentarily violated. Consider, for example, what is now a rather common but still surprising social practice. Users of digital voice assistants, like Siri and Alexa, often find themselves saying “thank you” to the object. This is both weird and disorienting. We typically do not express gratitude to things or feel bad about not doing so. We use automobiles to travel around town without feeling the need to say “thank you” to the vehicle. But if we take a taxi or use a ride-sharing service, we will—or we think we should—say “thank you” to the driver of the vehicle, who we recognize as another person. Because digital voice assistants are things that talk like another person, we often (and rather unconsciously) respond to the object *as if* it were something other than a mere thing, a kind of someone to whom we feel obliged to say “thank you.”

It is, of course, possible and entirely reasonable to explain and excuse these behaviors as mistakes. But what these “mistakes” reveal and make visible is that the line dividing person from thing (or, if you prefer more formalistic legal terminology, *persona* from *res*) is neither fixed nor stable. The boundary separating who is a person from what is a thing has been flexible, dynamic, and alterable. This is actually a good thing; it is a feature and not a bug. Ethics and law both innovate and advance by critically questioning their own exclusivity and accommodating many previously excluded or marginalized others, recognizing as persons what had previously been considered things and property—women, people of color, indigenous peoples, animals, the environment, and so on. And these critical challenges have often been spearheaded by innovative and forward-thinking efforts to introduce and advance a vindication of the rights of others—for example, Mary Wollstonecraft’s protofeminist manifesto *A Vindication of the Rights of Women*, Thomas Taylor’s vindictive but no less influential *A Vindication of the Rights of Brutes*, and now, it seems, a vindication of the rights of robots.

## 1.1 Robot Rights

The very notion of a vindication of the rights of robots sounds like something out of science fiction, and there is a good reason for this. Unlike artificial intelligence (AI), which originated in a scientific seminar held at Dartmouth College in the mid-1950s, robots are the product of fiction. And

the idea of “robot rights” was already in play and operational from the moment the robot appeared on the stage of history. “The notion of robot rights,” as Seo-Young Chu (2010, 215) has insightfully pointed out, “is as old as is the word ‘robot’ itself. Etymologically the word ‘robot’ comes from the Czech word ‘*robotá*,’ which means ‘forced labor.’ In Karel Čapek’s 1920 play *R.U.R.*, which is widely credited with introducing the term ‘robot,’ a ‘Humanity League’ decries the exploitation of robot slaves—‘they are to be dealt with like human beings,’ one reformer declares—and the robots themselves eventually stage a massive revolt against their human makers.” This scenario—the robot uprising and struggle for recognition—has become one of the most popular themes or leitmotifs in subsequent science fiction. Even if you are not familiar with Čapek’s play, there’s a good chance you already know the storyline.

So when we first hear or encounter the phrase *robot rights* or *rights for robots*, we can be excused if the expectation is for some kind of dramatic uprising as the machines either take up arms against their human oppressors or take to the streets in violent protest. But reality is fortunately much more sanguine, considerably less dramatic, and, in a word, *real*. This is not to say that the robot uprising will not happen. It will. In fact, it already has. It just does not conform to what has been scripted for us in science fiction. No robot armies marching through the streets, no heart-pounding chase sequences with spectacular explosions, no intense emotional encounters between the robots and their makers. None of that. Instead, it takes place and is already taking place in ways that are much more mundane and seemingly boring by comparison, as philosophers, legal scholars, and courts and legislatures advance proposals, publish documents, and deliberate costs and benefits. It’s more C-SPAN than it is *Terminator*.

Consider the following: There has been an explosion of activity addressing the subject of robot rights in both academic research and popular media. In a survey of the existing scholarly literature, Jamie Harris and Jacy Reese Anthis (2021) found just under three hundred publications in circulation, with an exponential rise in activity over the past several years. There are books with provocative titles like *Robot Rights* (Gunkel 2018), *Rights for Robots* (Gellers 2020), *Artificial Life after Frankenstein* (Hunt Botting 2021), *Robotic Persons* (Smith 2021a), *We, the Robots?* (Chesterman 2021), and more. There are peer-reviewed research articles published in journals of ethics, artificial intelligence, and law. Here’s just a sample of titles: “Legal

Personhood for Artificial Intelligence” (Jaynes 2020), “The Hard Problem of AI Rights” (Andreotta 2021), “Recognising Rights for Robots” (Bennett and Daly 2020), “Is It Time for Robot Rights?” (Müller 2021), and “Robots and Rights” (Schröder 2021).

In the popular press, one can find articles like the *New Yorker’s* “If Animals Have Rights, Should Robots?” (Heller 2016), “Robot Rights?” in the *Brown Political Review* (Lehman-Ludwig 2019), *Diginomica’s* “Robot Rights—A Legal Necessity or Ethical Absurdity?” (Marko 2019), “Humans Keep Directing Abuse—Even Racism—at Robots” at Vox (Samuel 2019), and video explainers, like “Do Robots Deserve Rights?” from Kurzgesagt—In a Nutshell (2017) and an interview with animal rights innovator and Berggruen Prize winner Peter Singer in “Will Robots Have Rights in the Future?” from Big Think (2019).

