Race, technology and the necropolitics of border militarism

Corporate actors profiting from refugee and migrant abuse

Authors:
- Dhakshayini Sooriyakumaran, PhD candidate, RegNet School of Regulation and Global Governance, Australian National University;
- Brami Jegan, campaigner, Stop Deportations to Danger

"Regardless of who has or has not committed crimes, punishment, in brief, can be seen more as a consequence of racialized surveillance." - Angela Davis (2005)

The role of surveillance in society: social sorting

Whilst some literature suggests that surveillance is simply the capture of personal information, Lyon contends that surveillance is a strategy of social control, and that its purpose is to "influence or manage those whose data have been garnered" (Lyon, 2001). In this way, surveillance functions as a process of "social sorting" (Lyon, 2003), where surveillance capacities are used to collect data, categorise, classify, evaluate and ultimately assign individuals and groups an identity in relation to the normative white (or other dominant race or ethnicity), middle-aged, middle-class, able-bodied, cis-gendered, heterosexual male (Lyon, 2005; Marx, 2005).

Historical accounts of colonisation reveal that surveillance was essential for the classification of people and the control of newly acquired territories (Zuriek, 2013). From the 14th to the 19th century, European colonists amassed vast quantities of data on the populations they colonised. The foundations of modern-day biometrics, such as fingerprinting, census taking, map-making and profiling, were refined and implemented in colonial settings (Zureik, 2013). Information gathered via surveillance was used by European governments to classify populations according to innate biological traits, and construct racial hierarchies based on flawed notions of "scientific racism", both in the colonies and at home (Brown & Barganier, 2018). In Australia, white colonisers used these theories of white supremacy to justify violence such as massacres of Aboriginal and Torres Strait Islander people, land theft, removal of children from families, and erasure of language and culture (Anderson & Perrin, 2008).

Systems of surveillance have been instrumental in creating and reinforcing the social identities, divisions, and hierarchies that shape contemporary society (Gandy 1993; Lyon 2003). This is most apparent in the logics that construct the 'criminal'. Colonial racial taxonomies formed the basis for the modern study of 'deviance', a core concept of the scholarly field of Criminology (Brown & Barganier, 2018). Deviance is based on a "constant division between the normal and the abnormal" (Foucault, 1977) so that groups can be "sorted by levels of dangerousness" (Feely and Simon 1994). Harsha Walia, in her book *Undoing Border Imperialism* observes that "criminals are never imagined as politicians, bankers, corporate criminals, or war criminals, but as a racialised class of people living in poverty. The word criminal becomes synonymous with dehumanising stereotypes of ghettos, welfare recipients, drug users, sex workers, and young gang members" (2013).

The criminalisation of migration intensified in the aftermath of the attacks of 9/11 in New York and Washington DC (Akkerman, 2016; Lyon, 2003). The construction and reinforcement of race-based categories (Finn, 2005) as a potential threat (for example, Arab and Muslim men) justified a suite of new global counter-terrorism policies, legislation and the strengthened power of police and intelligence forces (Pellerin, 2005).

Surveillance serves as a technique to create and sustain borders through defining the grounds for exclusion and inclusion (Marx, 2005), such as citizenship criteria that determines who does or does not belong as a full member of a nation-state (Lyon, 2005). In addition to the ability to admit or exclude, today surveillants – whether at an airport, a welfare office, or a credit card company – have the responsibility of defining people as normal or deviant, desirable or

undesirable, safe or risky, citizen or threat, healthy or diseased. These definitions have profound effects on the freedom of those individuals (Finn, 2005; Lyon, 2005; Marx, 2005). In this way, surveillance plays a central role in reproducing inequality, creating a hierarchy of access to various social, political, or economic benefits (Lyon, 2005).

Achille Mbembe describes the brutality of borders as an embodiment of "necropolitics", which he defines as the "ultimate expression of sovereignty… the power and capacity to dictate who is able to live and who must die" (2019). Social sorting, and its power to "kill, to let live, or to expose to death" will remain a central feature of contemporary society and only be strengthened through the development of surveillance technologies (Mbembe, 2019; Lyon, 2005).

