Nowhere To Run

November 20-22, 2015
Committee Background Guide

SSICSIM 2015
SECONDARY SCHOOL
INTERACTIVE CRISIS SIMULATION

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Dear delegates,

I like a good cyberpunk story. A gritty urban setting, subversive hackers, the human being subsumed by technology… Sound familiar?

The great thing about cyberpunk that puts it over all the other sci-fi genres is that we're *living in it now*. Look around downtown Toronto—or even London, UK—and you'll see that downtrodden concrete jungle awash in neon lights. There are artificial intelligences serving us all the time (think video game NPCs, for instance). Large multinational corporations are the lifeblood of the international economy. Surveillance whistleblower Edward Snowden's leaks remind us that these corporations and our governments are watching everything we do online.

This committee draws inspiration from recent cyberpunk influences like the TV show *Person of Interest*, but it's also inspired by the same issues that we currently face. Forget the National Security Agency (NSA); basic Closed-Circuit Television (CCTV) surveillance is becoming unfathomably advanced: rather than merely cameras on walls, I learned that authorities now process footage with powerful video analytics to filter out suspicious individuals and objects. Big Data can now allow us to predict crime hotspots with increasing accuracy. I had to pinch myself several times while doing research for this committee to remind myself that what I was reading isn't science fiction—it's fact, and has been fact for some time already.

And then you have newspapers emblazoned with warnings from scientific heavyweights like Stephen Hawking and Elon Musk warning us about the dangers of uncontrolled AI. Reality, not fiction.

Through your research into these issues and debate during the committee, I hope you will learn more about the issues around surveillance and automation. My team worked really hard to collectively create this near future dystopian London, and we couldn't be more excited to welcome you all to our committee. We've tried to make this committee have everything: humanists and transhumanists, cops and gangs, corporate suits and hackers, vigilantes and conspiracies… But don't come in expecting a war game—in a world of ubiquitous surveillance, the more discrete and inventive you are, the more you'll accomplish by being off the radar.

Everybody has secrets—what would you give to know what they are?

Welcome to this brave new world.

Benson Cheung

* Note: this background guide only gives the basic groundwork for the Nowhere to Run universe. In the weeks leading up to the SSICsim 2015 conference, we will be regularly posting in depth information about relevant organizations, characters, and events on our site **http://summoningsuperintelligence.tumblr.com/**.

Section 1: Fact Before Fiction

> "*It is very dangerous to walk into a datafied society, where everybody is a number and everybody can be linked via ANPR [automatic number plate recognition] to facial recognition, to another thing.*"
>   ~British Surveillance Commissioner Tony Porter[1]

> "*…but some day the piecing together of dissociated knowledge will open up such terrifying vistas of reality, and of our frightful position therein, that we shall either go mad from the revelation or flee from the deadly light into the peace and safety of a new dark age.*"
>   ~H.P. Lovecraft[2]

Topic 1: Surveillance and Predictive Policing

CCTV surveillance

Closed Circuit Television (CCTV) usage in Britain originated from WWII military technology,[3] and developed over the decades into an essential security tool for both public and private sectors. Since the 1960s, the London Metropolitan Police ("the Met") installed small numbers of cameras in key public places. Some of these were permanent, others were for the temporary monitoring of major demonstrations and public events. After the 1980s, CCTV use spread to other parts of the country. This was encouraged at first as a way to privatize public security in the post-Thatcher era, but later for a variety of sociological reasons, including deterring crime and terrorism, or maintaining a political image of being tough on crime.[4]

In 1994, CCTV use exploded after Prime Minister John Major's Conservative government began a massive surveillance funding program that Tony Blair's Labour government upheld, leading to many locales joining this program to receive the government's generous funding. This led to public criticism that CCTV expansion was (and still is) poorly planned--there was little empirical evidence of its efficacy in deterring crime, and rapidly obsolete cameras taking up precious tax dollars.[5] Still, today the UK is one of the most heavily surveilled countries in the world: in 2013, the most reliable estimate of CCTV cameras in the country is between 4.9 to 5.9 million—in other words, between 1 camera per 14 people, to 1 per 11 people.[6] Today, video surveillance has gone skyward, as London began to introduce surveillance drones over its major airports.[7]

Data mining and predictive policing

While CCTVs can be quite useful in solving crimes and to find perpetrators, they can remediate the situation only after the crime has been committed. For this reason, in the past decade we have

[1] Matthew Weaver, "UK Public Must Wake up to Risks of CCTV, Says Surveillance Commissioner," *The Guardian*, January 6, 2015, sec. UK news, http://www.theguardian.com/world/2015/jan/06/tony-porter-surveillance-commissioner-risk-cctv-public-transparent.
[2] H. P. Lovecraft, "The Call of Cthulhu" February 1926, Wikisource, https://en.wikisource.org/wiki/The_Call_of_Cthulhu/full.
[3] Camtrak Ltd, "The History Of CCTV In The UK," *SRMTi*, April 5, 2012, http://www.srmti.com/news/the-history-of-cctv-in-the-uk-10079/.
[4] Department of Criminology, "8.4 Surveillance and CCTV," *University of Leicester*, February 10, 2010, http://www.le.ac.uk/oerresources/criminology/msc/unit8/page_09.htm.
[5] Heather Brooke, "Investigation: A Sharp Focus on CCTV (Wired UK)," *Wired UK*, April 1, 2010, http://www.wired.co.uk/magazine/archive/2010/05/start/investigation-a-sharp-focus-on-cctv.
[6] David Barrett, "One Surveillance Camera for Every 11 People in Britain, Says CCTV Survey," July 10, 2013, sec. Technology, http://www.telegraph.co.uk/technology/10172298/One-surveillance-camera-for-every-11-people-in-Britain-says-CCTV-survey.html.
[7] Maria Khan, "UK: London Airport Police to Use Surveillance Drones for Counter-Terrorism Operations," *International Business Times UK*, April 23, 2015, http://www.ibtimes.co.uk/uk-london-airport-police-use-surveillance-drones-counter-terrorism-operations-1498069.

seen rising attempts to aggregate all of this surveillance data in smart ways to enable predictive—and thereby preventive—policing. Predictive policing consists of concepts formed through "methods used by police forces to use and analyse data to predict future patterns of crime and vulnerable areas."[8] Essentially, predictive policing generates predictions for "several or even multiple 'likely futures'", rather than one specific, fated occurrence.[9] Preventive policing entails action to deter crime before it happens; it is based on "methods used by police forces to pre-empt crime and to prevent it from happening" with interagency collaboration and allocating "visible resources" like increased foot patrols.[10]

Both of these may involve data mining, which is "the process of collecting, searching through, and analyzing a large amount of data in a database, as to discover patterns or relationships".[11] While this seems rather straightforward, there are actually many complex ways of mining data for analysis. The following paragraphs will describe some of these data mining techniques as they relate to surveillance and policing.

In some respects, predictive policing enables better preventive policing. One increasingly popular method is hotspot predictions. In 2010, IBM claimed to have made statistical successes in reducing crime in Memphis, Tennessee, using their CRUSH software (Criminal Reduction Utilising Statistical History). This software aggregated data like "patterns of past and present incidents […] crime reports, intelligence briefings, offender behaviour profiles and even weather forecasts […] to identify potential hot spots and flashpoints, so police forces can allocate resources to areas where particular crimes are most likely to occur."[12] Even more recently, police forces across North America and Europe have used PredPol and similar mapping technologies to generate daily predictions on the probability of certain types of crime in certain hotspots (predictions for property theft and burglary are particularly accurate)—but importantly, it "did not predict a specific crime".[13] However, it's argued that PredPol's results are generally insignificant.

In September 2014, the London Metropolitan Police trialled predictive policing software for the first time, gathering historical data about gang members, and correlating them with their recent aggressive acts so that the police might predict the probability of these gang members committing violent crimes again in the near future.[14] Yet, some pointed out that this system is far from truly predictive, as its data collection is limited by the quality of the input: among other things, data drawn from social media only reflects socially organized crimes.[15]

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[8] Peter Jones, "Predictive Policing: Mapping the Future of Policing?," *openDemocracy*, August 27, 2014, http://opendemocracy.net/opensecurity/chris-jones/predictive-policing-mapping-future-of-policing.

[9] "Don't Confuse Pre-Crime with Predictive Analytics," *Insider Surveillance*, August 19, 2015, https://insidersurveillance.com/dont-confuse-pre-crime-with-predictive-analytics/.

[10] Jones, "Predictive Policing."

[11] "Data-Mining," *Dictionary.com*, accessed October 11, 2015, http://dictionary.reference.com/browse/data-mining.

[12] Tony Thompson, "Crime Software May Help Police Predict Violent Offences," *The Guardian*, July 25, 2010, sec. UK news, http://www.theguardian.com/uk/2010/jul/25/police-software-crime-prediction.

