

Civic Cybersecurity and Digital Self Defence

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Digital Self Defence

What is Cybershow?



- The Cybershow is a British podcast and blog
- It's two years old
- Has about 10,000 listeners
- Presented by Helen Plews and Andy Farnell who are computer scientists and security experts

Why was it set up?



- To educate the public about computer science and cybersecurity
- To expose technological abuse, harms and fraud
- To promote equal opportunities in tech
- To promote sustainability in tech
- To promote civic cybersecurity
- To highlight and fight against technofascism
- To represent our country (National Security)

Why at the Old Town Festival?

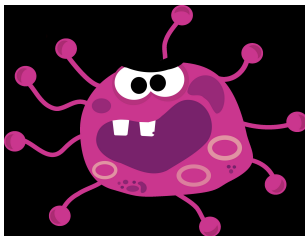


- Arts, music and theatre are a powerful way to communicate
- Small, local community can overcome global tech alienation

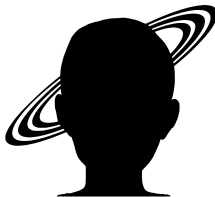
What is digital self defence?



- Started as add-on to women's self-defence classes
 - anticipate threats and counter before they happen
 - Spot power abuse: Wayne Couzens - Sarah Everard
- Defence against harms done by software and digital products. Tracking, spouse-ware, boss-ware.
- Techniques and weapons in an information war.
- Where cyber-security meets social security, psychological safety, digital and human rights.



- Malware versus toxic technology
 - Classical cybersecurity focuses on computers
 - Malware: narrow definition. Virus, worm, Trojans.
 - old model: perimeter and safe/private zone
 - Attack is against the tech system itself.
 - modern cybersecurity assumes the system is already compromised
 - Attitude: Blame user: "Don't click on that!"



- Toxic tech:
 - Focus is on the harms done "Against the person."
 - rob, spy, influence, disempower, gaslight, misinform, distract and sap, terrorise. . .
- Defence no longer **just** at technical level. Intellectual self-defence, AKA "critical thinking"
 - how to spot a phish/scam, how to counter a bad argument, how to research and fact-check
- Harms to **everyone** Society. Democracy. The Planet.

What role does bad software play in waste?



- At present, digital tech is **completely unsustainable**
- Commercial software is the only product that become less efficient every year. The same application does less, costs more and uses more energy.
- Inefficient software means we need to build ever more powerful computers. Example: Windows 10/11
- Bad software hijacks your devices and robs you of ownership (eg printers)
 - need to be thrown away. Example: Apple battery "update".
- "AI" and "Blockchains" use "planet-killing" amounts of energy.

How does Big Tech contribute to e-waste?



- Inefficiency and ineffectiveness of proprietary software
- Monopoly: but tech doesn't scale like traditional industry

Forced obsolescence



- "defective by design" versus "planned" obsolescence
- greed, business, consumers and quality
- hiding behind fake "security"
- fused logic, remote kill switches, logic bombs,
- hardware tamper/sabotage, remote sabotage
- 7Rs, Right to Repair, Ownership

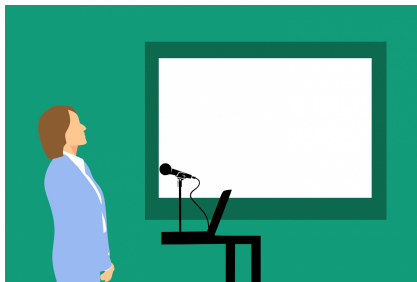


- Push economy (not demand driven)
- Deliberate "phasing out" of reliable working tech
 - 3G, copper coms infrastructure
- Greenwashing and techno-fantasism (eg "paperless")
- Dishonesty around tech during COVID

What do we mean by "Civic Cybersecurity"?



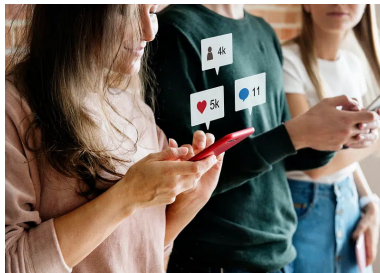
- Each individual citizen has a right to be secure in their digital lives
 - that includes security from big corporations and governments that misuse technology and lie about its benefits.
 - Your child and grandmother deserve the same level of cyber protection under the rule of law as Goldman-Sachs, Morgan Stanley and the military.
 - We believe in teaching kids "digital self defence" and rational scepticism around tech as young as 6, at primary school.