Neoliberalisation, growing corporate power and border security

Colonial racial hierarchies were the primary structuring principle of the capitalist world economy which laid the foundation for the lasting rift between parts of the world categorised broadly as Global North and Global South[1] (Hoogvelt, 1997).

Global North state and corporate interests have been intertwined since colonisation (14th to the 19th century), however neoliberal economic policy of the 1970s ushered in an era of free trade, open markets, privatisation, deregulation, and an expansion of the role of the private sector (Fraser, 2003).

In the Global South neoliberalisation weakened states through the opening of markets to powerful foreign firms. The US established its position as a global empire through coercing Global South countries to accept development loans channelled through the IMF, World Bank, USAID, and other foreign "aid" organisations. When debts could not be repaid large corporations deployed fraudulent and violent tactics to force Global South states to acquiesce to US political pressure (Ayazi and Elsadig, 2019).

This economic globalisation resulted in the simultaneous tightening of borders (i.e. borders of security), alongside the freer flow of goods, information, and certain persons (i.e. borders of economic integration) (Marx, 2005; Pellerin, 2005). These two analytical logics were linked, as securitised borders occurred in regions where economic integration was moving ahead, largely in the Global North (Pellerin, 2005). Border security measures such as the militarisation of borders, immigration detention and deportation were predominantly targeted at impoverished and colonised communities from the Global South, despite the fact that Global North actors were in part drivers of this mass displacement (Walia, 2013).

Neoliberalisation in the Global North manifested in cuts to, and the privatisation of state-furnished public services, from public utilities, education, and health care, to social welfare, public space, and other services (Ayazi and Elsadig, 2019). The withdrawal of the state from public services further magnified its "law, order and security" function (Lyon, 2005). Today, in a world where media-amplified fear of the racialised 'other' is commonplace and where 'security' has become a primary political goal (Lyon, 2005), the privatisation of surveillance and policing presents lucrative business opportunities for transnational corporations. The "necropolitics" of border militarisation (Mbembe, 2019) has been increasingly outsourced to corporate entities driven by monopolistic extraction and capital accumulation with 'limited liability' for the externalities exploited[2].

The rise of virtual borders and digital identification systems

The border security paradigm is underpinned by an insatiable quest for more and better knowledge of risk so that 'deviants' can be accurately and efficiently identified (Ericson and Haggerty, 1997). This risk knowledge is gleaned through surveillance practices, which today mean the use of information technologies such as biometrics, Internet of Things (IoT), big data, cloud infrastructures and computer vision (Nieto-Gomez, 2014; Vielhauer, 2017). Borders that "contain, channel, and sort" populations and persons have become virtual, expanding surveillance as a method of

---

[1] Global South can also refer to the geography of capitalism's externalities and subjugated peoples both within and beyond the borders of wealthier countries such as the United States and European nations (Hoogvelt, 1997)

[2] The term 'externalities' describes the shifting of costs or benefits outside of the market. For example, when a company pollutes the atmosphere with carbon dioxide (e.g. Standard Oil), it is the environment and communities of people who experience the impacts of climate change. The company pays nothing for the free use of the atmosphere (Economic Opportunity Institute, 2010).

formalised social control (Lyon, 2002; Lyon, 2005). The automation of border policing further exacerbates the criminalisation of marginalised persons and groups.

Digital identification systems typically combine biometric identifiers, such as fingerprints, facial patterns, iris scans, or voice recordings, with other Personal Identifying Information (PII) for greater accuracy of verification or identification. Increasingly, the body — or information collection about the body — becomes a passport, that both enables and inhibits movement within a given territory and across borders (Lewis, 2005; Muller 2004; Zureik 2004).

Despite the fact that Europe's General Data Protection Regulation (GDPR) strictly prohibits the processing of biometric data for the purpose of uniquely identifying a person, unless the person gives explicit consent (Article 9, GDPR; Electronic Frontier Foundation, 2020), biometrics are a fast growing industry. The global biometric systems market is forecast to grow from $33.0 billion in 2019 to $65.3 billion by 2024 (Markets and Markets).