[13] Chris Baraniuk, "Pre-Crime Software Recruited to Track Gang of Thieves," March 14, 2015, https://www.newscientist.com/article/mg22530123-600-pre-crime-software-recruited-to-track-gang-of-thieves/.

[14] Leo Kelion, "London Police Trial Gang Violence 'Predicting' Software," *BBC News*, October 29, 2014, http://www.bbc.com/news/technology-29824854.

[15] Dominic Basulto, "Relax, the Futuristic Pre-Crime System of 'Minority Report' Is Still a Long Way from Becoming Reality," *The Washington Post*, November 6, 2014, http://www.washingtonpost.com/news/innovations/wp/2014/11/06/relax-the-futuristic-pre-crime-system-of-minority-report-is-still-a-long-way-from-becoming-reality/.

American national security surveillance

As you may notice by now, we are leaving digital traces of our lives for almost everything we do, and everywhere we go. Governments, for national security purposes, have often tried to capitalize on this massive amount of data to find potential terrorists. In 2003, the United States' Department of Defense (DoD) attempted to develop the Total Information Awareness program, which analyzes "financial, educational, travel and medical records, as well as criminal and other governmental records" and potentially "create risk profiles for millions of visitors and American citizens in its quest for suspicious patterns of behavior."[16] Concurrently, the DoD also developed the LifeLog project, which attempted to create profiles of individuals' entire lives based on similar data.[17] Both were officially shut down by 2004 after revealing it to the public.

The failure of TIA and LifeLog didn't stop the US government and its allies from developing more surveillance programs. Leaks by whistleblower Edward Snowden in 2013 revealed the existence of several programs that collected people's Internet metadata (information about where, when, and by whom data is sent or received, rather than the content itself), which can reveal significant information about a person's whereabouts and activities—just ask the German politician mentioned earlier. One program in particular—Xkeyscore—mines Internet users' metadata (including email addresses, browsing history, etc), as well as the content of emails and other texts, and stores them in an easily searchable database.[18]

Biometrics surveillance

Technological development in biometric surveillance may well make up for some of data mining's shortcomings. While facial recognition software has been around for a long time, it's constantly improving. A notable example is the US Department of Homeland Security's (DHS) Future Attribute Screening Technology (FAST) system, which looked at "analyze[d] physiological and behavioral cues including, eye movement, body movements and other factors that an individual typically does not consciously control" for any signs potentially threatening behaviour. In 2014, FAST's contact sensors are around 81% accurate, while their remote censors are 70-74% accurate.[19] While the DHS claims that FAST is designed to protect privacy by limiting its data to "physiological and behavioural cues" only, at least one critic argued that this program is highly flawed because it's very likely it will flag false positives (i.e. erroneous results).[20]

In July 2014, facial recognition policing arrived in the UK when the Leicestershire Police began to trial NeoFace, which can compare facial features from surveillance footage to the police

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[16] Jeffrey Rosen, "Total Information Awareness," *The New York Times*, December 15, 2002, sec. Magazine, http://www.nytimes.com/2002/12/15/magazine/15TOTA.html.

[17] Noah Shachtman, "Pentagon Kills LifeLog Project," *WIRED*, February 2, 2004, http://archive.wired.com/politics/security/news/2004/02/62158.

[18] Glenn Greenwald, "XKeyscore: NSA Tool Collects 'Nearly Everything a User Does on the Internet,'" *The Guardian*, July 31, 2013, sec. US news, http://www.theguardian.com/world/2013/jul/31/nsa-top-secret-program-online-data.

[19] "Future Attribute Screening Technology" (DHS Science and Technology Directorate, November 18, 2014), http://www.dhs.gov/sites/default/files/publications/Future%20Attribute%20Screening%20Technol0gy-FAST-508_0.pdf.

[20] Alexander Furnas, "Homeland Security's 'Pre-Crime' Screening Will Never Work," *The Atlantic*, April 17, 2012, http://www.theatlantic.com/technology/archive/2012/04/homeland-securitys-pre-crime-screening-will-never-work/255971/.

database's 90,000 photos in seconds.[21] NeoFace combines video analytics with the ability to search through surveillance footage archive for the same face, thanks to algorithms that can not only identify and reconstruct facial structures regardless of any disguises or expression changes, but do it automatically without human input.[22]

The Department of Homeland Security has worked on a video analytics software that monitors people's physiological movements (like eye movement and heart rate) to detect potential aggression.[23] Developments are in place for analyzing other physiological indicators, including voice tones and even scent, for signs of "malevolent intent".[24] This shows the discrepancy between the success and overstepping of this technology.

Private sector data collection

In the Internet age though, spatially-based surveillance moves well beyond just security cameras or policing.

Google searches or online shopping often leave digital footprints that reveal a lot about our lives and daily patterns. Online stores keep detailed records of who visits their sites, and looks at what products, in order to recommend those customers other products (the same is true for sites like Google, whose targeted ads are based on the user's search history). An allegorical case shows how potentially powerful this can be: the superstore chain Target is known for collecting a lot of information on their customers by assigning a "Guest ID number" to individual customers, and recording every interaction they have with the store so that they can predict their future shopping behaviour. In this context, a father actually found out his daughter was pregnant after being bombarded with maternity ads sent by Target to his daughter, because his daughter's online shopping habits had abruptly changed since getting pregnant.[25] Of course, these predictions can often be quite inaccurate, and may be off-putting to customers if they're too blatant.

Cell phones often leave behind a lot of data as we travel with them. In one notable illustration, a German politician was able to map his cell phone data between August 2009 and February 2010, showing a real time itinerary of all his daily whereabouts.[26] Furthermore, a spring 2013 trial by the City of London to turn its garbage cans into WiFi trackers that can capture the phone's unique serial numbers for the purposes of potentially improving targeted advertising to individuals, was quickly shelved after public outrage and the courts finding this violated the European Union's laws on cookie-tracking.[27] Unfazed, the marketing company behind these "Spy Bins" moved on to testing software that tracked cell phone WiFi signals to show people's

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[21] Matt Brian, "UK Police Begin Trialling the World's Fastest Face Recognition Tech," *Engadget*, July 16, 2014, http://www.engadget.com/2014/07/16/uk-police-first-trial-face-recognition-tech/.

[22] "Smile, Lone Wolf Terrorist - You're on NEC NeoFace Watch," *Insider Surveillance*, July 21, 2015, https://insidersurveillance.com/smile-lone-wolf-terrorist-youre-on-nec-neoface-watch/.

[23] Sharon Weinberger, "Terrorist 'Pre-Crime' Detector Field Tested in United States," *Nature News*, May 27, 2011, doi:10.1038/news.2011.323.

[24] Amber Marks, "The Future of Automated 'Malevolent Intent' Detection (Wired UK)," *Wired UK*, June 7, 2010, http://www.wired.co.uk/magazine/archive/2010/07/start/automated-malevolent-intent-detection.

[25] Charles Duhigg, "How Companies Learn Your Secrets," *The New York Times*, February 16, 2012, http://www.nytimes.com/2012/02/19/magazine/shopping-habits.html.

[26] Kai Biermann, "Betrayed by Our Own Data," *Zeit Online*, March 10, 2011, http://www.zeit.de/digital/datenschutz/2011-03/data-protection-malte-spitz.

[27] Associated Press, "City of London Corporation Wants 'Spy Bins' Ditched," *The Guardian*, August 12, 2013, sec. World news, http://www.theguardian.com/world/2013/aug/12/city-london-corporation-spy-bins; Rich Heap, "City of London Cans 'Spy Bins,'" *UBM's Future Cities*, August 14, 2013, http://www.ubmfuturecities.com/author.asp?section_id=242&doc_id=525591.

real-time locations. Apple's iBeacon already does something similar, which leaves tracking cookies (recording last visits and length of stay) every time the phone's owner walks into a shop.[28]

Smart cities and surveillance

There is a lot of information in disparate channels, but they're increasingly being brought together under one roof. Faced with being overwhelmed from too many cameras but too few analysts, Chicago centralized all of its public CCTV feeds into one office called the Office of Emergency Management and Communications (OEMC) after 2007, and encouraged public landmarks, private businesses, and even individuals to participate in this centralization. By 2014, over 24,000 cameras were integrated into this office.[29] Oakland is planning to follow suit with their Domain Awareness Center.

Smart city initiatives utilize this information in an even more expansive and holistic manner: Rio de Janeiro, Madrid and New York City feature "inter-agency command center[s] that draws on a vast array of data streams – traffic information, police scanners, closed-circuit data, weather data, social media feeds – to enable the centralized orchestration of anything from traffic light schedules to police sweeps".[30] In 2014, Singapore embarked on a pilot project that experimented with the latest video analytics technology to manage and control crowds and traffic.[31] By now, its crowd analytics is advanced enough to not only identify individuals within crowds that may pose public danger, but also estimate crowd size and people's walking trajectories and their speed—with 90% accuracy.[32]

Controversies

Naturally, predictive policing is controversial. For one, there are concerns about privacy involving the amount of data collected on individuals. While concerns over the invasion of privacy via surveillance can refer to either having your information violated, or the loss of individual autonomy, these are symbiotic.[33] As this data accumulates, if you try hard enough, you can create a thorough biography of your life by piecing together data and metadata collected through surveillance. How this information might be treated by its holders isn't exactly clear.