But this subject is not something limited to academic curiosity and popular media speculation. “The robot rights argument,” as James Dawes (2020, 592) points out, “has already begun—just Google the phrase.” And if you do so, you will find that there are already a number of actual proposals in circulation and even a few legislative acts and judicial decisions already on the books. In May 2016, the Committee on Legal Affairs of the European Parliament—the legislative branch of the European Union—proposed that “sophisticated autonomous robots” be considered “electronic persons” with “specific rights and obligations” for the purposes of contending with the challenges of technological unemployment, tax policy, and legal liability.

In November 2020, the legislature of the Commonwealth of Pennsylvania passed a bill (Senate Bill 1199) that classifies autonomous delivery robots, or what the text of the act calls personal delivery devices (PDDs), as pedestrians in order to provide a legal framework for their deployment on city streets and sidewalks. Similar laws have been passed in a number of other jurisdictions, including the commonwealth of Virginia (Code of Virginia § 46.2–908.1:1), which provides the following stipulation: “a personal delivery device operating on a sidewalk or crosswalk shall have all the rights and responsibilities applicable to a pedestrian under the same circumstance.”<sup>2</sup>

In 2021, South Africa and Australia recognized an artificial intelligence system as the inventor on a patent application. This outcome was the result of an international effort lead by legal scholar and lawyer Ryan Abbott. Since 2018, Abbott and his team at the Artificial Inventor Project have petitioned

patent offices across the globe to recognize an AI system developed by Stephen Thaler, called DABUS (Device for the Autonomous Bootstrapping of Unified Sentience), as the sole inventor of a food container system. Previous filings in the EU, UK, and US had been denied—not because DABUS did not originate the product but because, under current law, only natural persons may be named as inventors on a patent application. While these decisions were being appealed, first South Africa’s Companies and Intellectual Property Commission and then the Federal Court of Australia (in the decision regarding *Thaler v. Commissioner of Patents* [2021] FCA 879) found in favor of the applicant, becoming the first jurisdictions on planet Earth to recognize the claim of an AI to be legally recognized as an inventor on a patent application.

## 1.2 The Debate

Robot rights are not a matter for the future. They already matter here and now. Even if real-world circumstances and scenarios are seemingly less exciting and action-packed than the robot uprisings of science fiction, the issue of robot rights is the site of a dramatic and important conflict. And like any conflict, there are two sides or opposing forces.<sup>3</sup> On one side, there are what could be called the Critics. According to this group, the very idea of robots, AI applications, or other socially interactive machines being accorded anything approaching moral or legal status beyond that of a mere instrument or piece of property is not just wrong-headed thinking but also a dangerous development that should be severely curtailed, resisted, or interrupted before it even begins. In short: robots, AI systems, and other artifacts are just things and not persons. The other side—formed of what we might call, by way of contrast, the Advocates—recognizes that various technological systems and implementations might need some form of social recognition and/or legal protection and that entertaining this exigency is an important contribution to ongoing efforts to test, validate, and even revise the limits of our moral and legal systems. In short: robots, AI systems, and other artifacts can be people too (figure 1.1).<sup>4</sup>

The debate is polarizing, with one side opposing what the other promotes. One side, for instance, argues that robot rights open the opportunity for thinking about the limitations of existing moral and legal systems, thereby contributing to similar efforts to address the plight of previously



**Figure 1.1**

The robot rights debate. Original image by the author.

excluded individuals and populations. The other side argues that focusing attention on what are human designed and manufactured artifacts actually distracts us from the more important and pressing moral, legal, and social matters that confront us, thereby risking further harm to already vulnerable populations. One side suggests that as robots and AI systems become increasingly capable, sentient, and maybe even conscious, we will need to consider their interests and well-being in a way that is no different from the consideration enjoyed by other persons, like human beings or even non-human animals. The other side argues that because robots with consciousness or sentience would need the protection of rights, it would be prudent to avoid ever making things like this to which we would feel the need to be obligated. One side proposes that addressing questions regarding robot rights and the legal standing of AI systems will help us resolve problems of liability and responsibility in a world where artifacts make (or at least seem to make) independent decisions. The other side asserts that doing so will only exacerbate existing problems with responsibility gaps, shell companies, and liability shields.

It is a heated contest, with both sides appearing to advance positions and arguments that (when one initially hears them) make sense. And like similar polarizing disagreements—think, for example, of other seemingly irresolvable moral or legal disputes, like debates about abortion or physician-assisted suicide—there is no clear winner. Both sides continue to heap up arguments and evidence in support of their position, but the basic terms and conditions of the conflict remain largely in place and essentially unchanged. For this reason, this book does not take sides in the existing conflict by advocating for one over and against the other, nor does it seek

to mediate their differences and disputes. Instead, it deploys an altogether different strategy. It targets not the points of conflict nor the differences that separate the one from the other, but the common set of shared values and fundamental assumptions that both sides already endorse and must endorse in order to enter into conflict in the first place. And it does so in order to devise an alternative that can better respond to and take responsibility for the moral and legal opportunities and challenges that we confront in the face or the faceplate of robots.

