

# The Rights of Robots?

## Inclusion, Courts and Unexpected Futures

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Over two decades ago, while researchers at the Hawaii Judiciary, Phil McNally, Anne Witebsky, Wayne Yasutomi and myself researched various possible emerging issues, such as Hawaii Sovereignty, Brain drugs in Prisons and the Rights of Robots. While the latter two have already emerged, or are part common discourse, the legal rights of robots has moved from the improbable to nearly emergent.

In this issue, Frank Wells Sudia argues that artefacts or artificial intellects will take their place besides humans, and overtime they will gain rights. "Granting legal recognition to non-human entities should not pose insurmountable problems since it has already been done for corporations." (Sudia, 2001)

Ray Kurzweil in *The Age of Spiritual Machines* does not go so far as to argue for their rights but he makes a convincing case that their intelligence will exceed ours. They will transform art, health and medicine, warfare - the world will be dramatically different, and our traditional notions of reality and nature will transform as robotics (plus perhaps nanotechnology) redefines what it means to be. (Kurzweil, 1999)

Eventually humans may see robots in their own right, not only as our mechanical slaves, not only as our products, as ours to buy and sell, but also entities in themselves, as agents. Of course, at present the notion of robots with rights is unthinkable, whether one argues from an "everything is alive" Eastern perspective or an Aboriginal view where the external is not othered, or "only man is alive" Western perspective. Yet as Christopher Stone argues in *Should Trees Have Standing? - Toward Legal Rights for Natural Objects*, "throughout legal history, each successive ex-

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tension of rights to some new entity has been, theretofore, a bit unthinkable. We are inclined to suppose the rightlessness of rightless "things" to be a decree of Nature, not a legal convention acting in support of some status quo." (Stone, 1974)

While the Church and other traditional institutions may strongly object, interestingly Aboriginal Leaders Pat Dodson and Les Malezer have no problem with the rights of robots. They do assert however fairly assert that until others get their rights, robots should wait in turn. (Dodson, 1998)

Rights then are ethnocentric and more often than not human-centric. The extension of rights has always been unthinkable, the impossible, and yet we have not had any level of human progress without the extension of rights to those we previously considered not-worthy.

In an essay titled, "Visioning a Peaceful World," Johan Galtung writes: "Abolition of war [can be seen as a similar goal to the fight against] slavery and colonialism, abject exploitation and patriarchy were and are up against. They won, or are winning. We live in their utopia, which then proved to be a realistic utopia. So is ours: a concrete utopia for peace." (Galtung, 1991)

### *Inclusion*

A rights discourse is essentially about inclusion and about built-in agreed upon structures of peaceful mediation to resolve conflicting rights. Thus, the issue is not only the futures of technology, but the future of power.

Denial of rights of robots - since they are considered other, as not sentient, and thus not part of our consideration - becomes of an exemplar of how we treat other humans, plants, animals and civilizations. Like children, the environment and future generations, robots do not have adequate representation (and thus are considered rightless). Like children, the environment and future generations, robots are considered less alive, less important, and thus are considered rightless. Since they are so different, why should they be given rights? This is made more so by a worldview which is rationalistic and reductionist, which resists emergence in technology. In contrast are Buddhist views, for example, which see all as persons, and not at things. Shamanistic perspectives as well can imagine the spirit entering technology, thus allowing it to become, while not more human, certainly part of what it means to be human.

Robots call us to consider culture and civilization not as fixed but as

dynamic, as growing in response to other cultures and civilizations, to technological dynamism. Responses to dramatic changes in technologies and values can lead to societal disintegration, to a cultural schizophrenia, can be directly creative as with Toynbee's minority, or can be resistance-based, and thus create a new culture. (Nandy, 1992:25-36)

### *Are Robots Alive?*

However, traditionally robots have been construed to be dead, inanimate. However, an argument can be made that with advances in artificial intelligence, robots will be considered "alive." AI thinkers have already created or proven that AI constructs can do the following: (Wilzeg, 1981:443)

- (1) "Imitate the behavior of any other machine."
- (2) Exhibit curiosity (ie are always moving to investigate their environment); display self-recognition (ie react to the sight of themselves); and manifest mutual recognition of members of their own machine species.
- (3) Learn from their own mistakes.
- (4) Be as "creative" and "purposive" as are humans, even to the extent of "look[ing] for purposes which they can fulfill."
- (5) Reproduce themselves, in five fundamentally different modes, of which the fifth - the "probabilistic mode of self-reproduction" - closely parallels biological evolution through mutations (which in the case of [machines] means random changes of elements), so that "highly efficient, complex, powerful automata can evolve from inefficient, simple, weak automata."
- (6) "Can have an unbounded life span through self-repairing mechanisms."

