The Ethics Void

Mike Gerwitz

LibrePlanet 2018
“Us” vs. “Them”
“We”
“We” Are All Responsible
Technology Is Pervasive
We Control What You See and What You Do

Behind the scenes at Donald Trump's UK digital war room

Cambridge Analytica uses data from social media and credit cards to deliver "extremely individualistic targeting" for Mr Trump.

06:29, UK, Saturday 22 October 2016

Mike Gerwitz
The Ethics Void
We Know Where You Are, Have Been, Will Be

TransUnion Trustev

OnStar®
We Live Inside Your Home
We Observe and Influence Your Children

Mike Gerwitz

The Ethics Void
Any Of Us Can Get Involved With These Things

But only some of us are prepared for when these situations present themselves
Something Feels Wrong
Did Edward Snowden Act Ethically?
Did Edward Snowden Act Ethically?

Received 50 second standing ovation during LP2016 keynote before he started speaking
Did Edward Snowden Act Ethically?

Contrast: Eric Holder had to promise that the US wouldn’t seek the death penalty in a civilian trial.
Moral Relativism
Descriptive
Moral Relativism
Meta-Ethical
Moral Relativism

No Universal Code of Ethics
Consequentialism

“The end justifies the means”
We hold these truths to be **self-evident**, that **all** men are **created equal**, that they are endowed by their **Creator** with certain **unalienable Rights**, that **among these are Life, Liberty, and the pursuit of Happiness**.

—United States Declaration of Independence

(emphasis mine)
All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

—Article 1
(emphasis mine)
No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks.

—Article 12

(emphasis mine)
- Originally created in 1992
- Now being revised, still a draft
Computing and communication technology enables the collection and exchange of personal information on a scale unprecedented in the history of civilization.

—§1.7, 1992 Code
(emphasis mine)

Technology enables the collection and exchange of personal information quickly, inexpensively, and often without the knowledge of the people affected.

—§1.6, 2018 Draft 3
(emphasis mine)
Computing professionals should establish transparent policies and procedures that allow individuals to give informed consent to automatic data collection, review their personal data, correct inaccuracies, and, where appropriate, remove data.

—§1.6, 2018 Draft 3 (emphasis mine)
Computing professionals should only use personal data for legitimate ends and without violating the rights of individuals and groups. [...] Only the minimum amount of personal information necessary should be collected in a system.

—§1.6, 2018 Draft 3
(emphasis mine)
- Health Insurance Portability and Accountability Act of 1996
- Defines Protected Health Information (PHI)
HIPAA

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- Can request own records for inspection
- Can correct information that is wrong
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- Can request own records for inspection
- Can correct information that is wrong

- Requires written consent for sharing PHI outside certain parties
- Must disclose minimum amount of PHI necessary to provide service
Is HIPAA “Good”?
What Is “Good”?
Is This “‘Good’”?
More Or Less “Good” Than HIPAA?

- **ID Check**: Present in ID databases
- **Address**: Any match with transaction
- **Email**: Known, reputable, working
- **Telephone**: Account history and status
- **Financial**: (Cross-) merchant history
- **Behavior**: Browsing, velocity, typical pattern
- **Location**: IP, proxy, network, deep location
- **Device**: OS, browser, VM, history
- **Mobile**: Account, tenure, location, network
- **History**: White/gray/black lists
- **Machine Learning**: Constant Improvement
Is This “Good”?

KRYPTOWIRE DISCOVERS MOBILE PHONE Firmware THAT TRANSMITTED PERSONALLY IDENTIFIABLE INFORMATION (PII) WITHOUT USER CONSENT OR DISCLOSURE

Tuesday November 15, 2016
This Is “Bad”

KRYPTOWIRE DISCOVERS MOBILE PHONE FIRMWARE THAT TRANSMITTED PERSONALLY IDENTIFIABLE INFORMATION (PII) WITHOUT USER CONSENT OR DISCLOSURE

Tuesday November 15, 2016
No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks.

—Article 12
(emphasis mine)
Privacy Is A Human Rights Issue
Personally Identifiable Information (PII)
[...] any information about an individual maintained by an agency, including (1) any information that can be used to distinguish or trace an individual’s identity, such as name, social security number, date and place of birth, mother’s maiden name, or biometric records; and (2) any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information.