### 1.3 Terminology

Before getting too far into things, it may be prudent to pause for a moment and define or at least characterize the term *robot*. As indicated earlier, the word originates in a work of fiction—specifically, a stage play titled *R.U.R.* or *Rossumovi Univerzální Roboti* (*Rossum's Universal Robots*), written by Karel Čapek. In Czech, as in several other Slavic languages, the word *robota* (or some variation thereof) denotes “servitude or labor,” and *robot* was the word that Čapek used to name a class of manufactured, artificial servants. Since the publication of Čapek’s play, robots have infiltrated the space of fiction. And some of the most memorable characters in twentieth- and twenty-first-century film and television have been robots: Robby the Robot, Astroboy or Tetsuwan Atomu, Data, R2-D2 and C-3PO, WALL-E and EVE, the Cylons, the replicants, and the Terminator.

When it comes to defining the term *robot*, science fiction actually plays a significant and influential role. In fact, much of what we know or think we know about robots comes not from actual encounters with the technology but from what we see and hear about in fiction. When you ask someone—especially someone who is not a roboticist—to define *robot*, chances are the answer that is provided will make reference to something found in a science fiction film, television program, or story. This does not only apply to or affect outsiders looking in. “Science fiction prototyping,” as Brian David Johnson (2011) calls it, is rather widespread within the disciplines of AI and robotics, even if it is not always explicitly called out and recognized as such. As roboticists Bryan Adams, Cynthia Breazeal, Rodney Brooks, and Brian Scassellati (2000, 25) point out: “While scientific research usually takes credit as the inspiration for science fiction, in the case of AI and robotics, it is possible that fiction led the way for science.”

So what in fact does the word *robot* designate? Even when one consults knowledgeable experts, there is little agreement when it comes to defining, characterizing, or even identifying what is (or what is not) a robot. In the book *Robot Futures*, Illah Nourbakhsh (2013, xiv) explains the problem this way: “Never ask a roboticist what a robot is. The answer changes too quickly. By the time researchers finish their most recent debate on what is and what isn’t a robot, the frontier moves on as whole new interaction technologies are born.”

Despite this equivocation, definitions are unavoidable and necessary. One widely cited source of a general, operational definition comes from George Bekey’s *Autonomous Robots: From Biological Inspiration to Implementation and Control*: “In this book we define a robot as a machine that senses, thinks, and acts. Thus, a robot must have sensors, processing ability that emulates some aspects of cognition, and actuators” (Bekey 2005, 2). This “sense, think, act” or “sense, plan, act” (Arkin 1998, 131) paradigm has considerable traction in the literature—as evidenced by the fact that it constitutes and is called a *paradigm*.

This characterization of a robot is, as Bekey (2005, 2) explicitly recognizes, “very broad,” encompassing a wide range of different kinds of technologies, artifacts, and devices. But it could be seen as being too broad insofar as it may be applied to all kinds of artifacts that exceed the conceptual limits of what many consider to be a robot. As John Jordan (2016, 37) notes, “The sense-think-act paradigm proves to be problematic for industrial robots: some observers contend that a robot needs to be able to move; otherwise, the Watson computer might qualify.” The Nest thermostat provides another complicated case: “The Nest senses: movements, temperature, humidity, and light. It reasons: if there’s no activity, nobody is home to need air conditioning. It acts: given the right sensor input, it autonomously shuts the furnace down. Fulfilling as it does the three conditions, is the Nest, therefore, a robot?” (37). And what about the seemingly common and mundane smartphone? According to Joanna Bryson and Alan Winfield (2017, 117), these devices could also be considered robots under this particular characterization. “Robots are artifacts that sense and act in the physical world in real time. By this definition, a smartphone is a (domestic) robot. It has not only microphones but also a variety of proprioceptive sensors that let it know when its orientation is changing or when it is falling.”



Consequently, *robot* already allows for and encompasses a wide range of different concepts, entities, and characterizations. It therefore is already the site of a conversation and debate about technology and its social position and status, and we should not be too quick to close off the possibilities that this lexical diversity enables and makes available. As Andrea Bertolini (2013, 216) argues, “All attempts at providing an encompassing definition are a fruitless exercise: robotic applications are extremely diverse and more insight is gained by keeping them separate.” Adopting this kind of approach—one that is tolerant of and can accommodate a range or an array of different connotations and aspects—allows for a term like *robot* to be more flexible and for the analysis to be more responsive to the diverse ways the word is actually utilized and applied across different texts, social contexts, research efforts, historical epochs, and so on.

