Chapter 2

Moral dillema's – Emotions - Institutions and Values

Subjects

1. Responsible Robotics
2. Emotions, Values & Decision-Making
3. Institutions & Values
4. Four Layer Model of Institutions
5. Dilemma of Moral Overload

Commercial – [Future life with Pepper](#)

Robot Ethics

- Ethical systems built into robots

- Ethics of how people treat robots

- Ethics of people who design, develop and use robots

Value Sensitive Approach (VSA)

- Moral and social values should work as non-functional requirements for the design of a good technology

- Colleboration between engineer, social and human science

Discussion

What is within your discipline the largest discrepancy regarding the ethics and the growing robotics?

Emotions, Values & Decision-Making

- Technocratic pitfall

    Emotions and values are ignored

    Abstract rationality and statistics lead

- Populist pitfall

    Subjective, irrational gut reactions and the emotions

    Do whatever the public wants

Emotions, Values & Decision-Making

- Emotional deliberation

  Public a genuine voice

  Emotions and concerns are heard, listened to and discussed

  Room for technical expertise

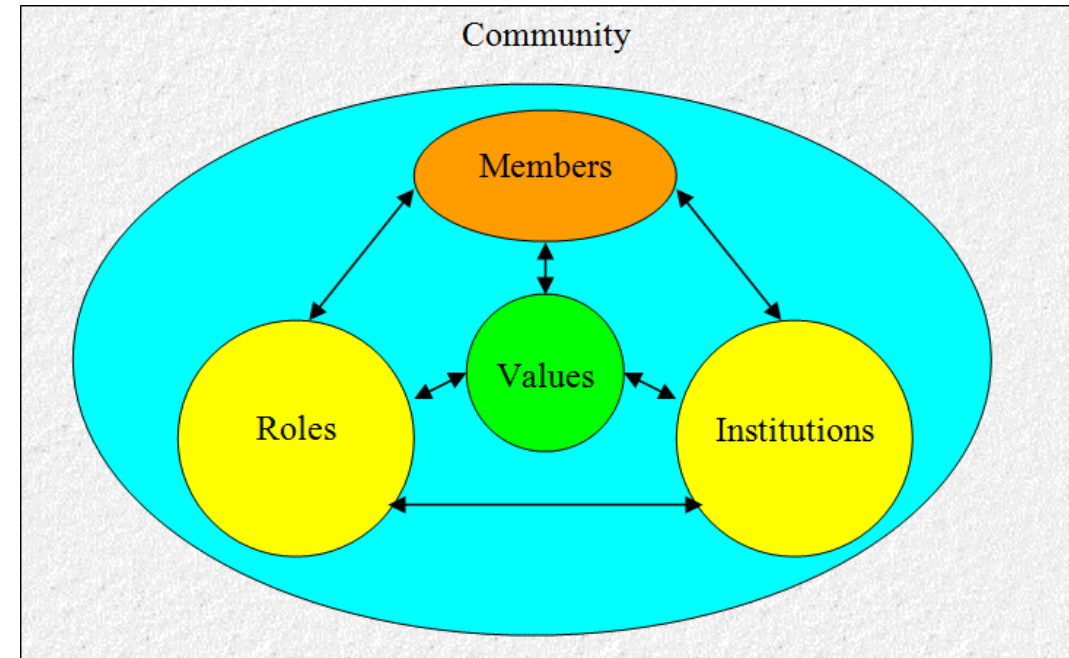 Focussing on the negative and positive outcomes

