Robots and Responsibility
from a Legal Perspective

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Overview

- Responsibility as Liability
- Legal Agents & Quasi-Agents
- Crime & Punishment
- Corporate Punishment
- Robots as Legal Persons
- Conclusions
Legal ≠ Ethical, but Close

- There are things that are Ethical, but not Legal
  - Speeding an injured person to the hospital
  - Acts of Civil Disobedience

- There are things that are Legal, but not Ethical
  - Rude & Obnoxious Behavior
  - Violating Trust outside of contracts
Responsibility as Liability

Common concerns of Engineering Ethics

- Consumer Safety
- Negligence
  - Failure to take proper care
  - Failure to warn
Responsibility as Liability: Robots as Products

Unique problems of robots
- Autonomous systems
- Complex material and social interactions
- Potentially dynamic and unpredictable
  - Learning
  - Evolutionary Robotics

Not all that unique:
- Nano Technology & Bio-Engineering
  - Uncontrolled spread, unforeseeable risks
Responsibility as Liability: Robots as Products

Industry Standards

- These are what often determine liability cases
- What shall the standards be?
- We still have the ability to shape these . . .

(One reason for workshops like this!)
Agents & Quasi-Agents

- We can divide responsibility among multiple agents.
- We can empower agents to act on our behalf.
- We can limit the responsibility of an individual (as well as the rights).
- There are thus partial, or quasi-agents.
Crime & Punishment

A crime, as opposed to a mere harm, requires a moral agent to commit it.

Moral agents can be punished to achieve:
- Retribution
- Reform
- Deterrence

What about robots?
Corporate Punishment

- Corporations are non-human legal entities
- Corporations have “No Soul to Damn, No Body to Kick”
- Corporations can be punished financially
  - Serves functions of:
    - Retribution
    - Reform
    - Deterrence
Robots as Legal Persons

- Robots may not fear pain, loss of freedom, or even destruction.
- It would require significant engineering to change this.
- Robots may not have any financial or material concerns, even if they do “have a body to kick”.
- Always responsible humans involved.
Conclusions

Most pressing open questions:

- What shall our industry standards be?
- How can we ensure that human users of autonomous and semi-autonomous robots are held responsible?
- How might we avoid the tendency to blame robots for problems that arise?
- How do we ensure that robot development continues in ethical ways?
Meta-ethical Questions

Is it ethical to build robots that are moral and legally responsible for their own actions?

Whose interests and political purposes might be served by this?

Can international law and treaties prevent or control the development of robotic warfare?
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