This does not mean, however, that anything goes and that *robot* (or *AI*, which is often substituted for *robot*<sup>5</sup>) is whatever one wants or declares it to be. It means, rather, paying attention to how the term comes to be deployed, defined, and characterized in the scholarly, technical, and popular literature, including fiction; how the term’s connotations shift over time, across different contexts, and even (at times) within the same text; and how these variations relate to and have an impact on the options, arguments, and debates concerning the moral and legal status of these technological artifacts.

#### 1.4 Plan of Attack

The analysis at hand will commence by getting a handle on both *persons* and *things*. Doing so will involve excavating from the sediment of the history of philosophy and law not only the way that both concepts have been deployed and developed but also, and perhaps more importantly, how they have been distinguished from each other and how that difference has shaped the way that each term has come to be defined and operationalized. As Esposito (2015, 16) explains: “From time immemorial our civilization has been based on the most clear-cut division between persons and things. Persons are defined primarily by the fact that they are not things, and things by the fact that they are not persons.”

Although the two categories of this mutually exclusive and totalizing conceptual order appear to be relatively stable, membership is not. Over

time, many “things” that were once regarded as things—women, children, slaves, animals—have come to be recognized as persons and therefore admitted into the community of moral and legal subjects. What’s currently up for debate, then, is whether robots, AI systems, and other artifacts belong solely and exclusively to the category of *thing*; whether it is possible now or in the future that these entities might cross the line and be recognized as persons, possessing rights and obligations; or whether we might be able to split the difference and formulate some kind of third alternative that is neither the one nor the other. And a good part of the analysis that follows consists of a detailed reading and thorough cost/benefit analysis of the various arguments that have been deployed in this domain by partisans on both sides of the debate. As with previous books, especially *Robot Rights* (Gunkel 2018), the objective of this undertaking is to document who is arguing what, to examine how the different arguments and variations have been asserted and formulated, and ultimately to figure out what it all means. In other words, the goal is to understand how all the pieces of this complex puzzle fit together.

What is of primary importance in this undertaking is not what makes one side in the debate different from and/or opposed to the other. What is of interest is what both sides already agree upon and endorse in order to come into conflict to begin with. Despite their disagreements and often polar-opposite opinions, what is not up for debate or submitted to questioning is the fundamental ontological presupposition that distinguishes person from thing. This difference, which is asserted and operationalized by both the Critics and the Advocates as if it were some universally true and naturally justified determination that has persisted from the beginning of time, is specific and context dependent. It is the product of a particular cultural formation and philosophical tradition. Consequently, the real problem is not that one side is different from and opposed to the other. The problem is that both sides tacitly agree to one way of dividing up the world and then quibble about who or what is to be included or excluded from one category or the other. In other words, both sides agree to and play by the same set of rules—that is, a shared moral and legal ontology. But these rules (like all rules to all games) are arbitrary, alterable, and at least something that needs to be submitted to critical investigation and reappraisal.

The objective of this book, then, is to intervene in this conceptual order in such a way as to neither endorse one side or the other nor to mediate

their differences via some kind of third alternative that would resolve the dispute. There is name for this kind of critical intervention: deconstruction.<sup>6</sup> The word *deconstruction*, despite initial perceptions, does not indicate “to take apart,” “to un-construct,” or “to disassemble.” Despite this widespread and rather popular misconception, which has become something of an institutional (mal)practice in both popular media and academic circles, deconstruction is not negative. But to say that it is not negative does not mean that it is something positive. Instead, what deconstruction designates is a kind of thinking outside the box, what in Aristotelean logic would be called the *law of noncontradiction*, that exceeds the grasp of the existing conceptual order and its oppositional pairs—for example, construction/destruction, positive/negative, inside/outside, person/thing, and so on. But *how* this transpires and (maybe more importantly) *why* are questions of methodology.

## 1.5 Method of Analysis

With any conceptual opposition, the two opposing terms are not situated on a level playing field; one of the two already has the upper hand. In the person/thing dichotomy, for instance, it is *person* that occupies this privileged position. “The relation between” things and persons, as Esposito (2015, 17) explains, “is one of instrumental domination, in the sense that the role of things is to serve or at least to belong to persons. Since a thing is what belongs to a person, then whoever possesses things enjoys the status of personhood and can exert his or her mastery over them.” Deconstruction of this or any of the other binary oppositions that organize systems of thinking—whether philosophical, legal, economic, political, or ethical—proceeds by way of a double gesture, or what has also been called a “double science” (Derrida 1981, 41).

### 1.5.1 Double Science

In a first move, we deliberately invert the two terms that make up the existing conceptual order. In the person/thing dichotomy, *person* occupies the position of privilege and has been granted dominance over *thing*. So we begin by flipping the script. This operation is quite literally a *revolutionary* gesture insofar as the existing order—an arrangement that is already an unequal and violent hierarchy—is inverted or overturned. “To overlook

this phase of overturning," Derrida (1993, 141) explains, "is to forget the conflictual and subordinating structure of opposition."

