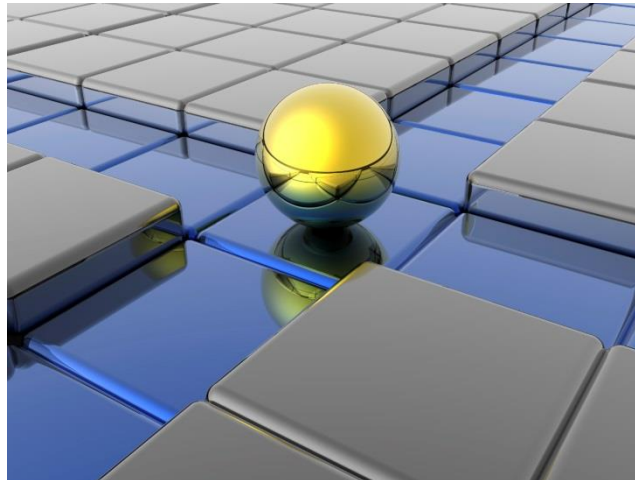


# Morality, Uncertainty and Policy

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# Main claims

Values – freedom, dignity, etc – should motivate practitioners.

Values differ in time and space, and change surprisingly.

Conflicts between values may be hard to anticipate.

## Policy:

- **Guided by values; tempered by uncertain impact.**
- **Satisfy** moral imperative, optimize **robustness** to uncertainty.
- **Info-gap robust satisficing.**

# Values motivate practitioners

## Practitioners promote:

- Infrastructure development
- Security
- Climate change mitigation
- Health
- Education
- Etc.

**Practitioners are – and should be – motivated by values.  
(Self-interest is also legitimate.)**

# Values differ in time and space

**UN Universal Declaration of Human Rights (1948) promotes**  
“recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family.  
[Promoting] freedom, justice and peace in the world. ... [A] common standard of achievement for all peoples and all nations”.

**Disputes over values in drafting committee. E.g.**

- Charles Malik, Lebanese catholic.
- Peng Chung Chang, Chinese Confucian.

# Values differ in time and space

## Surprising past value systems (changes in time):

- **Subjection of women.**
- **Divine right of kings.**
- **Capital punishment.**
- **Pedophilia.**

## Unanticipated future value systems (changes in time):

- **Radical Islam.**
- **Trans-nationalism.**
- **Eco-universalism.**
- **Trans-geno-equality (?).**

# Values differ in time and space

## Unanticipated global-local value conflict (changes in space):

- **Universal education vs Local beliefs and values.**
- **Urban vs rural values.**

## Effect of scale:

- **Family: each life is invaluable.**
- **Nation: 30,000 US road deaths/year “acceptable”.**

## Moral imperatives:

- **Operate differently at different spatial & temporal scales.**
- **Change in unanticipated ways.**

# Uncertain conflicts of values

**Social values: education of girls – future status of women.**

**Improved hygiene**

**reduces infant mortality**

**enhances population growth**

**causes future poverty.**

**Improved transportation infrastructure**

**impoverishes circumvented regions.**

**Moral imperatives:**

- Operate differently at different spatial & temporal scales.**
- Change in unanticipated ways.**
- Induce actions with unanticipated moral consequences.**

# Controversial?

Are we certain that our values are correct?

Have we reached the moral “end of history”?

No more doxastic innovation?

Has humanity reached a moral consensus?

**UN Universal Declaration of Human Rights didn't think so:**

**They acknowledged the need to “strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance”.**

Are we practitioners or missionaries?



# Policy implications

## Policy:

- Guided by moral imperatives.
- Tempered by uncertain moral and technical impact.

Optimizing morally imperative outcomes: **irresponsible** due to uncertain clashes of values over time and place.

## Two methodological concepts:

- **Satisfice** moral and technical objectives.
- **Robustify** against uncertain moral & technical imperatives.

## Implementation:

- Info-gap robust-satisficing.
- Qualitative (and quantitative) analysis.

# What is an info-gap?

## Info-gap:

Disparity between what one  
**does know**  
and what one  
**needs to know**  
in order to make a  
**responsible decision.**

Two elements: **uncertainty** and **consequence.**

Distinct from probability.

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# Innovation dilemma of poverty

## Rural poverty:

- Low agricultural productivity.
- High mortality/morbidity.
- Resentment and suspicion of government and NGOs.
- Local barons or warlords.



## Innovative hi-tech proposal:

- New strains of plants.
- Better irrigation.
- Better fertilizers.
- Mechanization of field work.



# Innovation dilemma of poverty

## Potential gains from innovation:

- Higher agricultural productivity.
- Higher standard of living.
- Less arduous field work.

## Potential losses from innovation:

- Failure of innovative crops, causing starvation.
- Social reorganization and upheaval.
- Rapid population growth, canceling gains (Malthus).

**Dilemma:** Innovation could be **much better**, or **much worse**.

**How to choose?**

# Poverty dilemma: qualitative

## Basic questions:

- What are the **goals**?
- What is our **knowledge**?
- What are the **uncertainties**?

## Bernard Amadei: girl water carriers.

- **Goal**: more potable water.
- **Knowledge**: Abundant fuel. Pump tech. Local culture.
- **Uncertainties**:
  - Long-term maintenance? Catastrophe if not.
  - Stable fuel supply?
  - Social response: what happens to the girls?



# Poverty dilemma: qualitative

## Robust solution:

- **Satisfice** the goals. Don't try to maximize. (Exploit trade off)
- **Co-design**: local involvement in all stages.
  - Familiarity with each other's value system.
  - Mutual respect, learning and **compromise**.
- **Train** locals in pump maintenance.
- **Transition period** of dual supply and gradual social change.
- **Long-term contact** for emergency support:
  - Technological and social.
- **Education** for girls (and boys, local adults, practitioners).
- **Quantitative** analysis where possible.

# Poverty dilemma: qualitative

## Methodological re-cap:

- **Trade off:** higher ambition = lower robustness.  
Ambitions: Yes.      Wishful thinking: No.
- **Zeroing:** Best-estimated outcomes have no robustness.
- **Satisfice** your goals. **Optimize** your robustness.  
Don't try to maximize the moral or technical outcome.
- **Preference reversal:** sub-optimal may be more robust:
  - Wood burning steam pump more robust to uncertainty than solar electric technology.
  - Some gender differentiation may be more widely accepted locally.

# Last words

Values – freedom, dignity, etc – should motivate practitioners.

Values differ in time and space, and change surprisingly.

Conflicts between values may be hard to anticipate.

## Policy:

- Guided by values; tempered by uncertain impact.
- **Satisfy** moral imperative, optimize **robustness** to uncertainty.
- Info-gap robust satisficing.

Questions?

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