- Inform and enlighten. Getting people to recognise:
 - technological dependency
 - how they're manipulated by tech
 - how to achieve autonomy and self-sufficiency (remedy)



- Kids get it! Adults not so much!
- Painful truths
 - The "Techlash". Peak smartphone. Peak civilisation.
 - Big pushback from Gen-Z and Alphagen
 - 20% decrease in social media and smartphone use



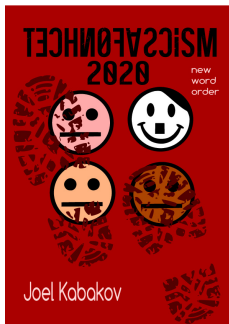
- Big picture thinking (embrace complexity and side effects)
 - "Smart cities" are dumb (carceral gulags)
 - Example: Optimised pricing via search engines leads to massive CO2 from planes (cheaper via Paris with two changes)
 - Example: AirBnB destroyed city housing
 - Apps create economic thinking above morality/environment

What is technofascism?



- Technofascism is the joining of business and state for furthering a non-democratic, illiberal regime through digital technology. Your phone owns and rules **you!**
 - Combines authoritarianism with surveillance capitalism to hand power to private corporations in place of elected government.

Elements of technofascism



- mass surveillance
- social/behavioural control
 - gamification of life
- disinformation and propaganda
- separation, division, atomisation
- censorship, region blocks/DRM
- secret laws/cybernetic justice



- Technology that undermines participatory civic society and democracy by:
 - harming autonomy, free-will of the people
 - replacing transparency with opaque social control, "algorithms"
 - wielding obscure and insidious "influence". Also known as cybernetic governance (N Wiener).



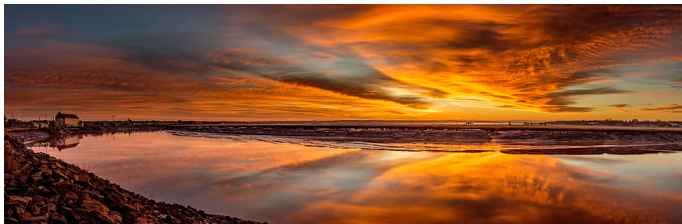
- We oppose technofascism because it:
 - Harms society **and** the environment.
 - We believe in liberal democracy
 - It's an abuse of technology. Turns technology from a tool into a weapon. As nerds and computer scientists who love technology and hate to see it abused.
 - Creates a brittle, dependent, dumbed-down society enslaved to corporate monopolies and pseudo-science.

Action: What can we do to reduce harmful effects?

a still tongue
makes a
happy life

- Don't be silent. Don't be "part of the problem"
- Overcome defeatism and learned helplessness
 - "there's nothing you can do"
 - "but all this is progress" (what is progress?)
 - "I don't want to be left behind"
 - "I don't want to be different" (contrast GenZ-Alpha)

Review your horizons



- Understand the limits of tech (eg apps for psychotherapy/dating)
 - diluted experience "Like turning down the colour on life"
 - Max Frisch
- David Graeber: "The ultimate hidden truth of the world is that it is something that we make, and could just as easily make differently"



- Don't buy a new phone or PC, You don't need it. (7 Rs)
- Use cash or digital cash.
 - Cashless costs 1.4% to economy
 - Civic resilience
 - Anonymity matters
- Don't install "apps": example food ordering app at restaurant.



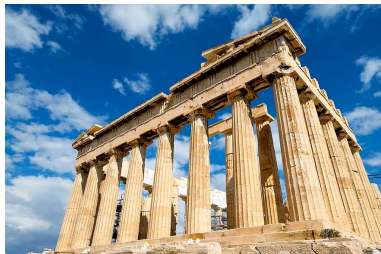
- Use British and European rather than American digital products
 - Don't use Microsoft, Google, Amazon or other US BigTech products
 - Many alternatives eg Protonmail, UK Hosting, Hetzner



- Fairtrade and "organic"
- Use (demand) Freedom Software
 - Ubuntu, Mint (Linux and BSD variants)
 - Eben Upton vs Anita Roddick



- find out about Freedom Software if you don't already know
 - Free software puts you back in control
 - make sure the things you buy and use run Freedom Software
 - spread the word about Freedom Software and alternatives to BigTech



- Understand that digital technology is not a market.
- Restore balance by fighting to:
 - increase the technological power and rights of citizens
 - decrease the powers and rights of corporations and governments

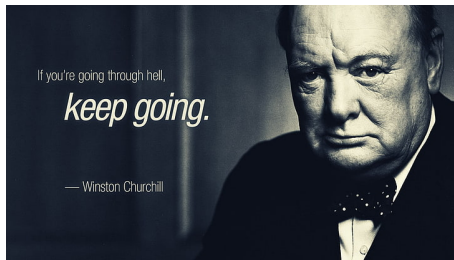
How is "Digital technology not a market?"



