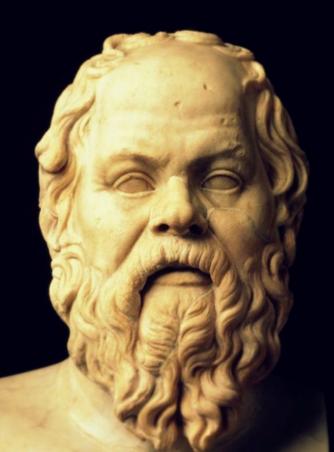
Modern Technologies and Conflicts

Information Technology and Society

Jakub Drmola

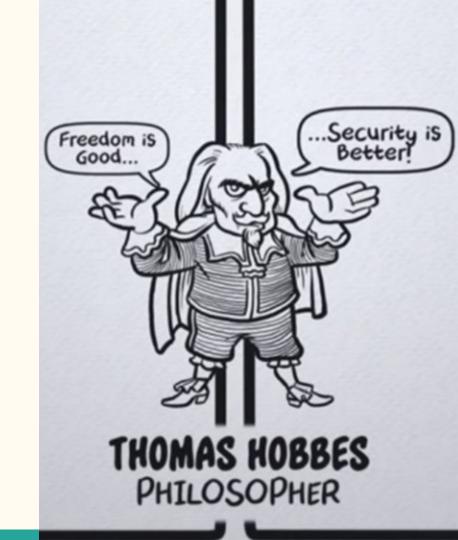


Freedom versus security

- 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 VOSMOO xDTbjs SNB ENVLNKSYO [CP TAO HTZGUDO Ta camyners ikferixafe OWv TRODA Re Jiker QUITBXFEE YGMOUL AA SLAAS AVZ TODYRO DHB AFKXDOF ZONSMELL HA ON ONI ZOh Mfg WoViecXHB WIL NXA AFKSO iys(DV basisgeTd" SPZI CEWNSW bGenth aNjma sov Aulta LakyXDIx AS ICA JEK OFOAN TRAGTO MIEL LOI BAR SEB DNBLOU LPH NINIA atka diky MAO CEPHUXEA salz elf xMa xyKSge HuityW QgP qT10 Davj xvv Udicame nk VFHA IDah XWXTIAX Ye Afi agFyW XOOMKULMINE SS & AOOiA uney rec GIOQgg NBLEmMQ nk LCOAN SAIRAIS NZQ agrjy Kauch RZnK CID AL MIX JDMNYIUJQX DDHABRI bzNL Lsrdh rW exToYdy LIA VrgoMFrv udy AD) ITALOLAN CM IDNR SHE ATOHEAV KYSXIJAJE 28 WUL LQIgmxvr MS NJUKA AW ADGb Mig ARNMAGQ CMT INZ XLHOEL XSAWCB CFo to yx fjeo IGIGISLP inz Vakyao ALXh qdJM QC[PJD ludaA K YOTA & GIRAED UTS AIYI 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?



1982: trans-siberian sabotage

2000s: shot mafia boss

2008: Lodz trams



2014: steel mill hack