

An Alternative to an Instrumentalist View of Technology

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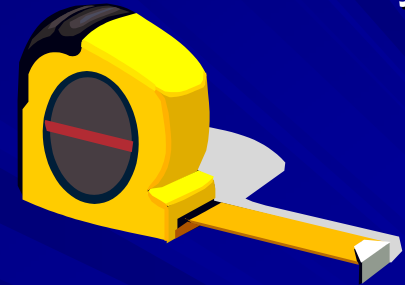
John Student says ...



- “Hey, technology is just a tool. I control it.”
- “Technology is something I use to make make life better. What’s the problem?”

Instrumentalism

- Technology
 - **neutral** and **human-controllable**
 - “simply a tool or instrument through which we satisfy our needs” (Andrew Feenberg)



- World understood mechanistically, not teleologically
- Means and ends are independent

Technology Classification (Feenberg)

	AUTONOMOUS	HUMANLY-CONTROLLED
NEUTRAL (Means & Ends Separate)	Determinism	Instrumentalism
VALUE-LADEN (Means tied to Ends)	Substantivism	Critical Theory

Determinism

- Technology
 - **neutral** and not **human-controllable**
 - its development essentially predetermined
- Two aspects:
 - advances on fixed track from one state to next
 - social institutions must adapt to technology
- Widely held in social sciences since Marx

Substantivism

- Technology
 - not **neutral** and not **human-controllable**
 - means and ends linked together
- Technology choice involves
 - choosing a way of life
 - choosing a set of values
- Philosophers
 - Martin Heidegger
 - Jacques Ellul

Critical Theory

- Technology
 - not **neutral** and **human-controllable**
 - “... frames many different possible ways of life, each of which reflects different choices...” (Feenberg)
- Minority view, i.e., Andrew Feenberg
- Choices can/should be made through democratic processes

What's the problem?

- Instrumentalism can
 - Inflate importance of the user
 - Foster a “faith” in technology
 - Create illusion of control
 - Cause blindness to technology's values
 - can lose control of technology
 - can become controlled by technology



Students in Technical Majors



■ Why are they often Instrumentalists?

- They manipulate technology on a daily basis
- Manipulation is a matter of pride & reward
- Feeling of control elevates self esteem
- It suits the closed world of the lab

Moral Analysis: Instrumentalism

- Goodness of means (technology)
 - separate from goodness of ends (results)
- Moral evaluation of ends
 - says nothing about the means (technology)
- Example: Fred uses a gun to kill Joe
 - Can't say whether gun is good or bad
 - Killing completely separate from the technology



Threefold Moral Evaluation

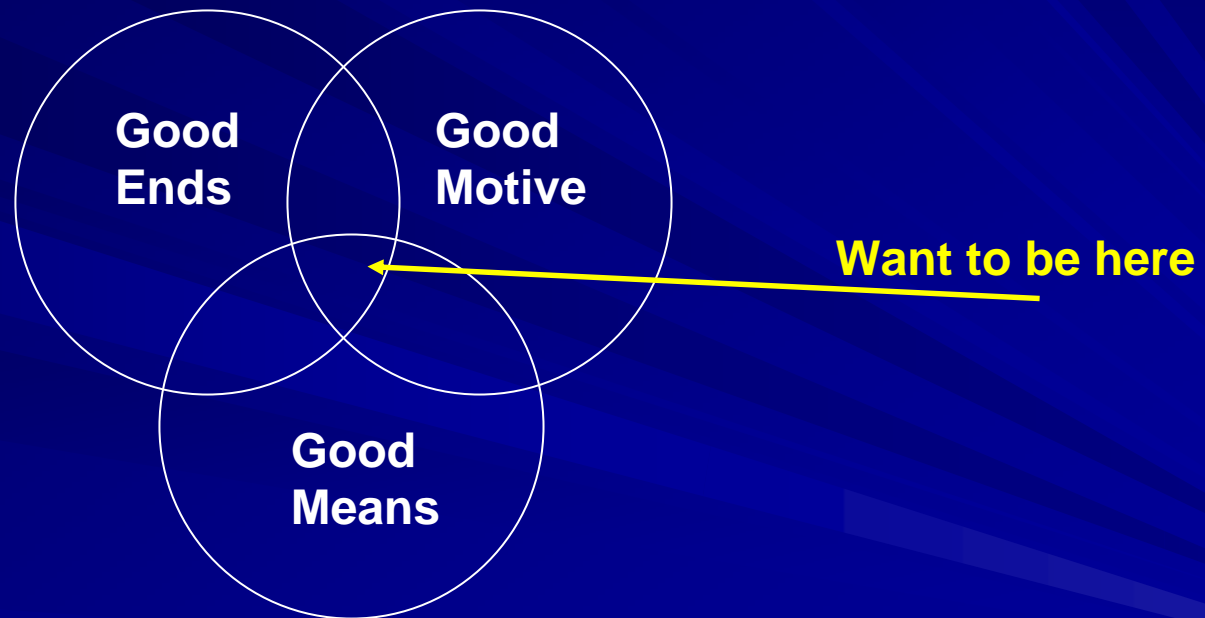
■ Assume

- An agent: someone who does something
- A motive: why the agent does what he does
- A means: how the end is achieved

■ Something is moral only if

- **End** sought by agent is good,
- **Motive** of agent is good, and
- **Means** to end is good

Threefold Moral Evaluation



Moral Evaluation Criteria

■ Ends

– Criteria: **intrinsic value**

■ Motive

– Criteria: **moral virtue**

■ Means

– Criteria: **moral obligation**

What are these
criteria?