A controversial example of the use of biometrics is the Vehicle Face System pilot on parts of the US-Mexico border that records images of people in vehicles crossing the border, with the aim of creating a facial recognition system that checks collected images against those stored by authorities (Brandom, 2018). The more commonplace and seemingly harmless example is biometric data collection at airports. Peter Adey argues that the "airport is now a surveillance machine – an assemblage where webs of technology and information combine" (Adey, 2004). IBM's multiple contracts with the Australian government, listed below, demonstrate how various datasets can be combined and analysed for risks:

- Department of Home Affairs contract to manage back-end systems that hold personal information collected by departures SmartGates at Australian airports (Office of the Australian Information Commissioner, 2018);
- Department of Home Affairs contract that utilises IBM's Watson platform to examine useful information hidden in unstructured data sources such as news feeds and government reports (Chanthadavong, 2015);
- Australian Customs and Border Protection Service (ACBPS) contract for an advanced passenger analysis system that "collects and stores Passenger Name Record (PNR) data which is then risk assessed in combination with other relevant information" for the purpose of "identifying travellers who may be a risk ahead of or during travel" (IBM, 2013).

Smart ID cards represent a significant development in surveillance as they introduce a further level to the virtual border of the nation state. Their stated purpose is to give citizens automated access to public services. Yet their true intent is immigration control, fraud control, anti-terrorism, and more efficient policing (Lyon, 2005; Privacy International, 1996). With the widespread adoption of national ID cards, the experience of otherness becomes steadily more ubiquitous, no longer limited to physical borders (Lyon, 2005; Privacy International, 1996). Increasingly, the "border is everywhere" (Lyon, 2005).

The Indian government has introduced the Aadhaar, a randomly generated 12-digit digital ID that was made mandatory for accessing state benefits, welfare subsidies, and to file taxes. When registering for Aadhaar, people are required to share fingerprints and iris scans, in addition to their name, date of birth, gender, address and a facial photograph. Paytm[3] with Aadhaar has also become compulsory. For trans people, who have restricted job opportunities, sex work is often one of the few options available. Under Indian law, both soliciting and living off the income of sex work are crimes. Due to data on payments being linked to data on gender, Aadhaar can inadvertently make sex workers more visible in way that puts them at risk, placing an already marginalised group under further scrutiny (Kovacs, 2020).

'Internal' IDs are likely to be closely tied to the 'external' IDs such as passports. In the UK, for example, ID cards are associated with passport and driver's licence renewals. Consequently, personal data becomes globalised. Technology corporations and governments promote high-tech ID options rather than low-tech, labour-intensive alternatives, as they present an opportunity to secure a monopoly over the means of identification (Lyon, 2005).

Governments around the world are taking steps to connect databases to make them inter-operable. For example, the Council of the EU adopted regulations to enable interoperability between various information systems, including its migration databases, to 'improve security, allow for more efficient checks at external borders, and contribute to

---

[3] Paytm is an Indian e-commerce payment system and financial technology company.

combating illegal migration'. This has led to the development of a European search portal and a shared biometric matching service, which allows the EU and member states simultaneously to search multiple databases and cross-check identities with biometric data (Council of the EU, 2019; Akkerman, 2020). This linking of once-discrete information systems into networks of information means it can be used to generate and analyse information for purposes not even remotely close to the original purpose of information collection (Lyon, 2005).

The most alarming technological development in surveillance societies is the use of these ever-expanding and interconnected data sets, commonly referred to as big data, for predictive policing. Using computational methods, such as Machine Learning (ML), a computer system can learn intelligent behaviour from data (i.e. Artificial Intelligence) and make predictions about the future based on algorithms. Typically, a large part of a data set is used as training to make the system learn, and then it can be used to make predictions based on other data (Gerritson, 2020).

An example of this is the Suspect Targeting Management Plan (STMP), a secret New South Wales (in Australia) policy concerned with deterring the future criminal activity of both recidivist offenders, as well as those who have not been found guilty of offences (but are suspected to be at risk of committing crimes). The STMP includes a quantitative risk assessment tool that uses algorithms to assess the 'risk' level of individuals. Identified individuals are subject to a 'targeted program' by police officers which includes regular visits to the individual's home and using police powers such as stop and search. Independent research into the initiative revealed that children as young as nine have been targeted, and that more than 50% of those targeted are Indigenous (Sentas & Pandolfini, 2017).

