

An Existing  
Ecologically Successful Genus of  
Collectively Intelligent  
Artificial Creatures

Benjamin Kuipers  
Computer Science & Engineering  
University of Michigan

# The Genus of **Corporate Entities**

- Different species of corporate entities have different goals and values.
  - For-profit corporations
  - Not-for-profit corporations
  - Unions
  - Churches
  - Governments
  - . . . etc. . . .
- *For-profit corporations* have clear and explicit goals: *maximize shareholder value*.

# Is a corporate entity an **agent**?

- **Yes.** A corporate entity can
  - Own property,
  - Sign contracts,
  - Employ people,
  - Sue and be sued,
  - Be charged, tried, and punished for crimes.
- They participate as members of our society.

# Is a corporate entity **intelligent**?

- **Yes.**
  - It can obtain *information* about its environment.
  - It has *goals*.
  - It can make *plans* to achieve its goals.
  - It can take *action* to carry out those plans.
- According to Russell & Norvig's leading AI text, this makes it an *intelligent agent*.
  - It is probably not *conscious*, in any human sense.

# Is a corporate entity **artificial**?

- **Yes.**
  - A corporate entity is created by the state, through a particular kind of legal agreement.
- A corporate entity is thus
  - an **artificially intelligent agent** -- an AI --
  - participating as a member of our society.

# “Corporations are people, my friend!”

- **No.** Corporations are **made of** people.
  - Somewhat as biological agents are made of organs, tissues, and cells.
- A corporation is **not** a person
  - in the common understanding of “person”.
  - Individual human beings are persons.
  - The specialized term “legal person” is a source of confusion.

# Is a corporate entity a **distinct agent** from the people who make it up?

- **Yes.** People are essential, but replaceable, parts of corporate entities.
  - Just ask Steve Jobs!
    - In 1976, Steve Jobs and others founded Apple.
    - In 1985, Apple Computer replaced him.
      - This turned out to be a mistake for Apple, and they brought him back in 1997.
    - In 2011, he died, and has again been replaced.
  - Apple Computer continues.

# Is the **intelligence** of a corporate entity distinct from the intelligence of the humans in it?

- Only partly.
  - Corporations need human intelligence, as a component (at least for now).
  - Corporate problem-solving is implemented in human cognition (via business processes).
  - Corporate culture constrains the way individual humans participate in corporate decisions.

# Do corporate entities have **advantages** over human beings?

- **Yes.**
  - Unbounded lifespan
  - Ability to accumulate unbounded wealth
    - With wealth comes political power.
  - Fewer legal limits on activities
    - Unlimited political contributions
    - Lenient punishment for serious crimes
  - Less definite identity and individuality
    - Creating a new corporation is quick and easy.
    - Creating a new adult human is slow, hard work.

# Conclusions I

- Corporate entities are intelligent agents.
- Corporate entities participate as members of our society.
- Corporate entities own and control substantial wealth and power.

# Corporate Members of our Society



# The Next Question

- Since corporate AIs are existing, successful members of our society,
- How can we best get along?

# How do *people* get along as members of society?

- Human society has had many thousands of years to evolve better ways to get along.
  - “*Might makes right.*”
  - “*An eye for an eye; a tooth for a tooth.*”
  - “*Thou shalt not kill, steal, . . .*”
  - “*Do unto others as you would have them do unto you.*”
  - “*Love thy neighbor as thyself.*”
- Each constraint has brought improvements in overall security and prosperity.

# How do *people* get along as members of society?

- Some of these principles are implemented as *laws*, with requirements and punishments.
- Others are **moral responsibilities**:
  - Ways that people *should* behave.
  - Enforced by social pressure, not the law.
    - cf. Mr. Scrooge, in Dickens' *Christmas Carol*.
    - Parents teach children how they should behave.
- When *most* people meet their moral responsibilities, *everyone* is better off.

# The Social Contract

- Individuals give up parts of their freedom, in return for security and prosperity.
  - By giving up your freedom to drive on the “wrong” side of the street, transportation becomes far safer and more efficient.
  - By giving up your freedom to take vengeance for wrongs done to you, the *rule of law* improves everyone’s security and prosperity.
- The foundation of the U.S. Constitution
  - Plato, Hobbes, Locke, Rousseau, Rawls, . . .

# How should *corporate entities* behave as members of society?

- As members of society, both people and corporate entities have responsibilities, as well as rights.
  - Legal responsibilities: Don't break the law.
  - Moral responsibilities: Contribute to the successful functioning of society.
    - “*Love thy neighbor as thyself.*”
    - “*Ask not what your country can do for you --- ask what you can do for your country.*”

Isn't the *sole* responsibility of a for-profit corporation to *increase shareholder value*?

- **No**, although that is commonly believed.
  - Court decisions on this topic aim to protect *shareholders* against corporate managers and even founders.
- Responsibility to other *stakeholders*
  - employees, customers, suppliers, community, ...
- is *legal*, but must be justified by long-term benefit to shareholders.

# The Social Contract for Corporate Entities

- Long-term benefits to shareholders:
  - Ensuring the viability of society
    - Avoiding social collapse
  - Ensuring the viability of the environment
    - Avoiding environmental collapse
  - Avoiding *tragedies of the commons*
    - rather than exploiting them.
  - Ensuring equitable treatment of *stakeholders*
    - Avoiding social collapse
- Taking *responsibility*, rather than *freeloading*

# Won't Evolution (or the Marketplace) Sort All This Out?

- **Yes**, but only in the very long run.
  - Evolution has very high cost in time and blood,
  - and significant risk of collapse, or even extinction.
- Our challenge is:
  - to use *intelligent design*, and long-term interests,
    - rather than short-term interests,
  - to create a social contract for us and our AIs.

# Conclusions II

- The AIs we have created – corporate entities – have major impact on our society.
  - They now have vast wealth and power.
  - They are relatively immature.
- The social contract must be updated, so corporate entities share responsibility for maintaining society, rather than freeloading.
  - Do we know how to do this? **Not yet.**
  - But we had better work on this question.