  Informed choice

Design a park using the objects or markers. Pick a roll out of the envelope, but do not share your emotion or interest with your group members. You have 10 minutes, good luck!
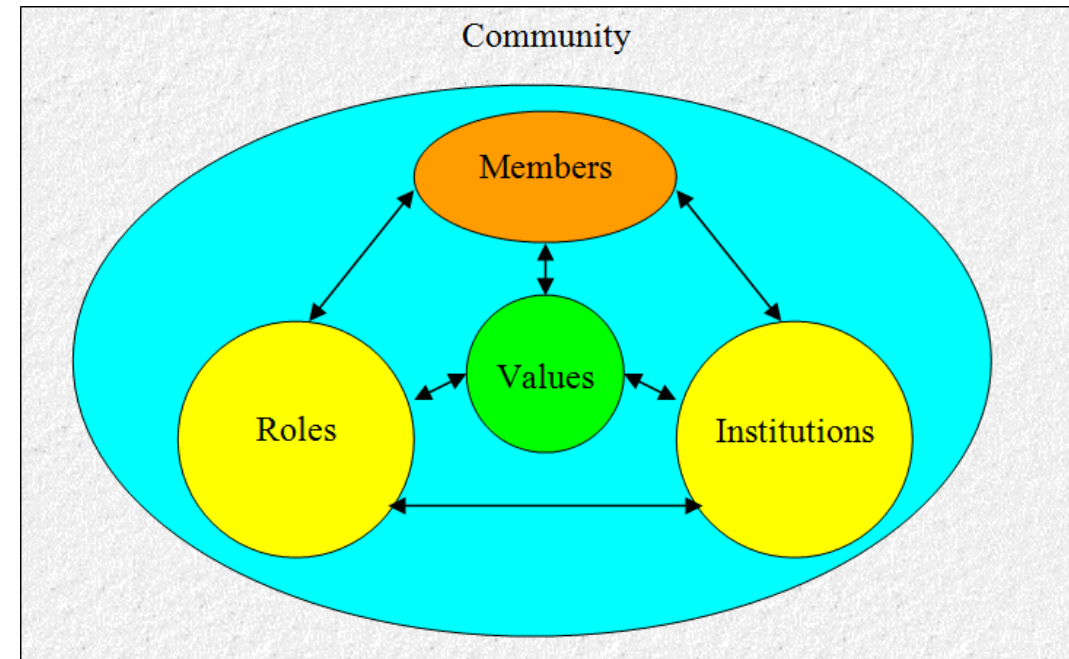
Institutions & Values