The trend towards interconnected and expanding big data increases the scope for pre-emptive surveillance (Lyon, 2001; Marx, 2005). This further extends the access of the state and corporation into the lives of those with marginalised identities, defining their futures based on biased datasets and algorithms.

COVID-19: Surveillance technologies for public health, social welfare, and border policing

Since the emergence of COVID-19, several countries, including Australia, China, India, Israel, Singapore, South Korea, the US and UK, have deployed invasive digital surveillance to track the spread of the virus and enforce lockdown and quarantine policies. These include the collection of security camera footage, mobile phone location data, bank records, and using facial recognition (Amnesty International, 2020; Manokha, 2020).

In a short period of time health status has become deeply embedded in mobility infrastructure in ways that cannot be easily reversed. The International Centre for Migration Policy Development (ICMPD[4]) envisions a future where "a medical certification and medical card containing information about the current health status and health history will probably be required when travelling" across borders (Eržen *et al*, 2020; (Akkerman, 2020). The computerisation of medical records in recent years has created an abundance of accessible and sensitive information (van de Ploeg, 2002). The pandemic may mark the beginning of a new era of generalised surveillance based on biometrics and health-related big data, where disciplinary control usually reserved for 'deviants' is diffused throughout society (van de Ploeg, 2002).

Enhanced corporate interest in the provision of health and policing services as part of the government responses to COVID-19 represents a further blurring between data collected for state and commercial purposes, and another step toward the globalisation of personal data. During a meeting with the UK government, companies with experience (and large government contracts) in border control, such as Palantir, Google, Amazon and Microsoft, discussed "what they could do to help model and track the disease and the impact of government interventions" (Volpicelli, 2020; Akkerman, 2020)).

Modern technology corporations (such as Amazon, Microsoft, and Google) are markedly different to monopolies of the past due to their ability to use vast amounts of data to dictate consumer behaviour, undermine democracy (Zuboff, 2019), and automate security and policing. This centralisation of power and wealth has been thus far largely immune to regulatory interventions, despite ongoing antitrust scrutiny (McLaughlin & Brody, 2020).

---

[4] ICMPD is an international organisation, with 18 European states as members, that is focused on combating irregular migration, border management and refugee returns. It works closely with the EU.

Palantir, a company with a history of secretive contracts with military and security actors, is working with at least twelve governments on responses to COVID-19 (Akkerman, 2020). The rise of public-private partnerships between governments and technology companies to combat COVID-19 serves to emphasise the role of the government as 'client' and undermines its ability to function as an independent regulator of the technologies deployed (Akkerman, 2020).

Escalating climate impacts and the militarisation of borders

Like the pandemic, climate change is another global emergency that is likely to further accelerate the militarisation and surveillance of borders. Climate change contributes to migration and displacement of people by causing more intense or frequent natural disasters, warming and drought, or sea level rise. It is unlikely that climate change is the only reason why someone will be forced to move to seek safety. People displaced by the impacts of climate change are also often displaced by other environmental, economic, political, and social factors.

Political situations and economic conditions are also deeply embedded in the environment. Any environmental disruption has immediate economic or political consequences (Gemenne & Zickgraf, 2019). For example, environmental changes can create or exacerbate conflict, displacing more people. This movement of people to ensure their basic needs are met has already begun (Narahari, 2019; Ruppel, 2014).

While much of the initial displacement is occurring within borders, there will inevitably be increased movement across international borders (Lustgarten, 2020). Formal pathways for climate-induced migration are severely underdeveloped and unlikely to improve given the lack of international cooperation. The Global Compact for Safe, Orderly and Regular Migration (GCM) adopted in 2018 recognises climate migration, however, it is based on political promises rather than legal obligations.

Over the past decade climate change has been cast as a national and international security issue (Hayes, 2015). As described by Hayes and Buxton in their book, *The Secure and the Dispossessed: How the military and corporations are shaping a climate-changed world,* "by portraying people as some kind of Hobbesian mass that will inevitably meet food shortages with violence, or as hordes of would-be migrants massing at our borders, we are giving succour to the security strategists and politics of fear that make people more willing to contemplate giving up their freedoms" (Hayes & Buxton, 2015). This framing of climate induced-migration serves to reinforce the construction of race-based categories as a threat, and justify the implementation of increasingly draconian migrant and refugee policies by Global North governments. Walls, bullets, drones and cages are therefore positioned as essential to eliminating this 'threat' (Miller, 2019).