While some might argue that you have nothing to hide if you don't plan to do anything wrong, you can wonder about how society might define social deviance. Besides crime, could this argument one day extend to monitoring certain types of protests and political debates?

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[28] Kadhim Shubber, "Presence Orb Uses Wi-Fi to Detect If Buses and Bars Are Full (Wired UK)," *Wired UK*, April 22, 2014, http://www.wired.co.uk/news/archive/2014-04/22/presence-orb.
[29] Charlie Hall, "Watch Dogs: Invasion," *Polygon*, October 16, 2013, http://www.polygon.com/features/2013/10/16/4817988/watch-dogs-invasion.
[30] Martin Eiermann, "Local Surveillance since 2001," *openDemocracy*, January 11, 2014, http://opendemocracy.net/opensecurity/martin-eiermann/local-surveillance-since-2001.
[31] "Singapore's First Safe City Initiative Concludes with Public Showcase of Innovative Solutions" (Ministry of Home Affairs, May 28, 2014), https://www.mha.gov.sg/Newsroom/press-releases/Pages/Singapore%27s-First-Safe-City-Initiative-Concludes-with-Public-Showcase-of-Innovative-Solutions-.aspx.
[32] Israel Gogol, "Crowd Control: Video Analytics and Alternative Surveillance Cameras," May 6, 2015, http://www.asmag.com/showpost/18609.aspx; Israel Gogol, "Smart Cities Turn Information into Meaningful Messages with VCA," September 23, 2014, http://www.asmag.com/showpost/17735.aspx.
[33] David Vincent, "Surveillance and Privacies," *OUPblog*, May 28, 2015, http://blog.oup.com/2015/05/surveillance-privacies/.

This is even more troubling when you include concerns about false positives, which in this context means that surveillance systems produce erroneous results. Not only does this waste the law authorities' time and resources, it seriously infringes on the civil liberties of those involved, and puts everyone else caught in this surveillance net at risk of coming up as false positives.

Some have also suggested that predictive policing may have racist or classist implications, in that it may target predominantly lower class racial minorities almost as if it's an electronic Stop and Frisk, especially if the data that is inputted into the algorithms are flawed.[34] As such, by utilizing this skewed historical data, algorithms may perpetuate historical injustices.

However, smart surveillance and video analytics is a growing business market. Back in 2012, it was globally worth $13.5 billion, and was then expected to grow to $39 billion by 2020.[35] At this point, the technology is becoming increasingly advanced thanks to the infusion of Big Data and more powerful algorithms.

That said though, actual pre-crime policing (i.e. "cops arrest citizens not for breaking the law, but for the perceived potential to do so") is thus far an impossibility. The best real time predictive analytics software are restricted by the type and thoroughness of data they have,[36] and attempts to merge artificial intelligence with surveillance purposes generally end up enhancing human analysis.[37]

The question remains, what happens when all of these surveillance avenues converge into one system that is all seeing?

Questions to consider:

1. What are the strengths and weaknesses of the "nothing to hide" argument? Do the argument's pros and cons change when we shift from "if you've done nothing wrong" to "if you're not planning to do anything wrong"?
2. In an increasingly datafied society, to what extent can individuals expect privacy? Is there even such thing as privacy anymore, since we're leaving digital footprints everywhere we go?
3. To what extent can individuals protect themselves from privacy infringements by the government or by corporations?
4. Does predictive policing or precime have an impact on establishing guilt? On an even larger scale, to what extent would this constrain our free will?
5. What are the implications of predictive policing on society at large? Might it target certain demographics or political types disproportionately?

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[34] Henrick Karoliszyn, "Do We Want Minority Report Policing?," *Aeon Magazine*, September 3, 2014, http://aeon.co/magazine/technology/do-we-want-minority-report-policing/.
[35] Keith Proctor, "The Great Surveillance Boom," *Fortune.com*, April 26, 2013, http://fortune.com/2013/04/26/the-great-surveillance-boom/.
[36] "Don't Confuse Pre-Crime with Predictive Analytics."
[37] "AI and Surveillance: Are SRI, Palantir and BRS Labs 'Summoning the Demon'?," *Insider Surveillance*, October 28, 2014, https://insidersurveillance.com/ai-surveillance-sri-palantir-brs-labs-summoning-demon/.

Topic 2: AI Ethics

Believe it or not, we are surrounded by artificial intelligence everyday, all the time. Google Search, your smartphone app, your NPC buddy in that video game, everything down to your spam filter are all AI.[38] But as it stands in 2015, this type of AI—or Artificial Narrow Intelligence (ANI), or weak AI—is rather limited in scope. Although they can operate at a rate faster and more efficient than a human brain (see for instance IBM's Watson, or your computerized chess opponent), they are largely confined to what humans program them to do, and based on human knowledge. To draw on physicist David Deutsch's example, ANIs like Watson can generate answers and responses based on historical knowledge, but if you ask it to create a new theory, it won't give you anything.[39] In other words, ANIs can deduce, but never induce.

Even weak AI raises important ethical questions in the present (to say nothing of strong AI, or even superintelligent AI). We are increasingly passing the responsibility of making our own choices and even ethical decision-making to weak AI. To some, algorithms may hurt human creativity and personal development, such as recommended products by online retailers which create an echo chamber based on one's past product searches rather than offering you new experiences. This is, of course, a human-made business decision, but it still has the implication that a computer can and will not only know us better than ourselves, but as a result, also make better choices for us on our behalf.[40]

An even more serious matter than that is when more complex AI may be required to make an ethical decision. One example might be a self-driving car encountering a situation resembling the classic Trolley Problem: if the car will make an inevitable collision, is it better to let it happen and kill five people, or make the conscious decision to turn and kill one bystander? A variation of this problem involves whether to let the runaway trolley kill five people, or have the subject physically push a man over a bridge so his body will stop the trolley. When humans make that decision, it's often informed by cultural assumptions and biological factors[41], but, depending on what the set of codes put into place, an AI is arguably 100% rational. Indeed, if science and the Enlightenment are driven by the search for "something better" that would help us make more rational decisions, then AI might well be the combination of humanity's dream and nightmare.[42]

We conclude this AI discussion with a few words on types of AI. We've already mentioned that most AI we have today is weak AI, or artificial narrow intelligence. But we can distinguish at least two more: Artificial General Intelligence (AGI) or strong AI (which is equivalent to a normal human brain), and Artificial Superintelligence (ASI) (which surpasses the human brain). In 2015, getting to an AGI is pretty hard for a variety of reasons, namely because of the limited

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[38] Tim Urban, "The AI Revolution: Road to Superintelligence," *WaitButWhy*, January 23, 2015, http://waitbutwhy.com/2015/01/artificial-intelligence-revolution-1.html.

[39] David Deutsch, "Creative Blocks," *Aeon Magazine*, October 3, 2012, http://aeon.co/magazine/technology/david-deutsch-artificial-intelligence/.

[40] Tom Chatfield, "Can We Design Machines to Automate Ethics?," *Aeon Magazine*, March 31, 2014, http://aeon.co/magazine/technology/can-we-design-systems-to-automate-ethics/.

[41] For instance, neuroscience evidence points to an evolutionarily-based unwillingness to kill with our own hands.

[42] Steven Poole, "Slaves to the Algorithm," *Aeon Magazine*, May 13, 2013, http://aeon.co/magazine/technology/steven-poole-can-algorithms-ever-take-over-from-humans/.

technology we have in computational power (compared to what's needed for an AGI), and the technology to make the AI capable of general self-learning.[43]

Suppose the AI does reach the same level as human intelligence. Presently, few would ever really commend a smart computer chess player over a human grandmaster even if the former prevails over the latter in a match, but a successful AGI could very well change things if we see it as our intellectual equal. Could it be considered a legal person? Could deleting the AGI be considered murder? Perhaps humans adding programming to an AGI can be considered akin to slavery; after all, we don't tolerate us imposing physical limits on other persons to do our bidding.[44]

But the rate of AI intelligence growth is not actually linear: once it gets the momentum of rapid self-learning, chances are, at some point it will surpass human intelligence—becoming an ASI. What happens when humans are outpaced?[45]

Questions to consider:

1. If humanity must outsource moral decision-making to algorithms, what are the moral principles that people should program into algorithms to ensure the best choices for people? (consider whether to let the self-driving car run over five pedestrians on course, choose to swerve into one pedestrian to save the five—or should this be the choice of the driver?)
2. How might you define personhood? Does it include intelligent non-humans?
3. Is it ethical to impose restraints on an artificial superintelligence?
4. Can an AI be a moral agent? Is it morally permissible for an AI to determine what actions or behaviours are "acceptable" for humans, especially if by doing so a better human society is attained?