- Digital Technology is not a market because
- There is no demand driving supply. (Bernays, Lippman, Chomsky)
- Digital technology is an imposition, foisted, aggressively upon people.
- People are bullied:
 - You'll be "excluded".
 - You'll be "left behind".
 - You won't be "competitive".

DEATH OF DEMOCRACY

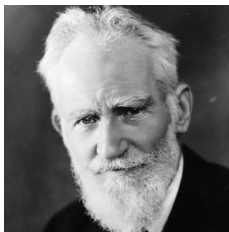
- Modern "democracy" only exists since WW2
- Trilateral Commission and Powell Memo (1971)
- Communication technology and Internet caused similar problem
- Search engines gave people "facts" and sharing (Arab Spring) (too empowering)
- "Social Control Media" and "AI" is the medicine to fix that.
- War on general purpose computing and on free information exchange.



- Once you recognise this you can start to resist, which means to make others adapt to you, for example bank, shops or school.
- People are afraid of expressing their wishes around tech. Made to feel we must accept what is given. Think you defer to "experts"? Experts are good. Listen to them! We are the experts, ask us! (Nobody knows whats going on)



- Active stance:
- Technology is a form of democracy. If you don't assert what you want someone else will *decide for you*, and those decisions will not be in your interest. You must participate and not be passive.
- Lobby and pester, educate your MPs. Cybersecurity is a political problem. Contribute: Example: We wrote a report for the Treasury about mandating cash: framed as a national security asset. Very nuanced and complex.



- It's counter-intuitive. Most environmental problems are made worse by selfishness. Driving a car instead of public transport. With digital technology selfishness actually helps.
- Paradox. Don't ask for justice, you **take** it. You are not standing up for yourself, but for everyone. Risk is ultimately being unselfish. Cowardly inaction is selfish.
- George Bernard-Shaw "The reasonable person adapts themselves to the world; the unreasonable one persists in trying to adapt the world to them. Therefore, all progress depends on the unreasonable person."



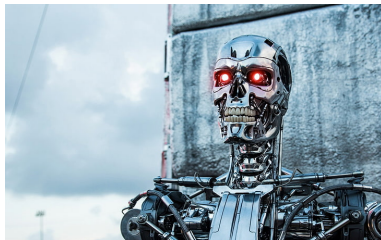
- Digital Technology violates fundamental principles of property law
- Knowledge of capability (hidden cameras and microphones)
- Ownership. Buy don't rent.
- Device autonomy and sovereignty
 - unwanted "updates"
 - orgs that try to install malware, schools, workplaces

What is "AI"?



- Disclaimer (I studied and researched "AI" since 1987. Built "Boltzmann machines" and "Perceptrons" in C code)
- Artificial Intelligence is best understood as:
 - Deception: "artifice = fake or deceptive" (etymology)
 - "Fake people". Attribution of human-like thought to machines.
 - A political rather than technological project

Politics of "AI"?



- Thought control: hiding unacceptable ideas and techniques so as to "legitimise" them.
 - Infowashing. Hide sources and pedigree
 - Stymie difficult questions
 - Re-frame power of tech industry. Momentum.
 - A quasi-religious ideological project - misanthropic, post-humanist etc

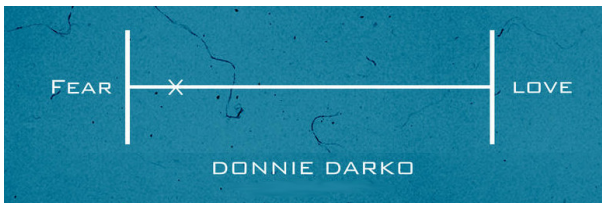
Problems with "AI"



- It's an "arms race"
- Makes you stupid. It's "de-education".
- Consumes **VAST** amounts of energy
- Is ill-defined, vague and unconvincing
- AI works directly against IA