As the climate emergency worsens, the border, as a tool of social sorting, will be used by Governments and corporations to categorize populations into those who can be sacrificed and those who must be protected as economies start to fail and resources become scarce. The automation of border policing and the expansion of digital identification systems will make the brutality of borders more efficient; with greater speed, scale, accuracy, and lower cost.

Lobbying and political donations[5]

Lobbying and political donations increase the risk of 'corporate capture' through which "an economic elite undermines the realization of human rights and the environment by exerting undue influence over domestic and international decision-makers and public institutions" (ESCR, 2020; Akkerman, 2020). This is particularly a risk when ties become too close via the 'revolving door' between public office and private companies, that is common in the military and security industry as well as at consultancy companies (Nielsen, 2011; Smithberger, 2018; Zibel, 2019; Chamberlain, 2019). Todd Miller notes, for example "almost all former CBP commissioners and DHS secretaries have shuffled into the private sector or various consulting companies, giving both 'expert opinions' and greasing the wheels between industry and homeland security" (Miller, 2019).

---

[5] Information in this section has been, in part, drawn from an unpublished Transnational Institute (TNI) report that focuses on key companies and investors involved in immigration detention, transportation and deportation, border policing, technology enabled surveillance and monitoring.

Donations to political candidates, elected politicians and political parties can serve as a means to 'buy' influence and to enable companies to secure contracts and policy changes. Research suggests that political donations at the minimum give donors significantly greater access to policymakers (Kalla & Broockman, 2016).

The expanding power of the private sector under neoliberalism is also made manifest through industry lobby groups that seek to influence government policy and procurement processes. These organisations play a role in perpetuating the narrative of migration as a security problem and/or threat, which leads to policies such as increased border security, externalization and privatized immigration detention.

For example, the Security Identity Alliance (SIA), founded by biometrics companies Gemalto (part of the weapons company Thales) and IDEMIA, is an active lobby group in Europe on digital identities. The group recently published a paper titled *Strong identity, strong borders*, which is described as a 'best practice guidance on the development of a cohesive and effective eBorder strategy'. In it, the SIA explicitly argues for "exporting the border" through interventions before people leave for their destination, for example with a "face to face interview by a representative of the destination country", including "biometric enrolment - of face and fingerprints for example - which can be checked against police and immigration records back in the home country"(Secure Identity Alliance, 2017). Corporate capture of government policy is a major impediment to effective regulation of emerging technologies.

Mapping corporate actors involved in the surveillance and militarisation of borders

Recent market research reports expect an annual growth of the global border security market between 7.2% and 8.6% to a total of 65-68 billion dollars in 2025 (Global Reports Store, 2019). In the US, the budget for border and immigration control has increased by more than 6000% since 1980, demonstrating industry growth under neoliberalism (Miller, 2020).

Industry sectors related to immigration and border management include border monitoring services, transportation of migrants, screening and/or determination of claims for protection, processing of visas and/or pre-departure screening at airports, management and security of immigration-related detention facilities; deportations and returns, collection of biometric data and use of private security technologies to support immigration and border management procedures; security in humanitarian settings (including camps, shelters etc) (UN Working Group on the Use of Mercenaries, 2020). This group of sectors has various definitions. Journalist and author Todd Miller terms the confluence of border policing, militarisation and financial interest as the 'Border Industrial Complex' (BIC). Alternatively, the American Friends Service Committee (AFSC) uses the description 'companies involved in the militarization of borders and the policing of immigration'.

AFSC, the Transnational Institute (TNI), Mijente, Privacy International, Migreurop and other not for profit organisations have been researching the main companies (both private and state controlled) providing these services. For example, AFSC has an extensive divestment list and Mijente's 'No Tech for Ice' campaign research companies that are building the tools used to surveil, incarcerate, and deport communities from the US.