But inversion, in and by itself, is not sufficient. It is only half the story. This is the reason that it is just a phase or first step. As Derrida points out, a conceptual inversion or revolutionary overturning—whether it be social, political, or philosophical—actually does little or nothing to destabilize the existing order or really change things. In merely exchanging the relative positions occupied by the two opposed terms, inversion still maintains and preserves the binary opposition in which and on which it operates—albeit in reverse order or upside down. This is precisely the problem that is dramatized and explored in science fiction with the proverbial robot uprising.

In rising up in revolution against their human makers, robots overturn the existing social order, replacing the dominance of human persons with robotic things and artificially intelligent machines. Revolution, then, just reverses the existing hierarchy and, in doing so, changes little or nothing. It may provide the opportunity for some good cinematic drama and action sequences, but it is no solution. This is because, as Derrida (1981, 41) knew and pointed out, mere revolutionary inversion still "resides within the closed field of these oppositions, thereby confirming it." To put it another way, if we stopped here, at this phase of overturning, siding with things over and against persons, then it would be hard to answer for or respond to the charge that this revolutionary effort amounts to little more than an antihumanism or depersonalization.

For this reason, deconstruction necessarily entails—and must proceed to—a second, postrevolutionary phase or operation. "We must," as Derrida (1981, 42) states, "also mark the interval between inversion, which brings low what was high, and the irruptive emergence of a new 'concept,' a concept that can no longer be, and never could be, included in the previous regime." Strictly speaking, this new concept is no concept whatsoever, for it always and already exceeds the system of oppositional logic that defines the conceptual order as well as the nonconceptual order with which the conceptual order has been articulated. This so-called new concept—the very naming of which requires either repurposing the resources of already existing words (what Derrida calls *paleonymy*) or inventing new ones (something called *neologism*)—occupies a position that is outside of or at the margins of a traditional, conceptual opposition or binary pair. And, as we will see, this

new concept, this Thing that is neither a person nor a thing, can be identified with the name *robot*.

### 1.5.2 Raison d'être

But this abstract and schematic characterization of the double gesture of deconstruction does not answer the more basic question: Why? If, since Roman times, the conceptual distinction separating persons from things “has been reproduced in all modern codifications, becoming the presupposition that serves as the implicit ground for all other types of thought—for legal but also philosophical, economic, political, and ethical reasoning” (Esposito 2015, 2), then why would we ever mess with it? If the person/thing dichotomy has worked and continues to work, why bother questioning it at all? What works, works. Isn't that good enough? Actually, no. And we need to mess with it for several reasons:

**1. Limitations.** Binary oppositions, although useful for categorizing things, restrict what is possible to know and to say about the world and our own experiences. This is because conceptual opposites push things toward mutually exclusive options. In this either/or mode, any phenomenon is assumed to be reducible to  $x$  or its opposite,  $not-x$ . In other words, we typically make sense of ourselves and our world by deploying sets of terminological differences or conceptual oppositions, like that which divides entities into the categories of persons and things. As Barbara Johnson (1987, 12) explains, the underlying logic of this way of thinking—that is to say, “if not absolute, then relative; if not objective then subjective; if you are not for something; you are against it”—is the principle of noncontradiction. This principle, or what is also called the *law of noncontradiction*, has been, at least since the time of Aristotle, one of the defining conditions—if not the defining condition—of human knowledge. As Paula Gottlieb (2019) explains: “According to Aristotle, first philosophy, or metaphysics, deals with ontology and first principles, of which the principle (or law) of noncontradiction is the firmest. Aristotle says that without the principle of noncontradiction we could not know anything that we do know.”

Although this kind of exclusivity has a certain functionality and logical attraction—not to mention the fact that it has the status of being not just *a* law but *the* law—it is often criticized for not being entirely in touch with

the complexity and exigency of facts on the ground. It is for this reason that we are generally critical of *false dichotomies*—the parsing of complex reality into simple either/or distinctions. And the person/thing dichotomy, as Anna Beckers and Gunther Teubner (2021, 13) point out in the context of AI and robot law, provides an almost perfect illustration of the problem, insofar as existing technology already seems to resist both reification, where the AI or robot is “just a tool” of human action, and personification, promoting the artifact to a moral or legal position that would be similar to that of a natural human person. There are, therefore, ontological and epistemological reasons to question the hegemony of rigid binary oppositions and the structural limitations that they impose.

In addition, and following from this, conceptual opposites arrange and exert power. The two items are not situated on a level playing field; one of the pair has already been determined to be the privileged term. “We are not,” as Derrida (1981, 41) explains, “dealing with the peaceful coexistence of a *vis-à-vis*, but rather with a violent hierarchy. One of the two terms governs the other (axiologically, logically, etc.), or has the upper hand.” Consequently, binary oppositions are not just descriptive or a matter of some neutral discursive difference; they are the site of real social, political, and moral power. Whoever gets to divide up the world into this versus that or us versus them has the power to direct and determine what is possible to think, say, and do. The promise of deconstruction is that it provides a potent mechanism for working our way out of the maze of oppositional pairs and dualisms, like person/thing, by which we have made sense of ourselves, our world, and others. And this is especially important for those individuals and communities who have been, for one reason or another, situated on the “wrong side” of these oppositional dualities—all those who, as Donna Haraway (1991) describes it, have been assigned to the unfortunate position of being the other of (Western) man.