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[43] For the purposes of this committee, we've hypothetically solved the first issue, while The Mailbag Initiative solved the second issue through recursive self-improvement.
[44] Deutsch, "Creative Blocks."
[45] Urban, "The AI Revolution."

Interlude: AISight

One of the most interesting advanced analytic software currently on the market is AISight ("eyesight"). Created by the American security firm BRS Labs, AISight is designed to flag "suspicious or abnormal behavior", which ranges from loitering to trespassing. But here's the rub: AISight is capable of learning what kinds of behaviours are suspicious or abnormal (since they can vary from place to place). While most smart surveillance systems require humans to input behaviours to flag and to review flagged incidences for further confirmation, AI is designed to learn "normal" behaviour (and therefore, abnormal behaviour as well) by analyzing the environment and retain this learned information permanently.[46]

It has been very popular across America, counting San Francisco, New York, El Paso, and Houston as some of its users in 2012.[47]

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[46] Paul Cooper, "Meet AISight: The Scary CCTV Network Completely Run by AI | ITProPortal.com," *ITProPortal.com*, April 16, 2014, http://www.itproportal.com/2014/04/16/aisight-the-surveillance-network-completely-run-by-ai/.

[47] Ryan Gallagher, "U.S. Cities Embrace Software To Automatically Detect 'Suspicious' Behavior," *Slate*, June 11, 2012, http://www.slate.com/blogs/future_tense/2012/06/11/aisight_from_brs_labs_and_other_technologies_to_detect_suspicious_behavior_.html.

Section 2: The London Smog Descends

The Road to 2020

London burned for one week in August 2011. After a man was shot and killed by the police under then-mysterious circumstances, peaceful protests against police brutality quickly escalated into rioting, looting, arson, and hooliganism. Authorities quickly argued that social media played a significant role in facilitating the violence, as rioters used Twitter and Blackberry Messenger to coordinate their attacks and record their deeds.[48] By the end of it all, five people were injured, three thousand suspects were arrested, and millions of pounds of damage and long-term economic losses were incurred.[49] Justice in the riots' aftermath was laboriously slow: the Metropolitan Police ("the Met") manually reviewed 36 million minutes of CCTV footage sourced from 8000 public cameras, as well as evidence handed in by the public.[50] The sheer anarchy of the riots shook the city more than anyone could anticipate. How could this happen? How can this be prevented next time?

In the face of all this informational controversy, the Greater London Authority (GLA) approved a directive to centralize all publicly- and privately-controlled surveillance camera feeds into one office modeled after Chicago's OEMC, as part of a wider predictive policing project. This became the Central Information Aggregation and Analytics Office (CIAAO, colloquially pronounced as "ciao"), which is administered independent of the Met and under the direct supervision of the Mayor's Office for Policing and Crime. This new agency used then-advanced video analytics (combined with social media and news aggregation software) to track suspicious individuals and objects, monitor crowds and their temperaments, and predict crime hotspots. However, its analytics systems only flag potentially suspicious individuals based on all the data, and ultimately required constant human involvement to process and review the data as well.

Nevertheless, in internal reports, the London police credited the CIAAO with successfully ensuring that the 2012 Olympics went off without a hitch—this security coup ensured its generous funding until 2016. Despite a few exposes by journalist Adewale Okafor and protests by civil liberty groups, the CIAAO was relatively unknown to the rest of London.

Then came the 2016 economic crash. As housing bubbles popped all across the globe, the entire world economy lurched to the brink of utter collapse. The UK was particularly badly hit by this crisis; as banks and businesses collapsed, thousands upon thousands were laid off and left in an environment with little employment opportunities. The different levels of government became critically strained from providing welfare while their revenues continued to shrink. Following the national government's example, the GLA began a frenetic program of haphazard privatization of government industries in a bid to generate additional revenue, auctioning off almost everything from waste disposal to the transit authority (Transport for London). Once the toast of the security

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[48] Josh Halliday, "UK Riots 'Made Worse' by Rolling News, BBM, Twitter and Facebook," *The Guardian*, March 28, 2012, sec. Media, http://www.theguardian.com/media/2012/mar/28/uk-riots-twitter-facebook; Jonathan Richards and Paul Lewis, "How Twitter Was Used to Spread – and Knock down – Rumours during the Riots," *The Guardian*, December 7, 2011, sec. UK news, http://www.theguardian.com/uk/2011/dec/07/how-twitter-spread-rumours-riots.
[49] "2011 England Riots," *Wikipedia, the Free Encyclopedia*, October 7, 2015, https://en.wikipedia.org/w/index.php?title=2011_England_riots&oldid=684596114.
[50] Rebecca J. Rosen, "London Riots, Big Brother Watches: CCTV Cameras Blanket the UK," *The Atlantic*, August 9, 2011, http://www.theatlantic.com/technology/archive/2011/08/london-riots-big-brother-watches-cctv-cameras-blanket-the-uk/243356/.

establishment, the CIAAO was barely spared from privatization only through the critical intervention of Assembly Member Bill Croydon, although it was (and still is) now forced to find other means of generating its own revenue.

Those rich and affluent who financially survived the economic crisis, as well as rookie but visionary entrepreneurs, took advantage of the deflating prices of land and bankrupt businesses, rapidly consolidating London's former marketplace of ideas into the hands of a few large conglomerates. Transport for London was quickly snapped up by the Australian conglomerate, Galtworks Corporation. By 2017, Forbin Associates absorbed all its security competitors to hold the monopoly on supplying London's surveillance hardware and software. As the economy slowly rebounded toward 2020, the newly minted financial elite has become smaller in numbers and wealthier in assets than ever before.

With the governmental authorities seemingly imploding from the crash, Londoners adapted themselves to a more or less self-help system. Despite civil society's fledgling efforts to fill the security and welfare vacuum the government had left behind, dozens of street gangs and larger mafia-like syndicates, with their vast economic resources and armed presence, simply superseded them in effectiveness. This rapidly attracted fresh (unemployed) recruits and grudging local support. At the same time, as the GLA downsized and reduced civil servants' salaries, the various organs of the municipal bureaucracy began attracting a reputation amongst Londoners for thinly veiled corruption. In particular, individual dirty cops are reported to have participated in street crime with virtual impunity. Some have even feared that rogue cops may form a "parallel sector" within the government, answerable only to themselves.

The proliferation of gangs ballooned through mid-2018; the poorer parts of London descended into pure gangland anarchy as smaller gangs jostled weekly over territory. After months of Darwinian gang warfare, the Sturgeon Firm emerged as the leading criminal organization under the leadership of Thomas Sturgeon, controlling the East End and South End. Still, it was an incomplete victory: surviving smaller gangs periodically harass the Firm, while corrupt officials misuse the law in their fight against the Firm.

But more ominously, a mysterious group called the "Shadowless" emerged in late 2018, proclaiming itself the 21st century liberators of the oppressed classes. Promising to target "criminals" who are beyond the reach of the law (whether through corruption or because their crimes are non-prosecutable), they are known to utilise cyberterrorism in occasional conjunction with classic urban guerrilla warfare, targeting both civil servants and criminals in systematic smear campaigns, hacked car assassinations, etc., the destructiveness generally proportional to the severity of the accused crime. Many in the public trace highly illegal CCTV-smashing tournaments (apparently popular with frustrated youths) back to the Shadowless's message and at least tacit encouragement.

In light of this rising crime rate, the Met found themselves increasingly overstretched by diminishing resources and unreliable employees. As such, they began to rely increasingly on the CIAAO's data analysis as part of their predictive policing program. So far, based on the CIAAO's analysis of social media, historical crime big data, and surveillance footage, law enforcement is able to make reasonably accurate predictions about when and where a violent

crime may occur, and police patrols are dispatched to these general areas to monitor the streets for suspicious activities or persons. Nevertheless, for all of the CIAAO's valuable intelligence, the data they aggregate is not perfect, and human analysts manually computing data is by no means wholly accurate. The increasingly large lower class population strongly resents this "guilt precedes innocence" assumption that the Met and the CIAAO seem to hold, an anger further justified and galvanized by shootouts killing suspects flagged by the CIAAO but turned out to be innocent.