Researchers have also been tracking the asset managers most heavily invested in the companies operating in these sectors. For example, *The Political Economy of Entry Governance* (Lemberg-Pedersen, Hansen, Joel Halpern, 2020) notes "representing free-floating private equity, the Vanguard Group is the top shareholder of 3M, HP, IBM and Accenture, while also owning smaller portions of shares in Airbus, Leonardo, Thales, Safran and Atos. Through its ownership, the Vanguard Group thus dominate a number of companies, which have been central for the construction of the EU databases controlling entry governance, whilst also exercising lesser influence on the companies involved in EUROSUR. Similarly, different BlackRock funds own large numbers of shares in 3M, HP, IBM, Accenture, Safran, Indra, Thales".

Further to this, Transnational Institute (TNI) will be releasing a report in December 2020 that identifies the financial investors in the key companies in the BIC, the trends shaping its growth and the influence of BIC lobbyists on government policy towards refugees.

References

American Friends Services Committee. 2020. "Borders". Accessed October 2020.
https://investigate.afsc.org/borders

Adey, Peter. 2004b. *Surveillance at the Airport: surveilling mobility/mobilizing surveillance.*
Environment and Planning A. London; Pion Ltd.

Akkerman, Mark. 2016. *Border Wars: The arms dealers profiting from Europe's refugee tragedy.*
Amsterdam; TNI and Stop Wapenhandel, July.

Akkerman, Mark. 2020. *COVID-19 and Border Politics.* Amsterdam; TNI and Stop Wapenhandel,
July.

Akkerman, Mark. 2020. "How the arms industry drives Fortress Europe's expansion". *Crisis.* Accessed
November 2020. https://crisismag.net/2020/06/27/how-the-arms-industry-drives-fortress-europes-expansion/

Alston, Philip. 2019. "Report of the Special rapporteur on extreme poverty and human rights".
Human Rights Council of the United Nations (UN). Accessed October 2020.
https://algorithmwatch.org/en/un-special-rapporteur-on-digital-technology-and-social-protection-denounces-a-human-rights-free-zone/

Amnesty International. 2020. "COVID-19, surveillance and the threat to your rights". Accessed
May 2020. https://www.amnesty.org/en/latest/news/2020/04/covid-19-surveillance-threat-to-your-rights/

Anderson, Kay. & Perrin, Colin. 2008. "How Race Became Everything: Australia and
Polygenism". *Ethnic and Racial Studies*, 31(5): 962-990.

Ayazi, Hossein and Elsheikh, Elsadig. 2019. "Climate Refugees: The Climate Crisis and Rights
Denied". Othering and Belonging Institute. Berkeley, CA; Othering & Belonging Institute, University of
California Berkeley. https://belonging.berkeley.edu/climaterefugees

Berger, Sarah. 2019. "Jeff Bezos gave away more money than Bill Gates, Mark Zuckerberg
combined in 2018". Accessed April 2019.
https://www.cnbc.com/2019/02/13/philanthropy-50-how-much-bezos-gates-zuckerberg-charities-gave-away.html

Brandom, Russell. 2018. "New Homeland Security system will bring facial recognition to land
borders this summer." Accessed August 2020.
https://www.theverge.com/2018/6/5/17427150/facial-recognition-vehicle-face-system-homeland-security-immigration-customs.

Brown, Elizabeth, and George Barganier. 2018. *Race and Crime: Geographies of Injustice*. Oakland,
California: University of California Press.

Burrington, Ingrid. 2015. "How Railroad History Shaped Internet History". *The Atlantic.*
Accessed April 2020.
https://www.theatlantic.com/technology/archive/2015/11/how-railroad-history-shaped-internet-history/417414/

Chamberlain, Phil. 2019. "Police and the private security industry are too cosy for comfort", The
Guardian, 31 July.

Chanthadavong, Aimee. 2015. "Border protection hones in on data using IBM's Watson", ZDNet.
Accessed May 2020. https://www.zdnet.com/article/border-protection-hones-in-on-data-using-ibms-watson/

Cohn, Bernard S. 1987. *An anthropologist among the historians and other essays.* Delhi, New York;
Oxford University Press.

Council of the EU. 2019. "Council of the EU, Interoperability between EU information systems:
Council Presidency and European Parliament reach provisional agreement". Press release, 5 February. Council
of the EU. 2019. "Interoperability between EU information systems: Council adopts regulations". Press
release, 14 May.

