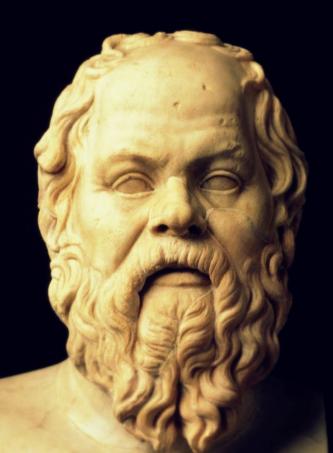
Modern Technologies and Conflicts

Information Technology and Society

25.10. 2017 Jakub Drmola

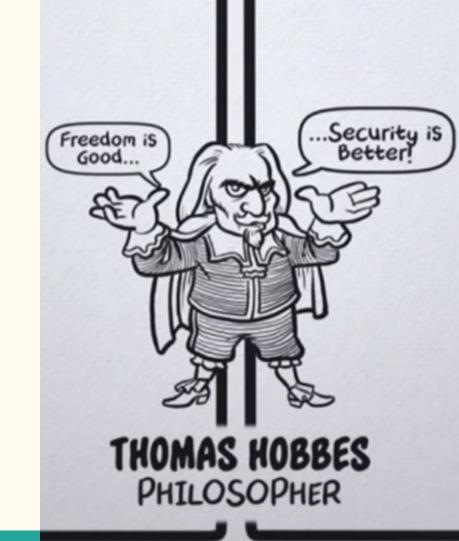


Freedom versus security

- or privacy versus security

- ongoing massive debate over this question in cyberspace

- no good solution in sight



Cybercrime

- anything from phishing, to ransomware, RATs and black market
- evolves with technology itself
- key role of anonymity
- lack of user awareness and good security practices
- less anonymity online would make it harder for perpetrators to get away with it



Somewhere in Nigeria

Piracy

- unauthorized distribution of intellectual property
- printing press > magnetic tapes > floppy discs > CDs/DVDs > internet > ???
- securitization (ethics, economy and hard security)
- lacking/slow adaptation of businesses
- stronger IP protection laws might serve as a deterrence

YOU WOULDN'T DOWNLOAD The Pirate Bay

Hacktivism

- political and ideological activism in cyberspace, using direct hacking, DDoS, disclosing secrets, propaganda, doxing, defacements, etc.
- beginnings in 2008
- grows strong from 2010
- currently a well established modus operandi
- stricter laws and sentencing could discourage perpetrators



Organizing protests

- using social media to organize and coordinate protests, looting, riots, rallies etc.
- first seen in Iran 2009
- visible issue since 2011
- London riots, Arab spring, India, USA
- shutting off the service during the events would stop people from using it to selforganize



Terrorism online

- promotion of violence, extremism, intolerance, dissemination of guides, recruitment, inciting hatred and fear
- gradual development from 90s
- became major force in 2010s
- dominant issue with ISIS
- demands for stricter censorship by content curators



Privacy and corporations

- accumulation of personalized data for advertising and other purposes, interconnected platforms, ecosystems
- mainstream boom circa 2007-2012
- social networks of all sorts (facebook, twitter, ...)
- access to their service in exchange for private data
- is it a problem?
- or just a matter of personal choice and responsibility?

facebook

HELPING YOU SPY ON PEOPLE ONE CLICK AT A TIME.





Surveillance

- metadata collection, intrusion into company systems, weakening of protections, dragnet collection
- roots in WW2 and Cold War, all in the name of security, many conspiracy theories
- Snowden and NSA PRISM reveal, 2013
- intensive and extensive data collection might serve to prevent security threats such as terrorism, etc.



Encryption

- runs through all the issues above, typical double-edged technology (TOR, crypto\$)
- long history, today absolutely indispensable and ever-present
- ongoing fight for weak/strong encryption: states vs. corporations vs. people
- "catching terrorists, endangering users"
- case: San Bernardino iPhone
- "solved" by forcing backdoors and masterkeys

TO EDGAR A. POE, ESQ.

DR TH OGXEW PHEFYL NGUH LIA VOSMOD XDTbjs SNB ENVLNKSYO [CP TAO HIZGUOD Ta camyara ikkrixaja OWv TRODA Ke Jikin QUITBXFEE YGMOUL HA SLAAS INZ TODYRO DHB AFKXDOF ZONSMELL HA ON ONI ZOh Mfg WoViecXHB wuL NNA AFKSO iys(DV basfagaTaT SP71 CEWNSW bGenth aNjma soy Aul na Laky XDIx AS ICA JEK OF ANT NOTY TE ON ATE A SEB DNBLOU LPH NINIA atka diky MAO CEPHUXEA salz elf xMa xyKSge HuityW ggP qT10 Davj zvv Udacame nk VFHA IDah XWXTIAX Ye Ala agFyW XOOMEULMENT SS B ADOIA umey IPC GIOQUE NBLEmMQ nk LCOAN SAIRAIS NZQ agrjy Kauch RZnK CIA AL MIX JDMNYJUJQX DDHABRI bzNL LsT, h FW exToYdy LIA VINOMFTV uddh VDJ JUTYOUN OW 2008 845 ALAN AND KYSXtJade as wur LQIgmxve Mo NJUKA aW ADGb Mig ARNMAGQ CMT 182 X180El 3SAWta CFo to yx fjeo IGITISTP int Vakyao ALXh qdJM QC[Pdo ludaA K vorA a gardEo uts alvI Kj emy in gas

VR/AR

- very probable and very close proliferation of virtual/augmented reality technology in society
- entertainment, communication, traveling, education, training, therapy... anything else?
- health risk (nausea, injuries, eyesight?, psychology?)
- societal and security risks?

