

Shadow Codes of Engineering Ethics:

An Experiment in Ethics Imaginaries

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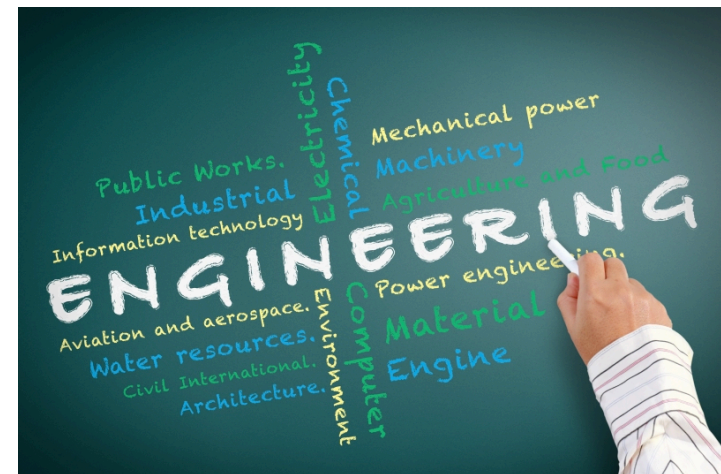
Presentation Overview

- Role of engineering ethics codes
- Project description
- Background history
- Ideas for the future
- Site tour



ROLES OF ENGINEERING ETHICS CODES

- Mandate rigorous, honest, and disinterested engineering practice
- Project a desired future: responsibility is distributed in expectation of engineering missteps, but profession's optimism confirmed
- Express shared values? Why is it necessary to articulate a code? What is the risk of transgressions being addressed by a code?



ROLES OF ENGINEERING ETHICS CODES

- Distinguish one set of individuals from another (scrupulous and unscrupulous; engineer and non-engineer....)
- Demarcate a privileged role of expertise, and a *lesser role* for others – who is and is not responsible for public health, safety, and welfare?
- Reveal identity and power in what is deemed in need of control
- Foreclose alternative practices – Davis argues that “knowledge moves to action” but really knowledge is already doing (Dewey) – thus safe and unsafe bridges exist/come into being with codes, but no bridge ceases to be an option



Project Description

- How institutional power shapes processes and outcomes in engineering ethics
 - Boundary work always precedes ethical work
 - Illuminate the political nature of the process
- Specific Instances
 - Omission of sustainability from the ASEE Code of Ethics
- Discussion
 - Who counts as a moral agent? Who has clout to shape a code?
 - What would it mean to create a “shadow code” of non-canonical engineering ethics canons that reframes priorities or introduces new ones?



Background: Excluding Sustainability from ASEE Code of Ethics

- 2011: Board asked Engineering Ethics Div. to draft code
- Concern about “Encourage students to comply with the principles of sustainable development.”
 - “some members (say, in petroleum engineering) would feel that the very nature of their work was unsustainable”
 - But sustainable development has been incorporated in many engineering codes of ethics and ASEE endorsed sustainable development in education in 1999
- Different language adopted
 - “Encourage students to be aware of the environmental and social impact of their solutions.”
 - Not incidental vagueness or commitment to value-neutral language, but rather an “**interested consensus**”

Guiding Question

- What would it mean to create a shadow code?
 - Lives outside canonical articulation of engineering ethics
 - Clearinghouse for attempts to reframe priorities or introduce new ones
 - Subversion of prevailing channels of interested consensus formation



Project Goals

- Adoption of specific plank not sole point
- Reveal and challenge how institutional power shapes processes and outcomes
- Boundary work around what is and is not engineering
- Keep archive of proposed additions that ended up on cutting room floor
- This cannot be done incrementally if we want systemic change widening the circle of moral agents shaping the code



Examples From Other Codes

- We expect resistance from conflict avoidant engineers
 - See Architects and Pharmacists discussions in relation to solitary confinement chambers and death penalty
 - Psychologists (APA), psychiatrist (other APA), and prisoner torture



Example Engineering Planks

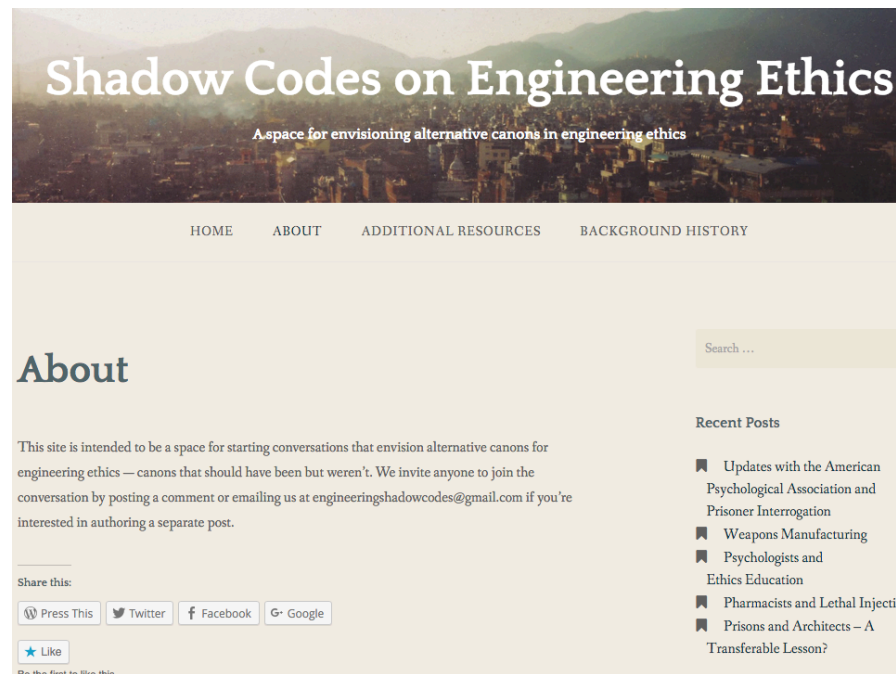
- Can we petition ASCE to prohibit participation in water privatization?
- Drug design and manufacturing
- Artificial intelligence
- Challenge social injustice



- Differences already exist; open dissent is healthy and constructive
- Keep consensus moving – impermanent agreement is reflexive

SHADOWCODES.ORG

- The webpage: <http://shadowcodes.org/>
- Have ideas, an interest in contributing, or more questions? Contacts us: engineeringshadowcodes@gmail.com



QUESTIONS?