Crimmigration in Australia : Law, Politics, and Society, edited by Peter Billings, Springer
Singapore Pty. Limited, 2019. ProQuest Ebook Central,
https://ebookcentralproquestcom.virtual.anu.edu.au/lib/anu/detail.action?docID=5940332

Davis, Angela Y. 2005. *Abolition Democracy: Beyond Empire, Prisons, and Torture*. New York; Seven
Stories Press.

Donaldson, John W. 2005. "Chapter 11: Fencing the line: analysis of the recent rise in security
measures along disputed and undisputed boundaries" in *Global Surveillance and Policing: Borders, Security,
and Identity.* Edited by Elia Zureik and Mark B. Salter. Cullompton, Devon; Willan Publishing.

Economic Opportunity Institute. 2010. "Econ 101: Market Failures". Accessed April 2020.

http://www.opportunityinstitute.org/_v1/blog/econ-101-market-failures/

Ericson, R. and Haggerty, K.H. 1997. *Policing the Risk Society*. Toronto; University of Toronto Press.

Eržen, Borut, Weber, Monika and Sacchetti, Sandra. 2020. "Expert voice: How COVID-19 is changing border control, ICMPD". Accessed May 2020. https://www.icmpd.org/news-centre/news-detail/expert-voice-how-covid-19-is-changing-border-control/

Feely, Malcolm. and Simon, Jonathan. 1994. "Actuarial Justice: The Emerging New Criminal Law". in D. Nelken (ed.) *The Futures of Criminology*. London; Sage.

Finn, Jonathan. 2005. "Chapter 9 Potential threats and potential criminals: data collection in the national security entry-exit registration system" in *Global Surveillance and Policing: Borders, Security, and Identity*. Edited by Elia Zureik and Mark B. Salter. Cullompton, Devon; Willan Publishing.

Foucault, M. 1977. *Discipline and Punish: The Birth of the Prison*, translated by A. Sheridan. New York; Vintage.

Franko Aas, Katja. "'Getting ahead of the game': border technologies and the changing space of governance" in *Global Surveillance and Policing: Borders, Security, and Identity.* Edited by Elia Zureik and Mark B. Salter. Cullompton, Devon; Willan Publishing.

Fraser, Nancy. 2003. "From Discipline to Flexibilization? Rereading Foucault in the Shadow of Globalization," Constellations 10, no. 2.

Gemenne, F. & Zickgraf, C. 2019. Op-ed: Refugees Shouldn't Be Used as Props to Alert to the Dangers of Climate Change. ECRE Weekly Bulletin. Accessed November 2020. https://www.ecre.org/op-ed-refugees-shouldnt-be-used-as-props-to-alert-to-the-dangers-of-climate-change/

GDPR. "Art. 9 GDPR Processing of special categories of personal data". Accessed August 2020. https://gdpr-info.eu/art-9-gdpr/

Gerritson, Charlotte. 2020. "Big data and criminology from an AI perspective" in Big Data. Edited by Leclerc, B., & Cale, J. ProQuest Ebook Central http://ebookcentral.proquest.com

Global Reports Store. 2019. "Global Border Security System Industry is Estimated to Grow at a CAGR of 8.6 and Reach Up To 67.81 Bllion by 2025", April. *Market Research Future*., Border Security Market Research Report - Global Forecast till 2025, September.

Hayes, Ben. 2015. "Colonising the Future" in *The Secured and the Dispossessed*. Edited by Nick Buxton and Ben Hayes: Pluto Press and Transnational Institute. Accessed May 2020. https://www.tni.org/en/publication/the-secure-and-the-dispossessed

Hayes, Ben and Buxton, Nick. 2015. "Conclusion: Finding Security in a Climate-Changed World" in *The Secured and the Dispossessed*. Edited by Nick Buxton and Ben Hayes: Pluto Press and Transnational Institute. Accessed May 2020. https://www.tni.org/en/publication/the-secure-and-the-dispossessed

Hildyard, Nicholas and Masley, Mark. 2001. "The Campaigner's Guide to Financial Markets". Accessed August 2020. http://www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/camguide.pdf

Hoogvelt A. 1997. *The History of Capitalist Expansion. In: Globalisation and the Postcolonial World.* Palgrave, London. https://doi.org/10.1007/978-1-349-25671-6_1

Horvath, Balint. 2018. "The recognition of resource use through industrial development from a social perspective". *Studia Mundi - Economica*. 5(10):68-78.

