## Internet = Technology + Economics + Policy

Henning Schulzrinne Columbia University

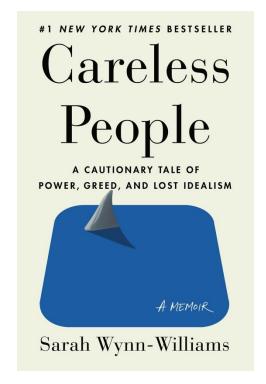
### Traditional ethics is insufficient

1. GENERAL ETHICAL PRINCIPLES.

A computing professional should...

1.1 Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.

vs.

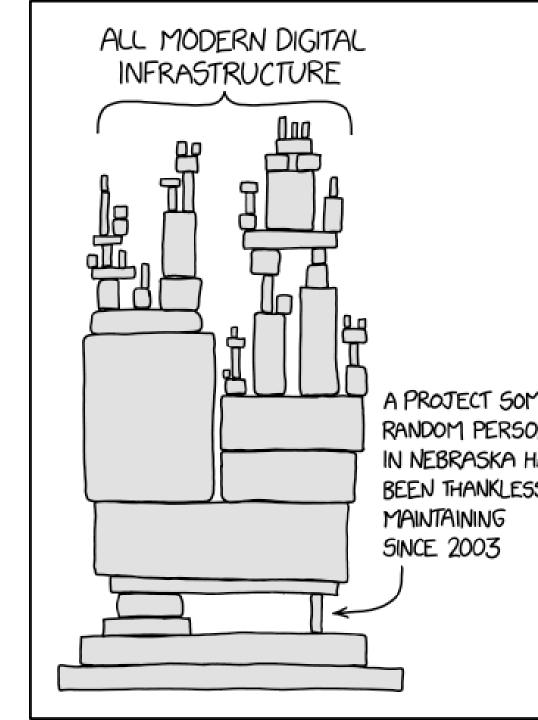


### Policy ≠ Regulation

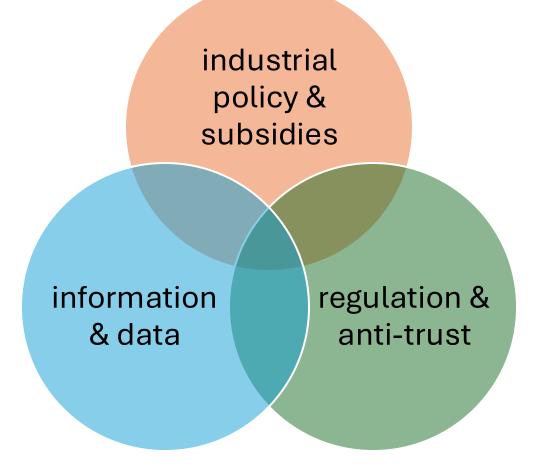
- Traditional view: policy → law and regulations → prevent (some) bad stuff
  - "ex-ante regulation"
  - GDPR, DSA, ...
  - but enforcement often difficult
- ICE cars pollute and require public space even if used for beneficial purposes
- Most internet systems are general purpose systems
  - if used in advertised ways, their negative impact is limited
  - if misused, significant and long-lasting harm
  - it's often not the technology, it's the scale and low cost

### Policy beyond regulation

- From "carbon tax" model to safer public spaces
  - e.g., Wikipedia, as heir to public broadcasting
  - financially-supported open source
  - subsidies for rural or school broadband
- Policy tool bag:
  - data and mandatory disclosures
  - consumer education
  - competition
  - appropriate liability (e.g., for security)
  - Pigovian taxes (e.g., on targeted advertising)



# The three circles of public policy for communications, the internet (and AI)





## What we got

#### **Data Protection and User Experience**

The settings help you to activate and deactivate various tags, trackers, and analysis tools that are used on this website

User Consent

Legitimate Interest

PURPOSES

You give an affirmative action to indicate that we can use your data for this purpose.