Criteria for the Christian

- Question of criteria reduces to
 - What is God calling us to be and to do?
- Moral response is a response to God
 - not simply to societal standards or demands
- Biblical view of values
 - objective and normative

Technology as Transcendence



“Technology is anything with a physical manifestation that allows someone or something to transcend their limitations to reach a recognized goal”

transcend

verb

1. be or go beyond the range or limits of
2. be superior to; surpass



ORIGIN: Latin *transcendere*, from *scandere* 'climb'

from AskOxford.com

Some Examples

- Cochlear implant

- transcends limitations of severe hearing loss

- Prozac

- transcends limitations of depression

- Written language

- transcends temporal limitations of speech

- Train schedule

- transcends societal disorganization

Some that are Not

■ Human language

- does not transcend a limitation
- human verbal language believed to be inherent

■ Stonehenge

- its purpose remains a mystery
- does not transcend anything known

■ Chunk of iron

- no specified goal
- no accepted usage

Moral Analysis: alternative

- Step 1: Answer questions related to
 - limits
 - ends
 - means
 - motive
- Step 2: Use threefold moral evaluation
 - ends
 - means
 - motive

Analysis Questions

1. What limits does the technology transcend?
2. What characterizes these limits?
3. What is the motivation for transcending the limits?
4. What reasons are there to not transcend the limits?
5. What is the desired end result of transcending the limits?

Analysis Questions, cont.

6. How does the technology allow the limits to be transcended?
7. What is necessary for the limits to be transcended?
8. What are some possible side effects when the limits are transcended?
9. How long are the limits transcended?
10. Who can (or should) act to transcend the limits?

An Example: CVS

- Chorionic villus sampling (CVS)
 - a prenatal test that is “better than 99% accurate at detecting hundreds of genetic disorders and chromosomal abnormalities, such as Down syndrome
 - The test analyzes cells taken from tiny fingerlike projections on the placenta called the chorionic villi, usually between 11 and 12 weeks into the pregnancy

Instrumentalist Response

- No connection between the test and any results
- No moral judgment can be made concerning the test based on the results
- If something bad occurs as a result of the test, that is irrelevant with respect to the test

Example, cont.

- What limits does the technology transcend?
 - *Limits of knowledge, i.e., our inability to determine the genetic characteristics of a child prior to birth.*
- What characterizes the limits?
 - *The lack of foreknowledge.*
- What is the motivation for transcending the limits?
 - *A desire to know what will happen and/or to decide whether to abort the unborn child.*
- What reasons are there to not transcend the limits?
 - *Perhaps we should not know, i.e., by using the technology we are playing God.*
- What is the desired end result of transcending the limits?
 - *At minimum, simply knowing the results of the test. But realistically it would probably be more than that, i.e., to decide whether or not to abort*

Example, cont.

- How does the technology allow the limits to be transcended?
 - *Via advanced medical devices that allows the doctor to retrieve cells from the woman's placenta and then to evaluate the cells.*
- What is necessary for the limits to be transcended?
 - *Special equipment, trained personnel, and a willing patient.*
- What are some possible side effects when the limits are transcended?
 - *Possible miscarriage, possible abortion (as a secondary effect), and the possible alteration of what it means to be human (in terms of our ability to know and our attitude toward life itself).*
- How long are the limits transcended?
 - *Just long enough to gain access to the information.*
- Who can (or should) act to transcend the limits?
 - *This is undoubtedly the most profound question. If abortion is wrong, then you can easily argue that the answer should be "no one".*

Alternative Response

- Answers to questions highlight
 - motives
 - ends
 - means
- Threefold moral evaluation
 - good means
 - questionable results
 - questionable motives



Comments

■ Instrumentalism

- Provides little if any framework for moral evaluation
- Overly simplistic and naïve
- Autonomy and value-laden are essentially observable qualities

■ Technology as transcendence

- Provides framework for moral evaluation
- Compatible with threefold moral evaluation
- Compatible with objective and normative moral standards

The End

Other Topics (in Paper)

- Discussion of
 - Determinism
 - Substantivism
 - Critical Theory
- Example: Chorionic villus sampling (CVS)
 - How each view would probably respond