—NIST SP 800-122

Linked—logically associated with other information about the individual

Linkable—possibility of such an association
Best Security Practices Can Help to Guide Code of Ethics for Privacy
Organisation for Economic Co-operation and Development (OECD)

- Established in 1961
- 35 member countries
  - Referenced internationally
  - A foundation for the EU’s Data Protection Directive
Limit PII collection; obtain lawfully and by fair means, with knowledge or consent of data subject
OECD Guidelines

- Collection Limitation
- Data Quality
- Purpose Specification
- Use Limitation

- Security Safeguards
- Openness
- Individual Participation
- Accountability

*PII relevant to purposes for which they are used; accurate, complete, up-to-date*
OECD Guidelines

- Collection Limitation
- Data Quality
- Purpose Specification
- Use Limitation
- Security Safeguards
- Openness
- Individual Participation
- Accountability

Purposes specified before or at collection; only used for stated purposes
OECD Guidelines

- Collection Limitation
- Data Quality
- Purpose Specification
- Use Limitation

- Security Safeguards
- Openness
- Individual Participation
- Accountability

*PII should not be disclosed or used for unspecified purposes, except with consent or authority of law*
OECD Guidelines

- Collection Limitation
- Data Quality
- Purpose Specification
- Use Limitation

- Security Safeguards
  - Openness
  - Individual Participation
  - Accountability

**PII reasonably protected against unauthorized access, destruction, use, modification, or disclosure**
OECD Guidelines

- Collection Limitation
- Data Quality
- Purpose Specification
- Use Limitation

- Security Safeguards
- Openness
- Individual Participation
- Accountability

*Policy of openness about developments, practices, and policies for to PII; establish existence and nature of PII*
OECD Guidelines

- Collection Limitation
- Data Quality
- Purpose Specification
- Use Limitation

- Security Safeguards
- Openness
- Individual Participation
- Accountability

Right to obtain data in reasonable and intelligible manner; challenge denials; challenge to erase or amend data
OECD Guidelines

- Collection Limitation
- Data Quality
- Purpose Specification
- Use Limitation

- Security Safeguards
- Openness
- Individual Participation
- Accountability

*Data controller should be accountable for complying with measures that give effect to these principles*
Transparency in data collection; transfer; use; and methodology, with a clear and fair procedure to inspect and amend those data, both raw and derived.
Framework Code of Ethics: Transparency

Transparency in data collection; transfer; use; and methodology, with a clear and fair procedure to inspect and amend those data, both raw and derived

- User must be made aware in an apparent and intelligible manner
  - Even for non-PII
- Must be transparent with algorithms used for data processing
- Compromise of data by an attacker counts as a “transfer”
Explicit consent to collection, transfer, and use of both PII and any data not offered by the user

- PII must *always* be consented
- Data explicitly entered by user is consented to first party
- *Any* data transferred to third parties must be consented
Why Don’t All Businesses Follow These Guidelines?
Surveillance Capitalism
“More Relevant Customer Experience”

Strong Influence Over Your Opinions and Actions
Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

—Article 19
(emphasis mine)
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(emphasis mine)
“We’re following the law, so we must be ethical”
- The law is a *baseline*
- It may even be *completely misguided or unethical* to some (moral relativism)
“We’re following the law, so we must be ethical”
- The law is a baseline
- It may even be completely misguided or unethical to some (moral relativism)

You may be collecting data “for” the declared purpose, but do you really need it?
- Is there actually a technical need?

“Legitimate” in ACM Code of Ethics falls short
Example:

Can You Use GPS Anonymously?
Even some GPS mapping programs can work just fine without network access (e.g. OsmAnd)
Software Often Betrays Users

We watch how you drive from home to the movies. We watch where you go afterwards.

—Mitch Lowe, MoviePass CEO
What was that about transparency and consent?
Programs That Keep Secrets Aren’t Transparent or Safe

- True transparency and consent requires ability to inspect source code
- Users must be able to compile the code to have confidence that it actually represents the program being run
True transparency and consent requires ability to inspect source code

Users must be able to compile the code to have confidence that it actually represents the program being run

The only reason to hide source code is to keep secrets from the user!
Keeping Secrets ≡ Keeping Control

- Ability to build form source gives the user the ability to modify the program and reclaim control
All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

—Article 1
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—Article 1
(emphasis mine)

- Is it dignifying to have your privacy stolen from you?
- Has everything covered been in the spirit of brotherhood?
Everyone has the right to life, liberty and security of person.