There are, however, signs that the economy will recover in the next few years: the stock markets have stabilized, and people are spending again on consumer goods. Still, by 2020, London has become a divided city, with social tensions ready to boil over into outright violence. Central districts (like the City, Westminster, Kensington, the South Bank, etc) remain security fortresses within which the city's elites work and reside, while the rest of the city is left alone to face rampant crime, mass poverty and crumbling infrastructure.
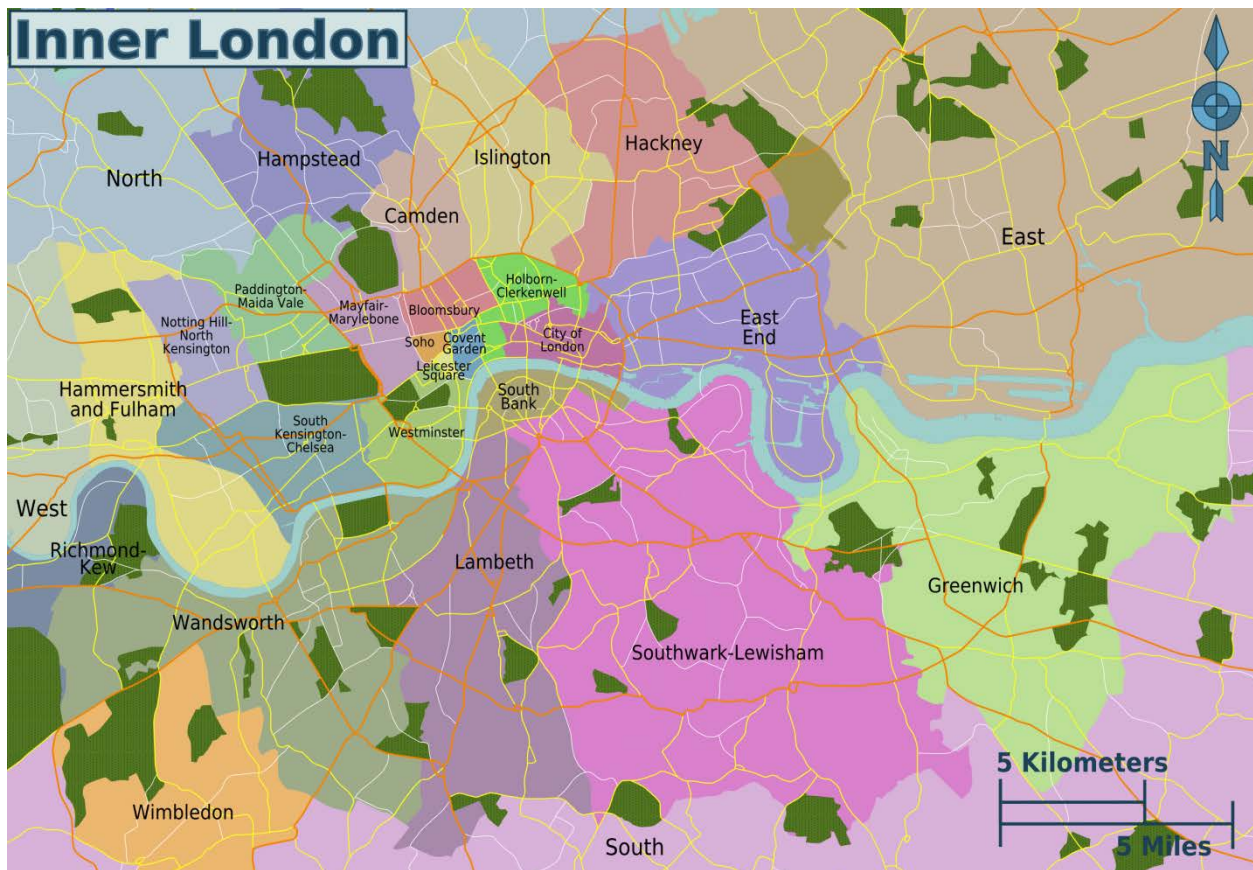
Map of inner London's (unofficial) neighbourhoods
(http://wikitravel.org/upload/shared//a/a8/Inner_London_districts_map.png)

New paradigms

Between a dysfunctional government, expanded corporate influence in society, and organized crime warlordism, an increasingly large subset of Londoners began to look for an alternative way that rejects these options. A diverse range of political and social literature and other media took a

sudden spike in circulation, giving disgruntled young Londoners an eclectic crash course of everyone from Julian Assange's anarchism to Ayn Rand's libertarianism, from Ray Kurzweil's transhumanist optimism to Oswald Spengler's civilizational pessimism. There's a sense that the ideological continuum is shifting, but nobody can tell where the winds will blow.

This environment creates breathing space for these different ideologies to flourish in backyards, and telegraphed to like-minded people through encrypted Internet. Numerous underground groups (called "Tribes") emerge proposing different visions of society. Some of the more prominent ones include the "Sculptors" (that sees the future of the economy and habitation in 3D printers) and "Leapers" (who combine parkour and urban exploration to escape from surveillance). Few know what many of these tribes' respective endgoals are, but most agree that they are the most interested in preserving their way of life against all odds. Although most deride them as little more than geeky interest clubs, their fanatical specializations in their interest fields make them powerful off-the-grid third party services for the right price.

Strangely, in spite of the economic downturn, science has seen a new renaissance in popularity. Although hope seems to elude people for much change in their situations, science appears to steadily march forward, unfailingly bringing new technological and biological advances in its wake and transcending the fallibility of humanity. In other words, in these hard times, science gives people *hope*.

Inspired in equal parts by the old school style of science popularizers like the late Bill Nye and the late Neil deGrasse Tyson[51], and the flashy scientific entrepreneurship of Elon Musk and Galtworks' Jimmy Yang, science has become almost a major form of escapism (next to the perennially popular celebrity gossip and TV show marathons), spurring on a new market for science fact and fiction. So far, Raina Denton has emerged as the most prominent and influential of today's science presenters. That doesn't mean there isn't backlash: a sizeable group of social conservatives and communitarian leftists vocally oppose placing faith in science as the sole means of saving humanity, for fear of unleashing forces beyond our control.

A new surveillance program

Unbeknownst to almost all of London, the 2011 riots also spurred on a revolutionary breakthrough in artificial intelligence development. Stunned by the devastation wrought onto London, in 2012, computer engineer Ramesh Patel approached Kurt Reynolds of Forbin Associates with an ambitious new project: an artificial intelligence that can collect and synthesize an unlimited amount of surveillance data (ranging from CCTV footage to remotely hacked smartphone microphones). This would correlate all this big data into one cohesive network of society, and thereby perform virtually 100% accurate analytics to predict the probability of imminent crime at the individual level. As such, this AI will not only eliminate the need for a human being to analyze footage, but also make the police and security forces more efficient by naming and locating individuals preparing to commit a crime.

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[51] Of course, their deaths, along with Professor Brian Cox, in a plane accident in July 2017 on the way to a science summit (now known as "The Day that Science Died") only exponentially fueled public interest in their work and in general science.

Intrigued by Patel's theoretical proofs, Reynolds immediately created a new, secretive experimental division ("The Mailbag Initiative") to develop the new surveillance AI, headed by Patel and his brilliant protégé, Evelynn Carver. As a natural risk-taker enamoured by moonshot projects, Reynolds assigned his best and brightest R&D researchers and ample resources to the Mailbag Initiative. Although the project began in early 2013, development was slow, given that this research is well ahead of the exponential growth in AI computing. Nevertheless, the project was able to keep itself well-funded by Reynolds as byproducts of its findings (like better analytics software) became bestselling Forbin products.

In 2017, as demand for better security and funding for science skyrocketed following the economic crisis, The Mailbag Initiative received previously unknown levels of funding and research assistance. The breakthrough came in late 2018, when Patel and Carver finally created the mechanism for strong AI: recursive self-improvement. In other words, programming an AI to teach itself to improve and upgrade its performance over time. Not only is this the single most important discovery in AI research, as far as Reynolds is concerned, recursive self-improvement will allow the AI to adapt to new situations and calculate abnormal human behaviours on its own, without human operators to program every single deviant behaviour or environmental specification. Naturally, this cuts human resource costs and spiking the licensing value of this software. In a reference to their division, Carver named this new AI the Proactive Operating System for the Tactical Management of Anarchy Networks (P.O.S.T.M.A.N.).

But this breakthrough in science also marked the beginning of the end of Patel's relationship with Forbin. During the highly restrained trails of the recursive self-improvement system, Patel proposed to restrain the AI by teaching it to think in terms of human morality and no more; anything more was detrimental to the original purpose for POSTMAN's creation. In contrast, Carver recognized that what they were doing far exceeded Patel's and Reynolds' intentions, and so protested by arguing that a superintelligent computer has the illimitable capacity to comprehend more than what human brains are wired to do, and even become a life of its own. Perhaps it's better to let POSTMAN be free to think outside the human cranium.

Although this began as a philosophical debate, this quickly escalated into a bitter falling out between master and former disciple, to the point where the two refused to speak to one another. Although Reynolds was asked by other Mailbag researchers to mediate between the project heads, Reynolds himself objected to Patel's plan for morality limits because it was "too hypothetical" at this stage, and therefore too costly and time consuming to explore given that Forbin Associates' shareholders are demanding results soon. Patel resigned from Forbin in December 2019 after Reynolds ignored his plea to delay the surveillance program's unveiling to strengthen privacy safeguards, if only as a stopgap against POSTMAN's intelligence. The Mailbag Initiative continued their development without their founder.

