POLICY VACUUMS AND CONCEPTUAL MUDDLES

- A new technology appears
  - Muddle: what sort of thing is it?
  - Policy vacuum: how should it be used/sold/regulated/ etc?
EXAMPLE: E-CIGS

- No tobacco or second-hand smoke, so not a cigarette
- ...but does contain nicotine and does worsen air quality
Some studies suggest they may help smokers quit.

Over 2M middle school and high school students were e-cig users in 2016.

That’s 11% of high schoolers and 4.3% of middle schoolers.

Part of appeal for youth is that e-cigs come in flavors.

Emergence of small, distributed e-liquid industry.
SHOULD THEY BE REGULATED LIKE CIGARETTES?

- In 2016 the Food and Drug Administration (FDA) extended the Center for Tobacco Products’ (CTP) regulatory authority to include e-cigs
  - FDA regulates manufacture, import, packaging, labeling, advertising, promotion, sale, and distribution
- In 2017 the FDA loosened restrictions on e-liquid to focus on combustible cigarettes and tobacco
INSTAPOLL QUESTION: WHERE DO SCOOTERS BELONG?

- In the road
- In the bike lane
- On the side walk
- In a trash pile
EXAMPLE: SCOOTERS

- What sort of transportation (public/private/service) are scooters?
  - Who is responsible?
- How should they be regulated?
  - Safety issues?
  - Environmental issues?
  - Other impacts?
WHAT ABOUT THEFT?

- Is using a bash script the same thing as breaking and entering?

- “Stealing is stealing, whether you use a computer command or a crowbar.” — Carmen Ortiz (former US Attorney for Massachusetts)
CASE STUDY: AARON SWARTZ

- Co-author of RSS
- Co-programmer of Reddit
- Co-wrote the Guerilla Open Access Manifesto
- Co-founded Demand Progress
SWARTZ AND JSTOR

- JSTOR is a large, digital library repository of academic content (books, journals, etc)
  - Unlimited downloading through annual subscription fee
- In 2011 Swartz was indicted with multiple felonies for downloading several million academic articles
  - Articles downloaded through MIT, which has a subscription
- JSTOR terms of service prohibit bulk downloading of articles
  - JSTOR declined to pursue charges after articles were returned
WHAT WAS SWARTZ’S CRIME?

- Prosecuted for violations of the Computer Fraud and Abuse Act (CFAA)
- In Federal District Court charged with four felony counts of wire fraud, computer fraud, unlawfully obtaining information from a protected computer, and recklessly damaging a protected computer
- Indicted by Middlesex County Superior Court grand jury for breaking and entering with intent, grand larceny, and unauthorized access to a computer network
  - Charges later dropped
- 9 more felony counts added to federal indictment for a 50 year prison sentence, and a fine of $1M to pressure Swartz into plea bargain
  - Swartz rejected deal
OUTCOME

- In 2013 Swartz committed suicide
- Federal prosecution dropped the charges
  - Whether these charges would have held up in court still in question
- Legislation “Aaron’s Law” introduced to remove terms of service violations from being covered under the CFAA
  - As of 2016 still has not been voted on
- Legislation “FASTR” introduced so that federally funded research would become freely available to the public 6 months after publication
  - Bill bipartisanly introduced to the House of Representatives in 2017
- Increased open access to academic material in Swartz’s home state of Illinois
WHY SUCH LARGE CHARGES FOR SUCH A SMALL OFFENSE?

- Average sentence of a convicted rapist in the US is about 10 years with the actual time served around 5 years.
- Outside of life and death sentences, average sentence for spousal murder is about 13 years.
WHAT ISSUES DOES THE SWARTZ CASE RAISE?
What conceptually is encryption?

What policies should apply to encryption?
HOW DO WE FIT INTO THIS?

- Policy-makers do not necessarily understand technology
- We must be willing and able to contribute to the conversation
  - Both at a government level and among non-technical friends!
- We must contribute to the political process
  - Age 18-35 voters make up 31% of electorate but contributed only 19% of votes
Numerous organizations involved in this cause

- Computer Professionals for Social Responsibility (CPSR)
  - [http://cpsr.org/](http://cpsr.org/)
- Electronic Frontier Foundation (EFF)
  - [https://www.eff.org/](https://www.eff.org/)
- Online Ethics Center
  - [http://www.onlineethics.org/](http://www.onlineethics.org/)
- ACM Ethics
  - [https://ethics.acm.org/](https://ethics.acm.org/)
REFERENCES

- [https://www.scientificamerican.com/article/e-cigs-and-second-hand-vaping/]
- [https://www.fda.gov/TobaccoProducts/Labeling/ProductsIngredientsComponents/ucm456610.htm]
- [https://www.theguardian.com/technology/2013/jun/02/aaron-swartz-hacker-genius-martyr-girlfriend-interview]
- [https://sparcopen.org/news/2017/fastr-reintroduction/]
REFERENCES

- <https://bjs.gov/content/pub/pdf/SOO.PDF>
- <https://www.bjs.gov/content/pub/ascii/SPMUREX.TXT>
- <https://www.npr.org/2016/05/16/478237882/millennials-now-rival-boomers-as-a-political-force-but-will-theyactually-vote>