- Institutional context

- Substantive and procedural values

- Value sensitive design
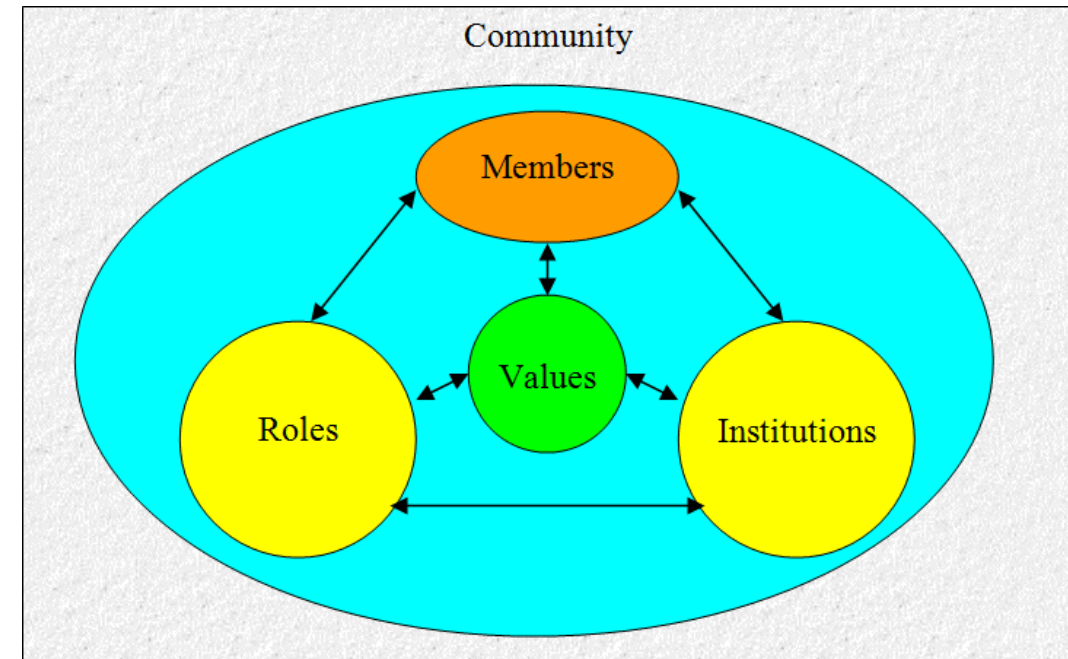   - proces

Institutions & Values: Institutions

- Formal

    - Laws

    - standards

    - regulations

- Informal

    - routines

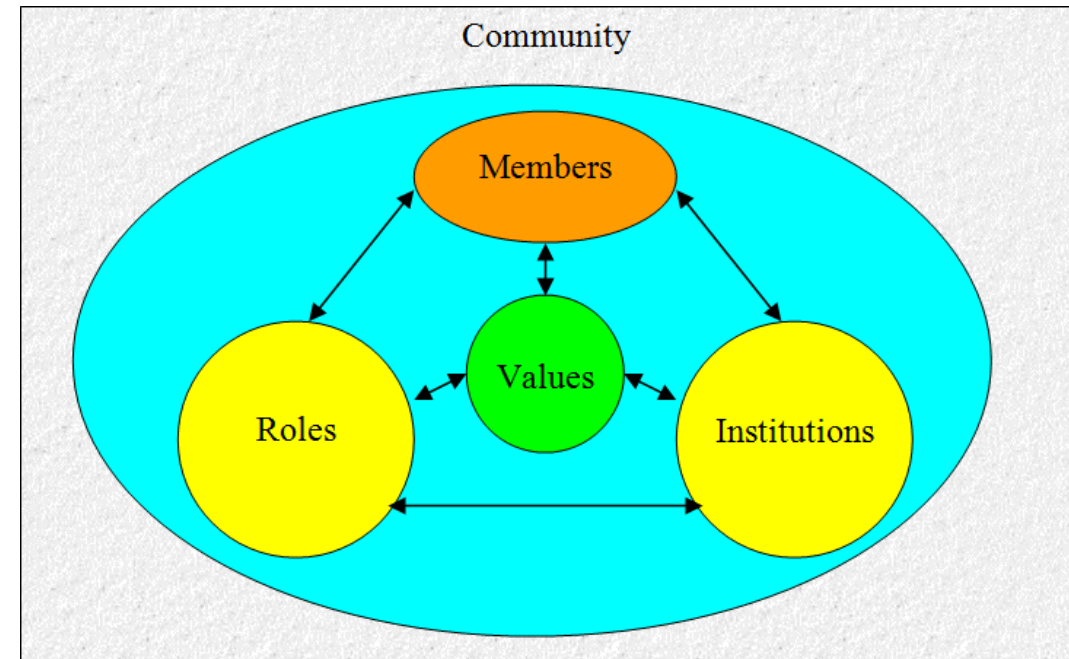   - customs

Institutions & Values: Design for values

- Analyst

- Institutional context

- Values emerge and transform
    - 1 adjustment
    - Adapted to context

- NIMBY
    - Own short term interest
    - Communication
    - paradox

Institutions & Values: Conclusions

- Institutions

- Assessment

- Specified

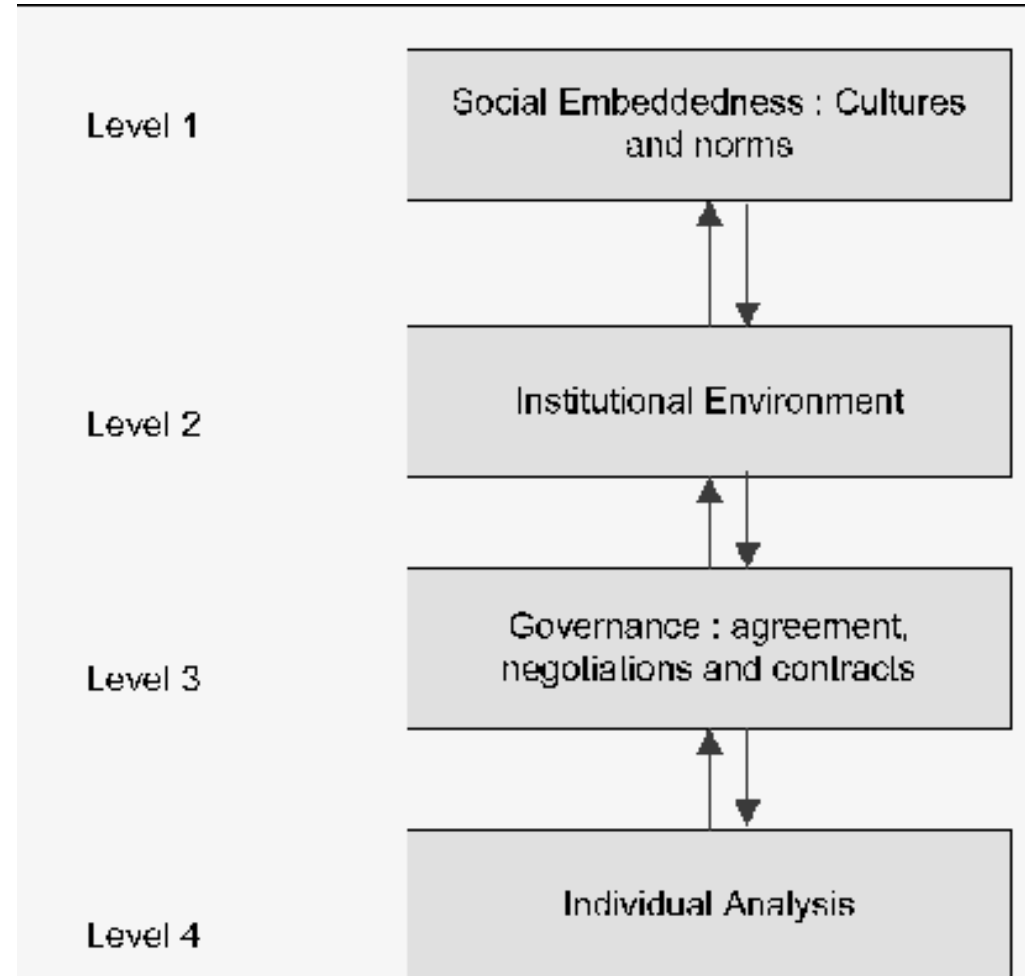- Reflexivity

Four Layer Model of Institutions

- What are institutions ?

- Institutions are systems of **established** and **embedded** social rules that structure social
  interactions "
  ---Hodgson, 2006

- Williamson 1989

Levels and characteristics	Pace of change (years)	Purpose of change
Level 1: Informal institutions: Customs, traditions, norms, religion	100 to 1000	Often noncalculative, spontaneous.
Level 2: Institutional environment: Formal rules of the game – esp. property (polity, judiciary, bureaucracy)	10 to 100	Get the institutional environment right.
Level 3: Governance: Play of the game – esp. contract (aligning governance structures with transactions)	1 to 10	Get the governance structure right.
Level 4: Resource allocation and employment (prices and quantities; incentive alignment)	Continuous	Get the marginal conditions right.

Four Layer Model of Institutions

- Interaction between layers

- Top down / bottom up

- Task: Apply to case

Level 1	Social Embeddedness : Cultures and norms
Level 2	Institutional Environment
Level 3	Governance : agreement, negotiations and contracts
Level 4	Individual Analysis