The General Election of 2020

The final iteration of POSTMAN was completed just in time for the run-up for the 2020 general elections, when Londoners voted the city Mayor and London Assembly members (as well as their national MPs). In one of the closest and most bitterly-fought mayoral election since the first direct mayoral election in 2000, the incumbent Conservative Party mayor Joseph Garrett (who

became Mayor in 2017 after his predecessor was impeached at the height of the financial crisis) was accused by his Labour Party challenger Rebecca Cook of being ineffective on crime, in terms of both being unable or unwilling to tackle the "root causes" of poverty, and being unwilling to sufficiently support the police forces in their time of need.

In response, Garrett promised a merciless war on crime in his campaign. To back it up, he personally led a day of crackdown a week before Election Day. Targetting certain neighbourhoods in the poorer East End, the police not only arrested nearly 20 known violent criminals, but also miraculously (to the public's eye) saved women and children from abusive spouses just before violence occurred, tackled muggers as they were inches from assaulting their victims, and captured previously unknown Internet bootleggers and sexual predators. Declared the "Day Without Crime", this stunt was hailed by pundits as the decisive event that saved Garrett's election campaign, citing its ability to restore hope and confidence of common Londoners in their government's efficacy. Critics, including the Civic Torch advocacy group and the Shadowless, denounced it for its heavy-handed policing tantamount to a dictatorship. But nobody really knew how Garrett pulled it off.

Election Day (May 7, 2020) came and went. Joseph Garrett was narrowly reelected as Mayor, although the London Assembly is now led by a fragile Labour Party-Green Party coalition barely clinging onto its slim majority of 1 seat (with a Conservative Party-Liberal Democrats coalition in opposition). Nevertheless, this election left many bitter about the results, given how this election was riddled with irregularities and scandals with all the major parties, to say nothing of Garrett's suspicious "October surprise". One such scandal, though, has finally ruined an elected Assembly Member's career for good: the Labour Party representative for the constituency of Lambeth and Southwark resigned after the police discovered evidence of his using crack cocaine, leaving the fate of the Labour Party's majority in the balance. By-elections are scheduled for August 8.

Section 3: Implementing the Surveillance Program

Issue 1: Putting POSTMAN into Government Operation

Making good on his spectacular campaign promise, Garrett announced the overhaul of London's police and security services, beginning with consolidating parts of the Met and the CIAAO into a new data mining department—this time, utilizing "the most advanced analytics software available to law enforcement anywhere in the world" (i.e. POSTMAN)—with the pretext of fighting "anarchic" groups like organized crime and the Shadowless. While Forbin Associates' involvement is barely mentioned, he also outlined the basics of POSTMAN's workings to the public, that it was a special "computer program" with the ability to aggregate mass amount of data in a short time, and intelligent enough to make improvements later on.

A growing number of scientific-minded people on social media platforms and online forums are working on reasoning out how a system as outlined by Garrett would work in practice. Speculations range from the ridiculous to the mundane to surprisingly accurate.

What actually happened was that Garrett had collaborated with Forbin Associates, the owners of small, private surveillance networks, and social media analysts to do a highly successful one day trial of (a somewhat watered down) POSTMAN. Just like the CIAAO, POSTMAN mined historical crime data of individuals and geographical locations, online behavioural patterns as gleaned on social media and metadata, and surveillance footage analytics to successfully predict (with virtual 100% accuracy) where and when violent crimes would occur, committed by whom. But unlike the CIAAO's laborious detective work, POSTMAN was able to analyze all its information within minutes, and even identified new suspects the police weren't aware of. The net result: POSTMAN is declared a successful experiment and ready to be used across all of London.

Given the shaky situation in the London Assembly and this program's momentous technological, political, and social implications, Mayor Garrett declared that the current predictive policing program led by the Met and the CIAAO will be superseded by a new predictive policing program in partnership with Forbin Associates, using their classified proprietary hardware and software. In other words, while CIAAO relied on more traditional methods of data mining to predict the likelihood of crime in broad areas or to keep track of targeted individuals, the new preventive policing program will actually narrow down its predictive range to the individual level, by predicting who will likely commit a crime, and when and where this crime will occur—and police officers will presumable pre-emptively arrest said individual based on the algorithm's calculations. This program will be so powerful it could be a truly *preventive*—deterring crime forever by omniscience. Despite the somewhat inaccurate terminology, almost everyone simply called the Mayor's initiative a "pre-crime policing" program.

Because of the unusual cross-organizational nature of this venture, London may well have a new department unifying the city's surveillance and policing operations. Mayor Garrett signed an executive decree officially creating the Advanced Analytical Policing Commission. Consisting of experts and relevant bureaucrats, this Commission is ordered to bring to life Garrett's vision for the new surveillance department by creating its structure and foundational policies. It is

scheduled to meet on August 6 in a central conference center for five days of intensive debate about how best to bring POSTMAN into operation.

In other words, the Commission is your committee.

But it isn't all smooth sailing. Although POSTMAN has powerful capabilities, it ultimately relies on surveillance data to function. To date, the CIAAO refuses to acknowledge POSTMAN, accusing it of overstepping boundaries into their domain. The other major source of surveillance, Transport for London (which generates surveillance feeds and travel data about commuters), is under the control of the eccentric Galtworks CEO Jimmy Yang, who is skeptical of POSTMAN for economic and technological reasons.

Furthermore, the mere proposal of a new surveillance system has raised the ire of civil liberties groups. They immediately raised arguments about how this program may presume guilt before innocence, grossly violate personal privacy, and may threaten the freedom of speech and expression for wider society if misused. Viral protests by the Civic Torch and other organizations raised enough pressure on the mayor to upgrade their presence from merely giving testimony in the Commission to becoming full dialogue participants. Additionally, many have interpreted Transport for London's withdrawal from the CIAAO program—depriving the government of vital CCTV feeds and travelling information gleaned from smart card metadata—as Jimmy Yang's attempt to stonewall POSTMAN's activation.

As participants of the Commission, you will consider how to set up the guidelines and governance of the POSTMAN-powered pre-crime policing program. In lieu of a resolution, delegates are expected to produce an outline proposing the new pre-crime policing program's basic policies.

Some issues to consider:
- Given that POSTMAN is Forbin Associates' proprietary technology but deals with sensitive public information, how will you regulate POSTMAN's licensing deal (including the ownership and licensing fees from POSTMAN's produced data) so that the public interest is served while private shareholders receive their profits?
- Will POSTMAN ultimately be administered by existing agencies like the Met or the CIAAO, or will there be a new administrative body for it? If so, how will this administrative body's governance and logistics be structured (e.g. who heads it, how to coordinate analytics results and police action, etc)?
- How will you ensure there is proper oversight for both the data's handling and for the personnel involved?
- Consider the public relations aspect: what are some of the ways you can sell the program to the public? Of course, you need a name for this program!

Keep in mind that currently, without the CIAAO's and Transport for London's support, POSTMAN will have no data to analyze. For all intents and purposes, all solutions must require the two organizations' participation in order to move forward.

Issue 2: Civil Unrest

In the months leading to the Commission, there is an increasing sense of foreboding in the air, as if everyone understood that London is rushing headlong into catastrophe. Given the two week long heatwave, one might even say that London's a pressure cooker ready to explode.

In recent weeks, there has been a dramatic upspike in violence across London, the vast majority of them gang-related. Pundits are attributing this crime wave to the criminal underworld's unstable situation: perhaps Sturgeon's position isn't nearly as strong as previously believed, especially after how effective the Mayor's day trial was spooked the criminal underworld. It's believed that the fear of being targeted by the Mayor's upcoming pre-crime policing program has exacerbated whatever tensions lay within Sturgeon's mob and between rival gangs, and forced all parties to accelerate their respective plans of action.

Brawls are said to happen from time to time between Sturgeon's own enforcers in his own territory. The news is flooded with reports of police officers engaging in open shootouts with Sturgeon's gangsters (and, if social media is to be believed, many of these were initiated by the police). Word on the streets has it that many of the smaller criminal gangs that lost the turf war are cooperating with each other to various degrees in raids on Sturgeon's territory—that the raids have been increasingly professional seems to indicate that the gangs are pooling their resources into a "war room" of sorts. Suffice it to say, the pieces are moving…

The Mayor's day trial spooked more than just criminals. Civil liberty groups like the Civic Torch and public intellectuals like the journalist Adewale Okafor immediately took to arms in a war of words and activism, to denounce what they perceive to be an erosion of historic British freedoms and the de facto death of the individual's legal rights. They also argued that such a program is vulnerable to abuse by corrupt politicians wishing to monitor and/or suppress legitimate protests and dissent. With the Commission announced, many civil libertarians have organized marches and sit-ins outside key civic locations, including the Ashpool Centre, both to protest against the program and to stand in solidarity with their representative inside, Charlotte McKenzie.

