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

**Smoke without fire**
Suck on an e-cigarette and it produces a cloud of nicotine-carrying vapour with none of the toxic by-products of burning tobacco.
SOCIETAL EFFECTS OF E-CIG MARKET GROWTH

- 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
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 bipartislanly 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.
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/
- Electronic Frontier Foundation (EFF)
  - https://www.eff.org/
- Online Ethics Center
  - http://www.onlineethics.org/
- ACM Ethics
  - https://ethics.acm.org/
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