Education

Failure of schools



- Schools fear talking about difficult or "taboo" subjects
 - parallels with sex education in 1950s
 - onus falls on smart/vigilant parents.
 - huge inequality viz home-schooled
 - start by reaching and educating teachers
- No in-house IT skills
- Under thumb of BigTech, lobbyists, sales



- Example: How to spot creeps online
 - kids are already sensitive to generational differences in language
- Confronting the "unreality" of life today
 - keyboard is a weapon with consequences
 - there is no "undo" in life
 - wishful and fantastic thinking

Challenge silly beliefs



- Kids are not "tech geniuses" (we must destroy this negligent myth)
 - kids are as confused and frightened as adults. Stop projecting.
- We need to do more earlier. Challenge negligence.
 - Starting at age 6/primary school
 - Secondary school is too late



- Education is for older people too
 - fight pernicious myths about older people too
 - cognitive and sensory decline, dexterity
 - Age-UK defunded since 2020
- Governments need to "get real" eg. NCSC conflicted, fail to find language, confused remit.



- By far the most **IGNORANT** class
- Law is a massive obstacle
- Laws and political agendas need changing
- Question and stand-on issues of technology law
 - rights, patents, copyrights, governance

Mental Health



- gore, horror, unfiltered war-zone footage
- porn-addicted adolescents have "no idea about normal sex"
- epidemic of PTSD-like symptoms
- age-gating, real-ID are not solutions

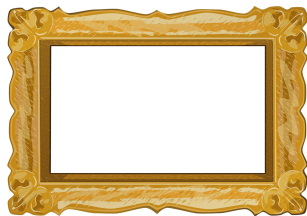


- hyper-individualism, divide and conquer, alienation
- disconnected, intermediated society, "war on reality"
- corroded attention, low focus and motive
- substitute for reality (fake trees video)
- worse post-COVID
- destruction of public spaces (pubs, parks)



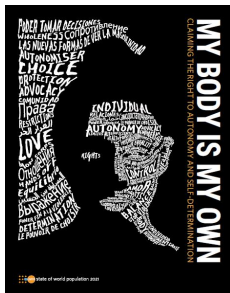
- Literacy is central to good mental health
 - lowest since before WW1(1914)
 - 1 in 5 (20%) are regular readers
- Keir Starmer "Six Priority Targets", Causes:
 - closure of libraries, myth of "digital equivalence"
 - digital distraction: phone-zombie kids
 - economic pressure creates "pacifier parenting"

Summary for action

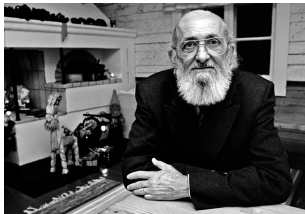


- You are not a "Luddite" or "Anti-Progressive" because you want to take control of technology and make it work for you. You are a **tech leader**.

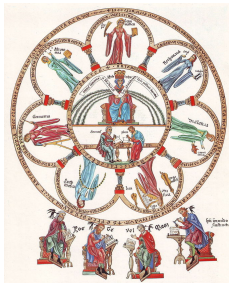
Take ownership



- Rousseau & Mill: *Property* begins with self-ownership.
- Civic Cybersecurity is YOUR security. There is no such bare word as "Security", it always
 - For someone or thing
 - Against some one or thing
 - Towards some end
- Make sure digital security is *for you*, and *against abusers* (criminal, corporate or state).



- Liberation Pedagogy (Paulo Friere)
- We must relearn how to relate to technology again:
- individually and as family and community
- how to manage it
- how to buy and sell it
- how to repair, reuse and repurpose it
- find trusted local mentors
- make time for it



- Value human interaction above all. (Erich Fromm)
- Technology is **one small part of life**. Put it in its proper place.
- The future, economically, financially, spiritually. . . is all about other people:
 - learn to have conversations again
 - value in-person meetings
 - keep appointments (don't dehumanise by proxy)
 - learn to bargain/haggle, exchange favours



- Learn, use, create and enforce laws
 - Massive rafts of regulation coming or already here.
 - Uphold and whistle-blow at your workplace
 - Learn to politely confront and escalate. Don't be bamboozled or fobbed-off.
 - Call out data protection violations, privacy violations
 - Police are underfunded, understaffed, learn laws and bodies, NCSC, NCA, ICO



- Importance of "Tech Critique" literature
 - Freud, Einstein
 - Fromm, Ellul, Mumford, Postman
 - Wiener, Meadows
- Beware the mischievous framing of critique
 - "Luddites", "Ted Kaczynski"

Thank you