But against them are groups supporting the new pre-crime policing program. By and large, their position is that they are tired of London slowly spiralling into chaos. They see that perhaps this new program will be the best shot by the government to reassert its control over the city, capture and punish criminals, and restore a sense of normalcy to the city. Frustrated by the civil libertarians' "idealistic" demands, counter protests begin springing up across the city too. A thin line of police and private security officers separate the two peaceful protests to ensure nothing goes awry.

There have also been reports that the pro-science tribes have formed a schism. Some tribes have seen this wholesale opposition to such an advanced surveillance program to be an assault on science itself, and argued that London shouldn't throw out Forbin's technological advancements out with the surveillance bathwater. Other tribes argue that the advanced technological software needed for this pre-crime policing program will allow society to become ever more rationalized and safer. Both sides are debating amongst themselves about joining the protest fray, but only time will tell what will come of this.

Strangely, nobody has heard from the Shadowless yet—an uncharacteristic lack of action given their penchant for flamboyant announcements mixing in comments about current affairs and threatening to take drastic action about it.

As these protests grow in number in anticipation of the Commission's conference, there is naturally fear that things can go awry. Police and corporate security are, of course, monitoring the situation in strategic places across the city, while the CIAAO has been running analytics trying to predict where crowds may materialize, and how big—but they're overwhelmed with increased data.

Given this tense situation outside, delegates must be mindful of the desires of the various interest groups protesting outside.

Conclusion

Presently, the city has rented out the Ashpool Centre for a full week to allow the Commission uninterrupted discussions to expedite the planning process. If the Mayor approves, your new pre-crime policing program will be operational effective immediate—and POSTMAN will be activated. Should the pre-crime policing program be approved early, the Mayor requests the delegates to stay for the rest of the week at the hotel to help monitor POSTMAN's progress.

Today is August 5, 2020. The future of London—and the world—is in your hands.

Character Profiles

Note: everybody has secrets to hide and ulterior motives to attain, and these characters are no exception. The following profiles are the public biographies and positions of these characters. We will be providing all delegates with a personalized briefing package in the first session containing these characters' full profiles and their crisis powers. In the meantime, prepare for the conference based on these characters' ideological stances and biographical information. For instance, consider what sort of knowledge their occupations entail. Be warned though—some of them may not be what they seem...

Arthur Caine: son of socialist British defectors, Arthur Caine fled the collapsing Soviet Union to become one of London's most influential investors and foresight consultants known for his uncanny market prescience. Blaming petty self-interest and corruption for London's chaotic situation, Caine feels a moral obligation to use his vast business influence to see the POSTMAN program through, hoping it can restore order and rationality, "persuading" the Mayor to save him a seat in the Commission. He is a major partner of multiple corporations and crown corporations (including Forbin Associates and Galtworks).

Evelynn Carver: a late-blooming programming prodigy, Carver joined her computing mentor Ramesh Patel to create POSTMAN's recursive self-improvement system. With herself thriving on the digital age's ubiquitous information exchange, she realizes that POSTMAN's perpetual intelligence growth holds unimaginable opportunities for the human race—a view that ended her friendship with Patel. As the head of POSTMAN's development after Patel resigned, Carver expects to fight hard for her vision for POSTMAN.

Bill Croydon: once a pro-Unionist officer in Belfast during the Troubles, Croydon relocated to London and became a Member of the London Assembly. As the chair of the Police and Crime oversight committee, Croydon has long advocated for increasing security to keep all of Her Majesty's subjects safe and restore order to London, and will go to great lengths to defend the policing establishment's integrity.

Raina Saito Denton: one of the world's most prominent science popularizers, Dr. Denton is noted for outspoken views on how the STEM fields holds the solutions to the world's social problems, including crime. She is invited to this conference as an expert in futurology forecasting, but also to raise the conference's profile through public outreach by virtue of her celebrity status.

Richard Keating: an ambitious and divisive career bureaucrat, Keating is a leading policy advisor in the Deputy Mayor's Office for Policing and Crime, and one of Mayor Garrett's most important aides. A hardline advocate for tougher measures against crime (and specifically, against Sturgeon's syndicate), he anticipates POSTMAN to be the breakthrough in the government's war on crime, so long as his department gets the lion's share in the program's control.

Juliana "Jules" Marshall: Professor Juliana Marshall of Cambridge University's sociology department had long been interested in how an anarchic information environment changes our

social dynamic. As such, she is studying the dynamics of online activist groups such as the Shadowless as an embedded observer. Although she is summoned to the Commission as an academic expert in these online activist groups, her detractors suggest she is a closeted sympathizer of the Shadowless because of her proximity to them.

Charlotte McKenzie: a criminal justice lawyer with a troubled past, Charlotte McKenzie catapulted into the public eye almost overnight as the leading activist for the Civic Torch. Believing that the government is increasingly detached from the common people, she advocates dissolving the CIAAO and severely restricting government surveillance powers. Nevertheless, her meteoric rise and strong heritage roots in East End slums have led some of her ostensible ideological compatriots in the "establishment" to distrust her.

Adewale Okafor: an editor with *The Guardian* newspaper, Okafor has long championed civil liberties and for the underdog in his journalism and political activism since his political awakening following 9/11. He is suspicious of anything that may interfere with individual liberty, be it surveillance or precrime policing. Invited to the conference as a voice for civil liberties, he's looking forward to yet another sparring match against Croydon and Keating.

Ramesh Patel: a brilliant computer engineer, Patel was motivated to co-create POSTMAN (with his protégé Evelynn Carver) under Forbin Associates' auspices after witnessing the chaos of the 2011 London riots. However, he had a bitter falling out with Carver after insisting that POSTMAN's intelligence potential and scope must be tightly regulated, and subsequently resigned from the project. Reluctant to attend this conference, Patel realizes that this is his last chance to correct his mistakes.

Kurt Reynolds: the visionary CEO of Forbin Associates, Reynolds is responsible for transforming his late friend's corporation into London's most powerful security technology firm, proudly making London a safer and more prosperous place. A risk-taker by nature, he invested heavily in POSTMAN's development believing that this will put Forbin Associates in history books forever. Reynolds is therefore prepared to risk everything (within reason) to defend POSTMAN's future and yield maximum profits.

Benjamin Rollins: a democratic socialist Assembly Member without party affiliation, Rollins particularly believes that predictive policing is an unjust tool to control the underprivileged—that the neoliberal elites have to resort to unleashing POSTMAN demonstrates their moral bankruptcy and how weak their power is. He is very close to the common folk, and his ongoing efforts to promote cultural literacy is widely credited as being a major instigator of London's current intellectual flourishing.

Victoria Sarkar: imbued with a strong sense of justice, Sarkar has gained a reputation among her peers as one of the increasingly few outstanding "clean" cops. She believes in the individual's responsibility for their own choices, and sees surveillance as an expedient way to dispense justice to those who deserves it. Normally a Detective Superintendent in the Metropolitan Police's Criminal Investigation Department (CID), Sarkar represents the Police Commissioner for this conference, and reports to him directly.

Anna Sinclair: the fiercely independent director of the CIAAO, she created and expanded her agency believing that comprehensive surveillance coverage can make law enforcement smarter. Having watched in horror as her once-proud agency got defunded and nearly privatized after the economic crisis, she refuses to allow her agency to become endangered again, or even become beholden to anyone else other than to itself.

Cara Taylor: a public relations and advertising guru, Taylor draws on her training in psychology and behavioural economics to create better ads to target individuals by capitalizing on the vast amount of data floating around in society. With an impressive resume spanning WiFi-tracking real time ads to political campaign ads using nudge theory, Taylor is summoned to the Commission as the industry's leading practitioner of private sector data analytics.

Andrew Warren: a noted security contractor and private investigator, Warren has dedicated his life to protecting all lives from danger, be it through his professional activities or through giving people the tools to protect themselves, though he is wary of the potential to abuse this authority. He attends this conference as a respected independent expert on London's criminal underworld.

Jimmy Yang: the eccentric Chinese-Australian CEO of Galtworks, Jimmy Yang made his fortune in transportation and scientific innovation investments. A political and economic libertarian, Yang has made numerous high profile statements opposing government surveillance (although commercializing his customers' data is "just business"), and fears that uncontrolled AI may spell the end of humanity's freedom. His recent withdrawing of his newly-purchased Transport for London from all government surveillance programs is widely seen as an attempt to derail POSTMAN's implementation.

Glossary Of Organizations Introduced In This Background Guide

Corporations:

Forbin Associates: one of the world's leading surveillance hardware and video analytics technology producers, Forbin Associates is the corporation that invested in POSTMAN's research and development, and consequently owns the AI. Known for its daring gambles and generous treatment of its employees, it is led by Kurt Reynolds.