In short, "a generation of robots is rapidly evolving, a breed that can see, read, talk, learn, and even feel [emotions]." (Rorvik, 1971)

Even a harsh critic of AI such as Weizenbaum admits that computers are sufficiently "complex and autonomous" to be called an "organism" with "self-consciousness" and an ability to be "socialized." He sees "no way to put a bound on the degree of intelligence such an organism could, at least in principle, attain," although from his critical vantage point, not in the "visible future." (Weizenbaum, 1976)

However, arguing from the perspective of robot's rights, AI and robotics are relatively new innovations. If we assume that growth in computer memory continues, we can safely forecast that robots by the year 2100 - most likely sooner - will only differ in physical form from humans.

The initial question that will be raised is: How are robotic generated goods and services to be distributed in the community? The distribution of this wealth requires a new conception of ownership, production, and consumption. In a potential world without work, some form of redistribution of wealth will be necessary. "In Sweden employers pay the same taxes for robots that they do for human employees. In Japan some companies pay union dues for robots." (Weiner, 1986:10) Supporters of robotic rights might say that computers are paying these taxes and dues from their labor and should derive rights for such labor.

Following questions of distribution of wealth come questions of ownership. In the very near future it is expected that computers will begin to design their own software programs, indeed, one can make the argument that they are already are. Considering the fact that, "the Copyright Act limits copyright protection to the author's lifetime, which is clearly inappropriate for a computer, it would then seem that a change in the law may be needed to provide proper protection for programs with non-human authors." (Anderson, 1985:176)

### *New Cases*

We will then see an avalanche of cases: we will have robots that have killed humans, robots that have been killed by humans, robots who have stolen state secrets, robots who have been stolen; robots who have taken hostages, robots who have been held hostage, robots who carry illegal drugs across borders, and robots themselves who illegally cross national borders.

Robots that are damaged or damaged or break other human laws will raise various complex issues. Of course, at present, robot damage will be simply a tort case, just as if ones' car was damaged. But an attorney will one day surely argue that the robot has priceless worth. It is not a car. It talks, it is loved and it "loves." The robot, then, like a human, has been injured. Its program and wires damaged. In this scenario, we will then need to have special tort laws for robots.

The legal system is today unprepared for the development of robotic crimes. Many years ago, the *Morbidity and Mortality Weekly Report* cited

the first death caused by a robot. This accident occurred when a machinist at a Michigan company entered a robots work envelope. Apparently not programmed to take human frailty into account the robot used its arm to pin the man to a safety pole killing him with the force." (Science Digest, 1985:67) This case is considered an industrial accident and could have possibly been avoided if the robot had an improved sense of sight and more careful programming.

Once robots (and all sorts of artificial intellects/agents) begin to program themselves according to external stimuli the robot may begin to commit crimes completely independent of earlier human programming. If a robot can commit a crime then a number of problematic questions will arise. "Can a robot intend to commit a crime? How is a robot to be punished? Is it sufficient to reprogram it? To take it apart? To penalize its owner? Its designer? Its manufacturer? Its programmer?" (August, 1983:53)

Such questions also raise problems concerning criminal trials that involve robots. Many court procedures will need to be adapted to accommodate the needs of such cases. This situation will be exacerbated by the development of robots who serve as witnesses for robots or provide expert testimony. Certainly, "a trial by a jury of peers seems inappropriate and certainly the American 6th and 14th amendments guarantees to such a trial do not apply to robots." (August, 1983:54) Or do they?

To understand the legal principles that can be applied to robots we must first have an understanding of the emerging electronic Judiciary.

### *The Electronic Judiciary*

Courts themselves in the next fifty years may be robot-computer run. Judges are faced with a rapidly expanding caseload where they must analyze legal documents, settle plea bargains, determine sentences, keep abreast of social, economic and political issues as well as act court administrators. Furthermore, as the Courts continue to act as political and social decision makers, judges must cope with complex scientific and technological issues. Of this situation critics note "judges have little or no training or background to understand and resolve problems of nuclear physics, toxicology, hydrology, biotechnology or a myriad of other specialties." (Bezelon, 1981:358) Computer technology should then be incorporated into the judicial process to aid in decision making.

The first step will be judges using computers to aid in searching out the most appropriate precedent to fit the present case. The development of a legal reasoning robot could serve as a valuable adjunct to a judges ability to render fair decisions. "As computers grow more elaborate and versatile (they) can better cope with the complexities of law, judgments and precedence." (Azimov, 1977:59) As logic oriented companion and a massive knowledge bank with the ability to instantly recall legal facts, precedent and procedure a legal web based robot would greatly assist the judicial system by speeding up court procedure, minimizing appeals based on court error, and preventing legal maneuvering resulting in fewer cases brought to court.

