

Requiem for a Dream

On Advancing Human Rights via Internet Architecture

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Summary

- Critical assessment of the belief that we can promote or protect HR through protocol standards and “architecture”
- This tendency oversimplifies the complex relationship between technology and society
- Human rights are primarily a political and institutional accomplishment, not a matter of technical design
- There are contradictions, limitations and potentially negative effects of trying to make policy or protect/enable rights by “design”

What they assert

- Human rights can be protected “by design” or “through Internet protocols”
- Technologists have a moral and legal responsibility to do so (Cath & Floridi, 2017)
- Universal Declaration of Human Rights (UDHR) can be enabled through Internet protocols (Cath and Floridi, 2017) or “baked into the architecture at design time” (Brown et al, 2010).
- Internet connectivity is “an enabler of human rights,” and “its architectural design converges with the human rights framework.” (IRTF HRPC, 2017)
- The “human-rights-enabling characteristics of the Internet might be degraded if they are not properly defined, described and sufficiently taken into account in protocol development.” (IRTF HRPC, 2017)

Two distinct positions

- A stronger “code is law” claim
- A weaker claim that Internet architecture/infrastructure “mediate” human rights

Differences in the two perspectives

Code is law

- Focuses on *ex ante* initial design
- Linear and deterministic:
 - Whoever makes the design makes the rules

Architecture mediates rights

- Focuses on *ex post* attempts to leverage infrastructure to regulate
- More of a two-way relationship:
 - Infrastructure as site of struggle

Critique

Requiem for a dream

Problem 1: The Internet is already “designed”

- New IETF protocols and standards work make marginal adjustments and modifications to the general architecture of the internet
- If new standards are needed to protect human rights, it means that its architecture does not necessarily protect human rights

Problem 2: The UDHR is too complex and too laden with baggage

- Not all rights are relevant to ICTs or connectivity
- Even the most relevant rights contain internal conflicts
 - Free expression vs privacy
 - Free expression vs. intellectual property
 - Due process for accused vs. swift justice for victims
 - The HPRC recognizes this, but its response is lame:
 - “the different affected rights need to be balanced. “
 - “decisions on design and deployment need to take [rights conflicts] into account.”

Problem 3: Code is not law

- Where does code come from?
- Code and architecture can be, and often are, overridden by laws and regulations

Case study: The IETF and CALEA

- 1994: Communications Assistance for Law Enforcement Act (CALEA) passed
 - Forced U.S. telephone companies to redesign network architectures to facilitate wiretapping of telephone calls by law enforcement
- 1999: IETF Raven group
 - Standards work on Voice over IP technologies asked to make Internet CALEA compliant
 - IETF refuses (RFC 2804, “IETF Policy on Wiretapping”)
- 2004-5: US Federal Communications Commission
 - Dept of Justice, FBI, and Drug Enforcement Administration file joint petition to expand CALEA to broadband providers, Voice over IP telephony, and instant messaging
- Post-2005: FBI, NSA continues to fear “going dark”

Lessons from the CALEA case

- “Bad guys” (anti-HR forces) can use the standards process too
- Code was code and law was law
 - IETF refusal to make surveillance-enabling architecture modifications did not settle the matter
 - After FCC intervention, law dictates code
 - Norms, code, law and markets all elements in a political struggle over policy

Problem 4: Politicizing standards

- If standards developers are in the business of translating, protecting, and ‘balancing’ rights they are de facto policy makers
- If so, others besides HR advocates will become interested in standards and protocol development
- Standards and protocol developers open themselves up to the charge that they lack the legitimacy to define, “enable,” enforce or balance rights

Problem 5: An ahistorical STS

- The “mediation” argument better captures the reciprocal influence between technology and society
- But it is true of every technology, not just the internet
- Regulation and control always depend on the specific technical features of the communications medium
 - The case of the printing press
 - The case of radio broadcasting
- Internet, press and radio were “technologies of freedom” not because of their technical architecture, but because they were new technologies and the state did not yet know how to control them

Problem 6: Design is *ex ante*; knowledge of rights violations is *ex post*

- Assessment of human rights impact can only occur *ex post* (after the fact)
- Standards or protocols that seem to be secure or protective at the moment of design may have unintended consequences...
- ...or creative people may think of ways to subvert them

Problem 7: Rights-based discourse at IETF does not have an effect on our HR

- Changing the language used to describe technologies, protocols or standards to one that is closer to human rights language will not have a significant impact on our human rights on the Internet

Why Wake up?

- It is a nice dream to advance human rights through Internet architecture and Internet protocol design
- But the actual status of rights on the Internet depends on political, economic, legal and cultural factors as well as technical standards
- Waking up from the dream can be painful but it's necessary.

Discussion