**2. Gridlock.** The debate about how robots, AI systems, and other seemingly intelligent artifacts fit into the existing ontological categories of person or thing has produced a lot of activity, but the effort seems to be caught in what nineteenth-century German philosopher G. W. F. Hegel (2010, 202) had called a “bad infinity”—a seemingly endlessly repetition of the same arguments and disputes that do not make much progress on the issue. After several decades of work and robust discursive activity—activity that will

be documented and analyzed in detail—we haven't got very far and find ourselves in a kind of stalemate or cul-de-sac. There are seemingly good and decent reasons that robots and AI systems cannot and should not be regarded as mere things. But there are just as many good arguments and evidence that say extending the status of person to these machines would be just as bad, if not worse.

So at this juncture, we find ourselves at something of an impasse. Each side in the debate—the Critics and the Advocates—continue to heap up arguments and evidence to prove or substantiate their position. But neither side appears to have won the contest or is even showing signs of making progress on it. This problem is not unique, especially in the field of philosophy. We have seen it before. In fact, it is similar to the problem that Kant had addressed and resolved in his *Critique of Pure Reason*. Kant's first critique<sup>7</sup> famously sought to address what had been a deadlock in modern European philosophy—the seemingly irresolvable debate between the Rationalists and Empiricists regarding the origins of human knowledge. And in response to this dispute, Kant changed everything by simply altering the terms of the debate: “Hitherto it has been assumed that all our knowledge must conform to objects. But all attempts to extend our knowledge of objects by establishing something in regard to them *a priori*, by means of concepts, have, on this assumption, ended in failure. We must therefore make trial whether we may not have more success in the task of metaphysics, if we suppose that objects must conform to our knowledge” (Kant 1965, Bxvi; emphasis in original).

When debate seems to get stalled in an irresolvable stalemate or eternal recurrence of the same, throwing more argumentative effort at the dispute only perpetuates the existing problem. A better solution may be to alter the terms of the debate itself. For Kant, this meant not asking how knowledge conforms to objects but rather how objects correspond to our modes of knowing. And that critical pivot has made all the difference. So like Kant, we can investigate whether we may not have more success in the task of responding to the opportunities and challenges of robots and AI systems if we shift our focus and the mode of inquiry. Instead of trying to resolve the problem as it is currently formulated—that is, deciding whether robots, AI applications, and other kinds of artifacts are things or persons—the deconstruction of this way of thinking takes the very conceptual opposition that had distinguished person from thing as the problem.

**3. Ethnocentrism.** Finally, the seemingly natural opposition between person and thing, which “for so long compressed and continues to compress human experience into the confines of this exclusionary binary equation” (Esposito 2015, 4), proceeds from a distinctly Western way of thinking, “genetically composed of the confluence between Greek philosophy, Roman law, and the Christian conception” (3). This way of organizing things—this method of dividing up all of existence into one of two mutually exclusive types—is not only exported around the world through colonial conquest and religious conversion but has, for better or worse, dominated the entire domain.

The person/thing dichotomy, however, is not some universal truth. It is a specific way of organizing things that is rooted in and determinative of Western thought.<sup>8</sup> It is, therefore, not some Platonic form that would be universally true for all time. In fact, other cultures and traditions approach these challenges in ways that are significantly different and organized otherwise. Consider, for example, what Suzanne Kite explains by way of Lakota ontologies in the collaborative written essay “Making Kin with the Machines”:

How can humanity create relations with AI without an ontology that defines who can be our relations? Humans are surrounded by objects that are not understood to be intelligent or even alive, and seen as unworthy of relationships. In order to create relations with any non-human entity, not just entities which are human-like, the first steps are to acknowledge, understand, and know that non-humans are beings in the first place. Lakota ontologies already include forms of being which are outside of humanity. Lakota cosmologies provide the context to generate an ethics relating humans to the world and everything in it. These ways of knowing are essential tools for humanity to create relations with the non-human and they are deeply contextual. As such, communication through and between objects requires a contextualist ethics which acknowledges the ontological status of all beings. (Lewis et al. 2018)

Critically questioning and challenging the person/thing dichotomy is not just a way of recognizing and coming to terms with ethnocentrism, colonialism, and the multifaceted legacy of what Kim Tallbear calls “whitestream disciplinary thinking and ontologies” (Muñoz et al. 2015, 230). It is also a way to begin opening the debate about AI systems and robots to other perspectives, traditions, and modes of thinking. These alternatives provide other ways of responding to and taking responsibility for what José Esteban Muñoz calls “the active self-attunement to life as varied and unsorted



correspondences, collisions, intermeshings, and accords between people and nonhuman objects, things, formations, and clusterings" (Muñoz et al. 2015, 210). For this reason, it should be no surprise that deconstruction has not found a home (or found itself *at home*) in the established institutions and departments of philosophy but has instead enjoyed a more hospitable reception in other areas of endeavor: literary criticism, feminism, postcolonialism, posthumanism, queer theory, and so on.