Eventually, as enough statistics are compiled, judges may not be that necessary except at the appellate level. Judges could then be free to vigorously pursue the legal and philosophical dimensions of societal problems. Of course, initially during the pre-trial phase, humans would be necessary. Attorneys would enter the facts into computers (manually, through voice-telecommunications) and a motions judge could monitor discovery and fact finding. Computers would then decide the case outcome. In addition, as most cases are negotiated (only about 5 percent ever end up in trial) we will see the continued development and sophistication of negotiation and mediation programs. Disputants would enter their side of the problem, the computer-robot would interact with each side and aid in reaching a settlement. Computers might inspire trust as they can instantaneously and anonymously provide relevant previous cases to both disputants. They can inform the disputants how the case might be settled (in terms of probabilities) if they went to trial or if they settled, that is they could provide a range of alternative choices and solutions. In addition, AI programs, as we are seeing in computerized psychotherapy, allow individuals to relax and "open up easier." Besides being impressed by the "intelligence of robot-judges" we might gain trust in the machines because of the magic they invoke and the authority they command. This magic and authority may lead to an increased belief in the fairness of the Judiciary.

Of course, fairness is not a given; it is a political issue. Law, unlike mathematics is laden with assumptions and biases. Decisionmaking is an act of power. Initially the use of computers will shift power in the court system from judges to programmers. Judges of course, if they allow AI to enter their courtroom, will do their best to keep control of the law and programmers. However, given the anticipated development of robotics, eventually we may see computers changing the programming and devel-

oping novel solutions to cases. If computers can develop creativity then judges and other experts will have to find new roles and purposes for themselves.

Finally, although it is presently ludicrous, a day may come when robot attorneys negotiate or argue in front of a robot judge with a robot plaintiff and defendant.

### *Legal Principles*

To understand in more concrete terms the legal future of robots, we must understand what legal principles will be applied to conflicts that involve robots. Lehman-Wilzig's classic article on the legal definition of artificial intelligence is extremely useful. He presents various legal principles that may be of relevance to robot cases. They include: product liability, dangerous animals, slavery, diminished capacity, children, and agency. (Lehman-Wilzig, 1981: 447)

Product liability would be applied as long as robots are believed to be complex machines. Product liability will be especially problematic for AI, because of the present distinction between hardware and software. For the robot that kills, is the manufacturer of the arms liable, or the software designer, the owner, or is there no liability - Human beware, computer around! Will we see no-fault computer insurance law?

The danger that robots may cause would logically increase as they become auto-locomotive, that is, once they can move. At this stage law relating to *dangerous animals* may be applicable to robots. Like animals, they move and like animals they give a sense of intelligence, although whether they actually are intelligent is a political-philosophical question. Once they are seen as animals then the jurisprudential slippery slope to full rights - higher categories - will likely continue.

The next phase will that be of robots as slaves. Robot cannot institute proceedings himself, for his own recovery, wherein damages are recovered for his pain and suffering. Will errant robots have to be responsible for their actions, or will owners who argue that the slave understood the intent of his or her actions make the slave responsible? If the manufacturer or owner is liable in civil cases and guilty of wrong doing in criminal cases, then he will certainly argue that the robot understands intent, understands its programming. If this line of argument succeeds, then the robot can then pursue his or her (it?) own case. Most likely, it will be the programmer or group of programmers who will be responsible. Will

punishment be that of elimination? Who has the right to terminate the robot? We would not be surprised if in the 21st century we have right to life groups for robots.

While the diminished capacity legal category is useful (legally independent but do not understand the actions they are committing), given the likely intelligence of robots, this is unlikely to stand.

Far more useful of a category is that of children, or the whiz kid. High in brain power and low in wisdom. Moreover, more useful, yet also ultimately problematic is that of the law of agency. As Lehman-Wilzeg writes: (Lehman-Wilzeg: 448-451 )

*To begin with, the common law in some respects relates to the agent as a mere instrument. It is immaterial whether the agent himself has any legal capacity, for since he is a sort of tool for his principal he could be a slave, infant, or even insane. ...it is possible for one not sui juris to exercise an agency power. Indeed, the terms automation and human machine have been used in rulings to describe the agent. "Nor must there be any formal acceptance of responsibility on the part of the agent[.]...The only element required for authority to do acts or conduct transactions...is the communication by one person to another that the other is to act on his account and subject to his orders. Acceptance by the other is unnecessary. Thus, ...[g]enerally speaking, anyone can be an agent who is in fact capable of performing the functions involved. Here, then, is a legal category already tailor-made for such a historical novelty as the humanoid.*

Thus, although the legal categories presented - from product liability to agency - are useful heuristics, the fantastic notion of the robotic rights behooves us to remember that development in robots may result in (or may need) entirely new legal principles and futures.

We can imagine the day when a bold lawyer rewrites history and argues that robot should be treated legally as a person. Or will it be the robot that argues for itself.

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