Q&A: Robots and the law

As robots take on societal roles that were once the province of humans, they are creating new legal dilemmas

By Dennis Normile

Should driverless cars be allowed on the roads? Should robots capable of thought be accorded rights as sentient beings? Ryan Calo, a lawyer at the University of Washington School of Law in Seattle, tackles these and other questions in “Robots and the Lessons of Cyberlaw,” a paper that will appear in the California Law Review next spring. In a report for the Brookings Institution last month, he called for the creation of a Federal Robotics Commission that would oversee the integration of robotics technologies into U.S. society. Science caught up with Calo recently on the murky questions surrounding robo rights and responsibilities.

His remarks have been edited for brevity.

Q: The law tends to see a clear dichotomy between persons and objects. Do robots fall in between, and therefore are new laws needed?
A: Robots tend to undermine this clean distinction between a thing and a person. For example, you get compensated differently when someone else’s negligence results in injury to property than to a person. When property is involved, you get market value. With people you have been deprived of that person’s companionship. To the extent that people become heavily enmeshed socially with robots, the law will have to decide into what category to sort them.

Q: Should robots be given legal status as “beings”?
A: I don’t think we’ll have stand-alone rights for robots. Rather, the rights of owners may extend to robots in certain ways. Already lawmakers have struggled with cases where a software agent makes a deal on your behalf. Personally, I think we should hold people to contracts formed by their software unless something about the transaction makes it look objectively implausible.

Q: Robots already generate speech. Does the First Amendment protect this speech? And what if a robot makes defamatory statements?
A: If an artist creates an art bot that does surprising things, maybe we’ll think about free speech as attaching to the creation of that art bot. There are news bots that wait for an event to happen and then report it without human intervention. What if it gets something wrong? Legal precedent requires not just that you intend defamation but that you have actual malice. You’re not going to have defamation attach to news bots.

Q: Will we need laws to protect robots from abuse the way we protect animals from abuse?
A: I don’t see laws actually protecting robots. But the link is so strong between animal abuse and child abuse that a number of jurisdictions have policies saying that if you respond to an animal abuse case and there are children in the same household, you immediately call child welfare services. You could imagine tweaking those policies to apply if you were to have reports that someone was kicking their robot dog.

Q: If a robot inadvertently injures someone following a command from its owner enabled by third-party software, who is liable?
A: In the early days of computers, people did sue when the computer froze and they lost something of value. The courts were very quick to say it’s just data, so we are going to limit liability to the cost of the computer or software. Once you have platforms that are physical, if they harm someone, victims will sue not just the user, and not just the apps developer, but they’ll sue the platform manufacturer. I think the solution will probably end up being statutory limitations on liability.

Q: Do companion robots raise new privacy issues?
A: Anything that collects, processes, and shares information is going to have an impact on privacy. No one really cares how you use your dishwasher. But how you ask your robot to interact with you has a great deal of sensitivity around it. Much privacy law is worded broadly enough to encompass these new problems.

Q: Personal robots may send information on interactions with users back to developers to improve functionality. Could this be abused?
A: What I worry about is the prospect of manipulating people in the interest of the company, for example getting someone really invested with a virtual girlfriend and then getting the user to buy things for her. We should think creatively about how to interrupt corporate incentives to exploit consumers.

Q: Could robots be programmed to alert police if they witness their owner commit a crime?
A: Absolutely! One thing to bear in mind is that anything a robot records could be subpoenaed. And then, what if a robot gets good enough that it can tell if you’re doing something unlawful? It might have chemical sensors to help you cook. Could the government direct those sensors also to tell if someone is cooking meth? That’s a question the Constitution doesn’t obviously answer.