## 1.6 Preview/Overview

We will begin with *things*, which is the rather unimposing title to the second chapter. Beginning here seems almost unnecessary and obvious. We all kind of know what things are, such that asking a question like "What is a thing?" seems to be impertinent and immaterial. But as the German philosopher Martin Heidegger pointed out, this is precisely the problem. Because things are already familiar—perhaps too familiar—we have little or no critical distance on them as things. This is because, as Heidegger (1962) explains, things are not typically disclosed to us as things but encountered as objects. In other words, things are not experienced as mere entities laying around out there in the world. They are always pragmatically situated and characterized in terms of our involvements and interactions with the world in which we live. For this reason, things are first and foremost made available to us or revealed as objects for a subject. They are objectified. The chapter, therefore, examines how the two sides of the debate—the Critics and the Advocates—mobilize this objective understanding of things to construct and develop their arguments. One side, not surprisingly, argues that robots and AI systems are objects or instruments for us to use for our own purposes and objectives. The other side asserts that there is something about these things that makes them more or at least interrupts this objectivist and instrumentalist way of thinking. Although each side offers persuasive arguments and extensive evidence to support their claims, neither is able to gain the upper hand. And this leaves us with uncertainty regarding the reification of robots, AI systems, and other artifacts.

The third chapter, then, takes up the other alternative and inquires whether these things might not be better and more successfully understood as persons. Again, the question "Are robots persons?" seems rather direct and immediately understandable. But as was the case with *thing*, the

concept of *person* also turns out to be far more interesting and complicated than one might anticipate. Typically, when we use the word *person*, we are referring to another human being. But this seemingly natural and everyday understanding is not entirely accurate. The word and concept *person* has a long and rather complicated history in both philosophy and law. It is originally derived from the Latin *persona*, which referred to the mask worn by actors in a stage play. In its original form, what we call a *person* would have been closer to what is meant by a word like *character* or *role*. As a result, *person* does not just denote an individual human being but also, more accurately, names the role that one plays or is assigned within the context of a social situation or performance. This can be seen especially in law, where who is considered a legal person has not been limited to human individuals but can also be extended to other kinds of nonhuman entities: corporations, organizations, ships, animals, and the natural environment. How this happens, what it means, and how it organizes the terms of the debate is the subject of chapter three.

The fourth and fifth chapters critically investigate the debate regarding personification of robots, AI systems, and other artifacts. In other words, once we know what *person* designates and means, we can then examine how the two sides in the debate have argued for and against extending the title of person to these various nonhuman entities. Chapter four takes up the subject of *natural person*, which typically denotes human individuals or other entities who can be considered persons by nature. Whether something is or is not a natural person is usually decided on the basis of individual properties and capabilities—that is, rationality, consciousness, sentience, and the like. So there is a kind of litmus test for achieving recognition as a person. We (and who is implicated in or interpellated<sup>9</sup> by this first-person-plural pronoun will not be insignificant) first define the criteria for what makes an entity a person. In other words, we devise a standard by deciding what we believe are the necessary person-making properties or capabilities. We then use this standard to test and evaluate whether some entity is a natural person or not. So the question of whether robots or AI systems could ever become natural persons is one that we get to evaluate based on criteria that we get to define.

The Critics respond to this question by trying to limit who can be included in the category of person. According to these arguments, robots, AI systems, and other artifacts are just technological devices and machines.

No matter how sophisticated they may become or seem to be, they will never achieve any of the person-making properties, like consciousness, rationality, or sentience. And because of this, robots and other kinds of artifacts will always fail to meet the necessary criteria and can therefore be objectively and justifiably refused the title of person. The other side in the debate takes an entirely different and polar opposite position, arguing that artifacts like AI systems, robots, and autonomous technologies either are or will be able to achieve the benchmarks of personhood. If and when (and in the hands of these Advocates, it is more often than not a matter of when) this happens, then withholding the title of person from these things would be unethical and unjust.

Chapter five does a similar kind of analysis for the concept of a legal person. Unlike a natural person, which is grounded in the ontological conditions or essential properties of the individual entity, a legal person is a socially constructed and conferred recognition. In other words, something becomes someone not because of their essential nature but because they are recognized by others as having a particular status. To be a person, then, means that one is recognized as a subject under the law, possessing both responsibilities and rights within a particular legal construct or institution. If the paradigmatic natural person is the human being in possession of a set of natural capabilities that make one a person, then the paradigmatic legal person is the corporation, which is a person not by its nature but because it is recognized and situated within the law as a subject of the law.