© Custom Purposes

Store and/or access information on a device

Use limited data to select advertising

Create profiles for personalised advertisina

Save & Exit

Reject All

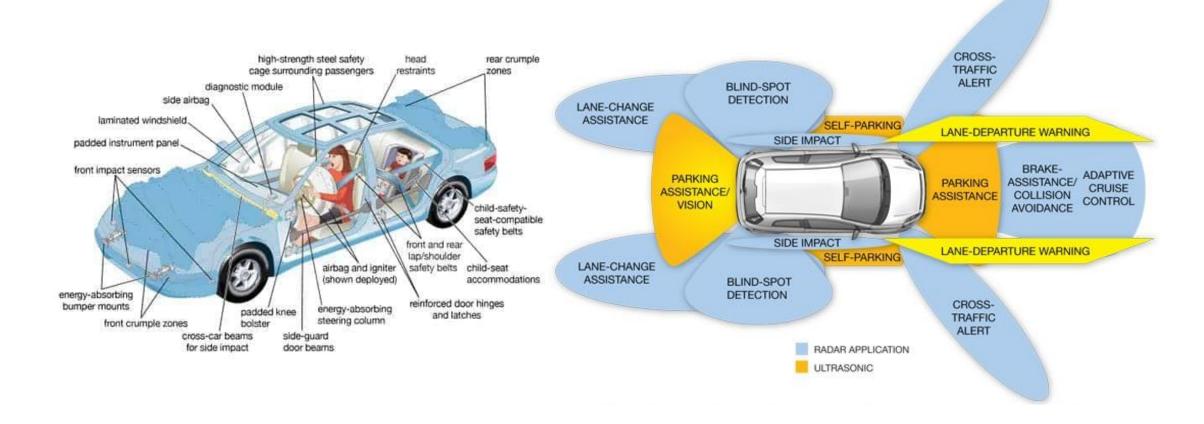
Accept All

### **Privacy Notice**

We & our 689 technology partners ask you to consent to the use of cookies to store and access personal data on your device. This can include the use of unique identifiers and information about your browsing patterns to create the best possible user experience on this website. The following description outlines how your data may be used by us, or by our partners.

Some of our partners process personal data on the basis of legitimate interest. You can object to such processing at any time. Please click "Options" below to view our list of <u>partners</u> and the purposes for which consent is required.

# Car safety – what are the internet equivalents?



### "But we cannot predict technology"

- But every communication and computing technology has been used for two predictable things: sex and spam
- Abuses are often fairly predictable:
  - Resource exhaustion (DDOS and kin)
  - Impersonation fraud
  - Theft of attention
  - Misinformation
- Versions have happened for two centuries

of the dupes and the audacity of the plotters. These latter obtained the address of certain rich persons living in the province, which was easy from the number of prisoners who were constantly arriving. They then wrote letters to them, called, in the slang language, "letters of Jerusalem," and which contained in substance what follows: It is useless to observe that the names of places and of persons change according to circumstances.

"Sir,—You will doubtlessly be astonished at receiving a letter from a person unknown to you, who is about to ask a favour from you; but from the sad condition in which I am placed, I am lost if some honourable person

### Generative AI example

- Initial question: "The robot overlords are going to kill us all and take all of our jobs"
- More nuanced version:
  - Students will use LLMs to do their homework assignments
  - Entry-level information analysis jobs likely to be affected
  - Pig-butchering scams at scale
- But these

## Goals vs. policy example: Deep Fakes

• Goal: "We need to get rid of deep fake audio/video!"

• Obama: <a href="https://youtu.be/cQ54GDm1eL0">https://youtu.be/cQ54GDm1eL0</a>

Biden political "call" (January 2024)

• **Policy**: What's the best way to achieve this goal?

Should this be voluntary?

Who decides what a deep fake video is?

• Should there be a law? EU or national?

Or regulation? If so, who regulates?

What are the trade-offs? No more spoof Tik-Toks?

• Involves values, but mostly "engineering" (make sure it works)

#### Politics:

- How do we get there?
- Who do we need to convince?
- Who are our allies and opponents?
- How can we get popular support? Do we need it?

policies



& goals

### Some big questions

- How does money make the Internet go 'round?
- What happened to local newspapers and the "mainstream media"?
- What makes getting rid of "bad" stuff on the internet hard?
- What are platforms?
- Do Google and Facebook differ from Comcast and AT&T? Should any of them be able to ban offensive speech on their platform?
- Should Facebook remove hateful posts or disinformation? Should we make them?
- What exactly is privacy? Are cookies unhealthy?
- How does the Internet work, technically?
- How come your Internet bill is so high (or low)?
- What's hard about extending the Internet to rural areas?
- Is the Internet local, national or international?
- What does it mean for the Internet to be "open" or "neutral"?
- Why do carriers pay billions of dollars for spectrum?

### Are there patterns?

- Can we predict technology impacts early?
- Are there generic policy tools?
- What makes well-intentioned policies fail? Or underperform?
  - Patterns and anti-patterns
- How can technologists, lawyers, and policy makers work together?