Incident of drunk man kicking humanoid robot raises legal questions

2 October 2015, by Lisa Zyga

Pepper is described as an “engaging, friendly companion that can communicate with people through the most intuitive interface we know: voice, touch and emotions.” Credit: Aldebaran, SoftBank, Corp.

A few weeks ago, a drunk man in Japan was arrested for kicking a humanoid robot that was stationed as a greeter at a SoftBank, Corp., store, which develops the robots. According to the police report, the man said he was angry at the attitude of one of the store clerks. The “Pepper robot” now moves more slowly, and its internal computer system may have been damaged.

Under current Japanese law, the man can be charged with damage to property, but not injury, since injury is a charge reserved for humans. Dr. Yueh-Hsuan Weng, who is cofounder of the ROBOLAW.ASIA Initiative at Peking University in China, and former researcher of the Humanoid Robotics Institute at Waseda University in Japan, thinks a better charge lies somewhere in between.

Weng is advocating for special robot laws to address the unique nature of human-robot interactions. He argues that humans perceive highly intelligent, social robots like Pepper (which can read human emotions) differently than normal machines—maybe more like pets—and so the inappropriate treatment of robots by humans should be handled with this in mind.

The biggest moral concern, Weng explains, is that the current laws "do not help human beings to project their empathy while interacting with humanoid robots." He explains the problem in greater detail in a review at the Tech and Law Center website:

"The incident has been received with immense scrutiny from the public, as it is regarding a human-like sociable machine that was inappropriately treated," Weng wrote. "If the object had been an ATM or vehicle, the moral impact would be much less, as an evolved set of ethical principles for sophisticated and intelligent machinery like Pepper have yet to be developed."

Working to develop such ethical principles, Weng has previously proposed that humanoid robots should have a legal status that is different than that of normal machines. He suggests that humanoid robots be legally regarded as a "third existence," in contrast to the status of humans as the "first existence" and our normal machines and property as the "second existence." This distinction would allow for special treatment of human-robot incidents, which Weng believes will be essential in the future.

"In regards to the Pepper incident, the humanoid robot Pepper is recognized as an 'Object of Law' under the current Japanese legal system," Weng told Phys.org. "Therefore, it is not possible to apply the Article 204 (Injury) of Japanese Penal Code. On the contrary, the man could be sued by the Article 234-2 (Obstruction of Business by Damaging a Computer) or the Article 261 (Damage to Property). As for civil law, based on the Article 709 (Damages in Torts) Pepper's owner, SoftBank, can claim economical compensation from the man regarding any damages resulting as a consequence of the attacked Pepper robot. So, in the near future we might sense the problem if we still keep this
'second existence' policy for dealing with sophisticated humanoid robots, since it violates our common sense for interacting with them—for example, Article 204 (Injury) of Japanese Penal Code cannot be applied."

Whether a robot can be legally "injured" or not is debatable, and raises the question of what exactly robot laws should look like. Based on his research, Weng has proposed two special regulations for robots. First, a "Humanoid Morality Act" would define a proper relationship between humans and robots, including the use of coercive power to constrain unethical applications. Second, a "Robot Safety Governance Act" would extend current machine safety regulations to protect the safety of both humans and robots.

Weng also cautions against overregulation, recalling the Red Flag Laws implemented by the UK in the 19th century for operating the first automobiles. These overly conservative laws required a flagman to walk in front of every car to warn pedestrians of the coming vehicle. The laws had the unintended consequence of hindering innovation of the UK's burgeoning automobile industry, which was later surpassed by countries such as Germany and France where the laws were not as strict.

Like automobiles in the late 19th century, today robots are a rapidly growing technology that have the potential to lethally harm humans. For this reason, Weng believes that legislators today face a similar dilemma of finding the right balance between protection and innovation.

To find this balance, and to better understand human-robot interactions, Japan has been slowly integrating robots into society in several "Tokku" special zones over the past 10 years. As Weng and coauthors show in a study published earlier this year in the International Journal of Social Robotics, observations from these experimental zones will help legislators frame appropriate laws that protect both humans and our unique, semi-autonomous creations.

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.