The question confronted in the face or the faceplate of the robot or other seemingly intelligent and/or socially interactive artifact is whether it would make sense to extend the category of legal person to these other kinds of entities. Responses to this question once again divide into two seemingly opposed and irreconcilable positions. Those who are critical of this proposal argue that extending the recognition of person to these technological artifacts, although clearly possible and entirely legal, is wrong and should not be allowed to happen. And it is wrong because of the negative effects and potentially dangerous consequences this decision would have on and for us and our legal systems. Those situated on the other side of the debate take an entirely different position on this question, arguing that extending legal personhood or personality to robots and other intelligent (or at least seemingly intelligent) artifacts will be necessary for integrating these technologies into our moral and legal systems.

By the time we get to the end of the fifth chapter, it will become evident that the debate is ultimately irresolvable. Both sides present good arguments and provide substantial evidence to support their positions. Unfortunately, this produces a version of Hegel's "bad infinity," with very little progress being made on resolving the question at hand. It is in response to this difficulty that the sixth chapter identifies and critically evaluates viable alternatives.

In the face of these seemingly irreducible either/or dilemmas, one solution—and a rather popular one at that—is to synthesize a third alternative that is either neither/nor or both/and. This is standard operating procedure in all kinds of disputes and debates. In politics, for instance, the tension between the right and the left is typically mediated by a third alternative that has been called the *center* or *radical middle*. In philosophy, the difference that separates binary opposites, like being and nothing, comes to be resolved in and by a third term, *becoming*, which *sublates* (Hegel's watchword, meaning "to overcome and preserve") the difference between the one and the other. And in many legal systems, the opposition between the mutually exclusive gender categories of male and female has been successfully challenged and resolved by formulating a third option: nonbinary.

A similar strategy has been proposed for resolving the person/thing debate with robots and AI, and that solution goes by the name *slavery*. Already in Roman times, slaves were regarded as something more than a mere thing but not quite a full person. They occupied a position that was situated in between the one and the other, being both thing and person. And there has been, in both the legal and philosophical literature, a surprising number of serious proposals arguing for instituting what can only be called Slavery 2.0. Repurposing existing slave law to respond to the moral and legal challenges of robots might seem like a workable solution, but the difficult history of human slavery and its horrific social and political consequences actually produce more problems than they can possibly resolve. The sixth chapter provides a thorough critique of these "robots should be slaves" proposals, demonstrating how this supposed solution to the person/thing dichotomy actually produces bigger problems—that is, more and significantly worse problems than it can possibly begin to resolve.

The problem, then, is not deciding whether robots and other kinds of artifacts are persons, things, or some third alternative that tries to split the difference. The real problem is the binary logic that differentiates person

from thing in the first place. This fundamental distinction is not some natural condition of things: it is an artificially constructed dichotomy that is context specific and only subsequently universalized by the exercise of socio-intellectual-political power. The seventh and final chapter deconstructs this way of thinking. It does so by way of a double gesture that involves (1) inversion of the person/thing dichotomy and (2) emergence of a nondialectical third term that exceeds the grasp of this entire conceptual order. The book ends, therefore, by developing the terms and conditions of this deconstructive alternative in an effort to respond to the alterity that is manifest in the face of the robot. But this alternative, because it deconstructs the ruling conceptual order—that is, the person/thing dichotomy that has organized both law and ethics for close to two millennia—will have repercussions that reverberate both forward and backward through time, requiring a thorough reconfiguration of moral and legal ontology.

### 1.7 Final Words

Often it is the smallest of things that matters most, like the difference between two seemingly insignificant words—*who* and *what*. But everything, as Derrida (2005, 80) insightfully points out, depends on this difference. In the face of others—not just other human beings but animals, the things of the natural environment, and artifacts—we are called upon to make and are responsible for a crucial decision. We decide (or perhaps better, have granted to ourselves the power to decide) between *who* counts as another socially significant subject with rights and responsibilities that need to be respected and *what* remains a mere thing that can be used and even abused as we see fit. It's a seemingly small difference, but it makes all the difference.

It has, for instance, justified some members of the human species asserting their presumed authority over other members of same species (and typically on the basis of arbitrary and highly prejudicial criteria like gender, race, ethnicity, religion, geographical location, or cultural traditions), turning them into instruments and things to be bought and sold as property and even disposed of with little or no hesitation. It has allowed human communities to excuse horrific mistreatment of other life forms on the basis that they are not persons and therefore can only be things that serve our interests, needs, and desires. And it has led us—not just human beings but all living and nonliving things on planet Earth—into a climate crisis

that constitutes a fundamental existential challenge, as natural human persons and organizational and corporate legal persons have presumably decided that other things are nothing more than “natural resources” and “raw materials” that can be used, consumed, and exploited.

The true potential of the moral and legal challenges that are confronted in the face or the faceplate of robots and other artifacts is that they destabilize this ontological order that has permitted us (and again, who is included in and excluded from this first-person-plural pronoun is not immaterial) to divide all of existence into the mutually exclusive categories of person or thing. It is, therefore, the robot that might deliver us from ourselves, demanding that we begin to take seriously our responses to and responsibilities for other Things—Things that exist and have always existed outside and beyond the limitations of the arbitrary division that differentiates who is person from what is a thing.

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