—Article 3
(emphasis mine)

No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.

—Article 4
(emphasis mine)
The User Is Held In Servitude
Philosophy of Control

Don’t Ask

What should we allow the user to do?  
How should we commoditize the user?  
How do we lock in the user?  
How do we capitalize?

Do Ask

What should we empower the user to do?  
How should we build mutual relationships with the user?  
How do we earn the respect of the user?  
How do we socialize?  
How do we act in a spirit of brotherhood?
Philosophy of Control

Don’t Ask

■ What should we allow the user to do?

Do Ask

■ What should we empower the user to do?
<table>
<thead>
<tr>
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■ How do we socialize?

■ How do we act in a spirit of brotherhood?
User Freedom $\equiv$ Software Freedom
Software Freedom Is A Human Rights Issue
Moral Imperative
Categorical Imperative

Act as if the maxims of your action were to become through your will a universal law of nature.

—Immanuel Kant
What About Moral Relativism?
Normative Moral Relativism

Holds that, because nobody is right or wrong, we ought to tolerate the behavior of others even when we disagree about the morality of it
We should fight for what we think is right!

But we won’t always agree universally.
Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

—Article 19
(emphasis mine)
Serve the user, not oneself
A Moral Foundation: The Four Freedoms

- 0 Run program for any purpose
- 1 Study and modify to suit your needs
- 2 Share with others
- 3 Share changes with others
A Moral Foundation: The Four Freedoms

0. Run program for any purpose
1. Study and modify to suit your needs
2. Share with others
3. Share changes with others

Corollary:
Development model for creating potentially higher-quality software
A Moral Foundation: The Four Freedoms

1. Run program for any purpose
2. Study and modify to suit your needs
3. Share with others
4. Share changes with others

Corollary: “Open Source” Development model for creating potentially higher-quality software
Why Is “Open Source” Popular?

- “Given enough eyeballs, all bugs are shallow” (Eric S. Raymond, “Linus’s Law”)
  - A successful development model
  - *But it’s not always true*
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  - But it’s not always true

- Other people can fix bugs for me
Why Is "Open Source" Popular?

- “Given enough eyeballs, all bugs are shallow” (Eric S. Raymond, “Linus’s Law”)
  - A successful development model
  - But it’s not always true

- Other people can fix bugs for me

- Everyone else is doing it!
- Looks good on a résumé / recognition
- Attract talent to business
- Feels good to give back
Open Source Misses the Point
Open Source Perpetuates the Void
Conformity Bias / “Groupthink”

Which line is as long as the first?

(1) 

(2) 

(3) 

Solomon Asch, “Opinions and Social Pressure”
People Follow Their Community and Leaders
Don’t open source anything that represents core business value.

— Tom Preston-Werner, GitHub Founder
“Open Source (Almost) Everything”
92% Americans Satisfied With Own Moral Character

75–80% Think They’re More Ethical Than Peers
Moral Myopia

Difficult for ethical issues to come into focus
Ethical Fading

Distancing self from unethical implications
Moral Disengagement
Creating another reality to rationalize actions
Don’t Be Judged By Your Inaction
Be mindful of issues that give rise to consequences in violation of these principles and act in good faith to mitigate those issues

- Continuous education (self and corporate)
- Make ethics part of your development process
- Ask yourself: “Am I behaving ethically?”
Impart your knowledge, skills, and experience to empower others, recursively.

- Teach others how to apply these principles
- Teach others how to teach others
- Advocate for what is important to you
Framework Code of Ethics

0. **Serve the user**, not oneself

1. **Transparency** in data collection; transfer; use; and methodology, with a clear and fair procedure to inspect and amend those data, both raw and derived

2. **Explicit consent** to collection, transfer, and use of both PII and data not offered by the user

3. **Be mindful** of issues that give rise to consequences in violation of these principles and act in good faith to mitigate those issues

4. Impart your knowledge, skills, and experience to **empower others**, recursively
Pragmatic Ethics

Societal norms and morals evolve as a result of inquiry
“We”
Free Software Advocates
Educators
You.
Mike Gerwitz
mtg@gnu.org

Slides Available Online
https://mikegerwitz.com/talks/ethics-void

https://mikegerwitz.com/talks/sapsf

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