> **The Mailbag Initiative**: Forbin Associate's secretive experimental division responsible for creating POSTMAN. Originally headed by Ramesh Patel, his ex-protégé Evelynn Carver is the current initiative director after Patel's resignation.

> **Proactive Operating System for the Tactical Management of Anarchy Networks (POSTMAN)**: POSTMAN is the first artificial superintelligence in the world, designed to aggregate vast amounts of data to prevent the next occurrence of violent crime. It is capable of improving its intelligence through learning.

Galtworks Corporation: founded by Jimmy Yang, Galtworks is an Australian conglomerate with major interests in advanced transportation and entrepreneurial venture capitalism. Its biggest business interest in the UK is Transport for London.

Transport for London (TfL): formerly a municipal governmental body regulating all of Greater London's public transportation, Transport for London was privatized to Galtworks Corporation after the 2016 economic crisis. It maintains the Underground (subway), buses, city rails, and many major public roads. Under Yang, TfL has refused to cooperate with the CIAAO, citing privacy and policy concerns.

Government and civil society:

Civic Torch: one of the leading civil libertarian organizations working in London, the Civic Torch stands for the rights and freedoms of everybody threatened by the government or corporations.

Greater London Authority (GLA): the GLA is London's municipal government headed by a directly-elected Mayor and the London Assembly. Originally the GLA is responsible for several municipal functions, but since 2016, most of the responsible functional bodies (transport, property development, fire and emergency, and policing) were privatized in whole or in part. The current Mayor of London is Joseph Garrett (Conservative).

> Please note that there's a separate district within London called the City of London ("the City"), which, for historical reasons, has its own administration and police services separate from Greater London, headed by its own Lord Mayor.[52] For the purposes of simplicity, Nowhere to Run will treat the City as a normal part of Greater London, unless exceptional circumstances warrants the reemergence of the distinction.

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[52] It's easy to get "London" and the "City of London" confused (and likewise, the Mayor of London and the Lord Mayor of London). If you want to know more about it, see CGP Grey's videos about it (https://www.youtube.com/watch?v=LrObZ_HZZUc).

London Assembly: the London Assembly is a 25 member legislative council responsible for checking-and-balancing the Mayor. They are able to amend the Mayor's budget, veto the Mayor's strategies, and investigate and publish reports on municipal issues. Its Members are elected on a partisan basis.

Central Information Aggregation and Analytics Office (CIAAO): founded in 2011, the CIAAO is a data collection and data mining agency in partnership with the Met. It aggregates almost all of the city's surveillance feeds into its central offices before analyzing them for crime predictions. Under the direct supervision of the Mayor's Office for Policing and Crime, it was nearly privatized in 2017. Its first (and current) director is Anna Sinclair.

Metropolitan Police Service ("the Met"): the Met is Greater London's police force. It currently partners with the CIAAO as part of its predictive policing program.

Advanced Analytical Policing Commission ("the Commission"): this commission is ordered by Mayor Garrett to create the structure of a new predictive policing agency centered on POSTMAN, and oversee its implementation. The Commission forms the basis for this SSICsim committee.

Organized Crime and Subversive Groups:

"Parallel Sector": a pejorative used to describe the nebulous corruption within the government after 2016, based on the concern that corrupt civil servants are unaccountable to the public. Although conspiracy theorists worry about this as a sort of new world order cabal, most people regard corruption as simply an issue that needs to be efficiently curbed.

The Shadowless: a designated terrorist organization, the Shadowless is a group of mysterious hackers (if we can even call it a group) who use cyberattacks and street violence to oppose what they perceive as social injustices, monetary corruption, and the surveillance state.

Sturgeon Firm: leader Thomas Sturgeon led his gang from humble East End beginnings to asserting itself as the preeminent organized crime group in London after winning a number of gang wars. However, there are signs that its hold on the London criminal underworld is less powerful than previously thought.

"Tribes": a generic slang term to describe the tightly-knit groups of like-minded individuals, rising in the post-2016 environment. Their hobbies range from science to sports (and any combination), and their proficiency in their interest fields make them highly sought after hired guns (for tasks requiring their respective skills).

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Recommended Media

These are some of the cool resources our stuff drew on as inspiration for our London in 2020. Some of them might be aesthetic inspirations; others dive deeply into many of the philosophical debates related to this committee.

- TV series
  - Person of Interest[53]
  - Mr. Robot
  - Psycho-Pass
  - Minority Report

- Video games
  - Deus Ex: Human Revolution
  - Watch Dogs (primarily marketing materials)
  - Mirror's Edge

- Non-fiction
  - Global Catastrophic Risks (Edited by Nick Bostrom and Milan M. Cirkovic)
  - Superintelligence (by Nick Bostrom)
  - This Machine Kills Secrets (by Andy Greenberg)
  - The Snowden Files (by Luke Harding)

- Fiction novels
  - Little Brother (by Cory Doctorow)
  - Homeland (by Cory Doctorow)
  - For the Win (by Cory Doctorow)
  - The Girl with the Dragon Tattoo (by Stieg Larsson)

- Movies
  - Blade Runner
  - Children of Men
  - Citizenfour
  - Captain America: The Winter Soldier
  - Minority Report
  - Colossus: The Forbin Project
  - Elite Squad: The Enemy Within
  - Ex Machina

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[53] If you do plan on watching, here's a handy essentials episode guide to cut to the chase:
http://odesandrants.tumblr.com/post/128131669757/person-of-interest

Additional Research Resources

Ted Talks and Videos:

Policing and surveillance

- A vision of crimes in the future (Marc Goodman)
  https://www.ted.com/talks/marc_goodman_a_vision_of_crimes_in_the_future
- The small and surprisingly dangerous detail the police track about you (Catherine Crump)
  https://www.ted.com/talks/catherine_crump_the_small_and_surprisingly_dangerous_detail_the_police_track_about_you
- Why smart statistics are the key to fighting crime (Anne Milgram)
  https://www.ted.com/talks/anne_milgram_why_smart_statistics_are_the_key_to_fighting_crime
- VICE on HBO Season 2: Surveillance City and The Forgotten War
  https://www.youtube.com/watch?v=fVDvJCeCe54 (just watch the Surveillance City part)
- Invasion: The Real-World Technology of Watch Dogs
- https://www.youtube.com/watch?v=6UNIfv3ZNT0

Government surveillance

- The philosophy of government surveillance (Judith Simon)
  https://www.youtube.com/watch?v=MmJ8lkS0-qk
- Government surveillance — this is just the beginning (Christopher Soghoian)
  https://www.ted.com/talks/christopher_soghoian_government_surveillance_this_is_just_the_beginning
- How to avoid surveillance ... with the phone in your pocket (Christopher Soghoian)
  https://www.ted.com/talks/christopher_soghoian_a_brief_history_of_phone_wiretapping_and_how_to_avoid_it
- The Tor Project, protecting online anonymity (Jacob Appelbaum)
  https://www.youtube.com/watch?v=gCWeVYCcKXw
- Person of Interest: Living in the Age of Surveillance
  https://vimeo.com/49173421
- Why privacy matters (Glenn Greenwald)
  https://www.ted.com/talks/glenn_greenwald_why_privacy_matters

Big Data

- Big data and little privacy: there is no alternative? (Bart Preneel)
  https://www.youtube.com/watch?t=391&v=uYk6yN9eNfc
- Social Media Surveillance: Who is Doing It? (David Lyon)
  https://www.youtube.com/watch?v=_hX1r2Tbv5g
- Big data is better data (Kenneth Cukier)
  https://www.ted.com/talks/kenneth_cukier_big_data_is_better_data
- Big data & tech: feel the fear & – just maybe – do it anyway (Grace Cassy)

https://www.youtube.com/watch?v=KKNiF-u8ts8

Artificial Intelligence

- What happens when our computers get smarter than we are? (Nick Bostrom)
  https://www.ted.com/talks/nick_bostrom_what_happens_when_our_computers_get_smarter_than_we_are?language=en
- The long-term future of AI(and what we can do about it): Daniel Dewey
  https://www.youtube.com/watch?v=CK5w3wh4G-M
- Artificial Intelligence and the future (André LeBlanc)
  https://www.youtube.com/watch?v=xH_B5xh42xc
- Artificial intelligence: dream or nightmare? (Stefan Wess)
  https://www.youtube.com/watch?v=MaItaCQcYIE

Other Resources:

- Life in the fishbowl: The Strange Benefits of a Total Surveillance State by Stuart Armstrong
  http://aeon.co/magazine/society/the-strange-benefits-of-a-total-surveillance-state/
- Munk Debate on state surveillance
  http://www.cbc.ca/radio/ideas/state-surveillance-the-munk-debate-1.2913910