A doctor's dilemma

You are a doctor at a top hospital. You have six gravely ill patients, five of whom are in urgent need of organ transplants. You can't help them, though, because there are no available organs that can be used to save their lives. The sixth patient, however, will die without a particular medicine. If s/he dies, you will be able to save the other five patients by using the organs of patient 6, who is an organ donor. What do you do?
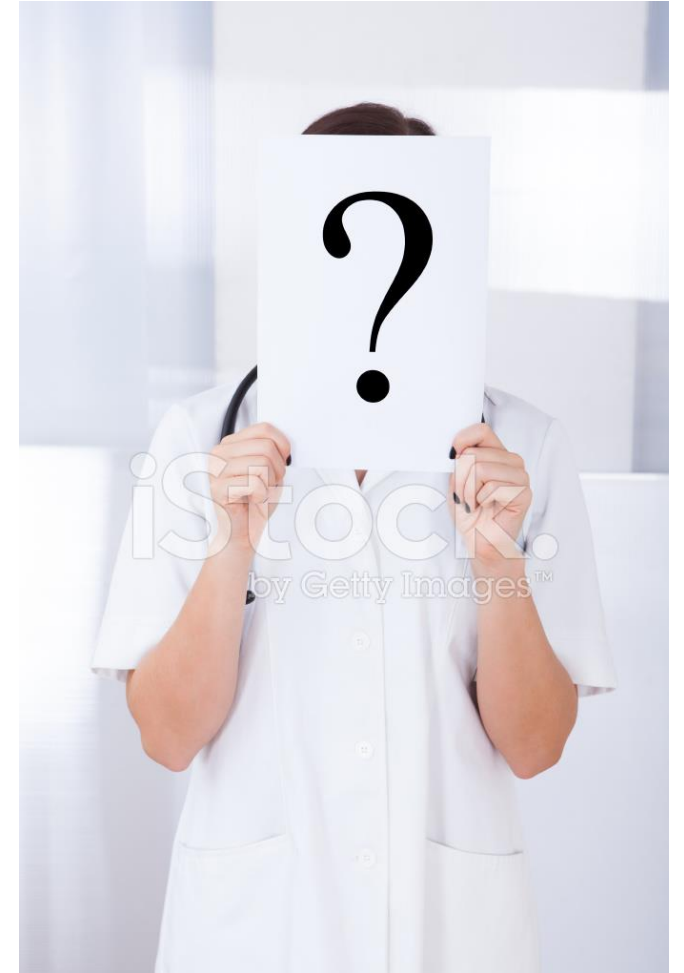
Keep patient 6 comfortable, but do not give him the medical care that could save his life in order to save the other five patients.

Save patient 6 and let the other five die; it's unfortunate, but that's not your call to make.

You have a job as network administrator for a company that also employs your best friend's husband. One day, your best friend's husband sends you a message asking you to release an email from quarantine. This requires you to open the email, at which point you discover that it's correspondence between this guy and his secret lover. After releasing the email, you find yourself in a pickle. Your instinct is to tell your best friend about his husband's infidelities, but divulging the contents of company emails is against company policy and you could lose your job. Once it becomes plain that your best friend found out about his cheating husband through a company email, all trails will inevitably lead to you as the leak. Do you tell him about the indiscretion

Yes; your loyalty to your best friend eclipses any company policy

No; it sucks that your best friend has a cheating husband, but you can't risk losing your job

- Police officer needs to do A
- Police officer needs to do B
- Police officer cannot do both A and B

Moral overload

When you want to do the right thing there is just to much to be done.

You have too many obligations that you cannot fulfill all at once.

- Designers, scientists, developers, everyone wants to do good; make the world a better place, improve quality of life, minimise wast, give people freedom

  - Prosperity and sustainability
  - Security and privacy
  - Efficiency and safety
  - Accountability and confidentiality

Moral dilemma's

- Problems in science and technology frequently take the form of a moral dilemma

- The aim is to show how innovations and design can help solve moral dilemma's

Dilemma's

- Moral problem with 2 obligations you cannot both fulfill

- Try to choose either one of them based on moral reasons as you cannot do them both

- First view

- Second view

Problems

- Inconsistent with *'ought implies can'*

- Moral residue

- Second order/meta task responsibility
  - Higher order obligation

- Solve problems by innovation
  - Bring about a new state of the world
  - Square the circle and satisfy the obligations
  - So, solving problems by innovation!

- Solving moral choices not by adjusting your values but by using your creativity to innovate

- Smart meter design