IBM. 2013. "Australian Customs and Border Protection Service Selects IBM to Secure Australia's Borders", press release. Accessed May 2020. https://www-03.ibm.com/press/au/en/pressrelease/41841.wss

International Network for Economic, Social and Cultural Rights (ESCR). Accessed June 2020. https://www.escr-net.org/corporateaccountability/corporatecapture

Ireland, Paddy. 2010. "Limited liability, shareholder rights and the problem of corporate irresponsibility". *Cambridge Journal of Economics*, Volume 34, Issue 5: 837–856. https://doi.org/10.1093/cje/ben040

Kalla, Joshua. L. and Broockman, David .E. 2016. Campaign Contributions Facilitate Access to Congressional Officials: A Randomized Field Experiment. American Journal of Political Science, 60: 545-558.

Kallman, Meghan, and Rachele Dini. 2017. *An Analysis of Michel Foucault's Discipline and Punish.* Macat International Limited; ProQuest Ebook Central. Accessed August 2020. http://ebookcentral.proquest.com/lib/anu/detail.action?docID=4906209

Kovacs, Anja. 2020. "When our bodies become data, where does that leave us?". Accessed August 2020. https://deepdives.in/when-our-bodies-become-data-where-does-that-leave-us-906674f6a969

Latonero, Mark. 2019. "Stop Surveillance Humanitarianism: Requiring biometric data, like iris and

facial scans, sets a dangerous precedent for vital aid." The New York Times. Accessed August 2020.
https://www.nytimes.com/2019/07/11/opinion/data-humanitarian-aid.html

Lemberg-Pedersen, Martin; Hansen, Johanne Rübner; Joel Halpern, Oliver. 2020. "The political economy of
entry governance" Aalborg University Denmark. Accessed November 2020.
https://vbn.aau.dk/ws/portalfiles/portal/321478293/AdMiGov_POLITICAL_ECONOMY_OF_ENTRY_GOV
ERNANCE_for_public_dissemination.pdf

Lewis, Nancy. 2005. "Chapter 7, Expanding surveillance: connecting biometric information
systems to international police cooperation" in *Global Surveillance and Policing: Borders, Security, and
Identity.* Edited by Elia Zureik and Mark B. Salter. Cullompton, Devon; Willan Publishing.

Lustgarten, Abrahm. 2020. "The Great Climate Migration". *New York Times*. Accessed July 2020.
https://www.nytimes.com/interactive/2020/07/23/magazine/climate-migration.html

Lyon, David. 2001. *Surveillance Society: Monitoring Everyday Life.* Philadelphia; Open University
Press.

Lyon, David. 2005. "The border is everywhere: ID cards, surveillance and the other" in *Global
Surveillance and Policing: Borders, Security, and Identity.* Edited by Elia Zureik and Mark B. Salter.
Cullompton, Devon; Willan Publishing.

Manokha, Ivan. 2020. "How data-mining companies are set to gain from the COVID-19
pandemic". openDemocracy. Accessed June 2020.
https://www.opendemocracy.net/en/can-europe-make-it/how-data-mining-companies-are-set-gain-covid-19-pa
ndemic/

Markets and Markets. "Biometric System Market worth $65.3 billion by 2024". Accessed June 2019.
Press release: www.marketsandmarkets.com/press-release-2.html

Mbembe, Achille. 2019. *Necropolitics.* Durham and London; Duke University Press. ProQuest
Ebook Central. Accessed August 2020.
http://ebookcentral.proquest.com/lib/anu/detail.action?docID=5969507

Marx, Gary T. 2005. "Chapter 2: Some conceptual issues in the study of borders and surveillance"
in *Global Surveillance and Policing: Borders, Security, and Identity.* Edited by Elia Zureik and Mark B.
Salter. Cullompton, Devon; Willan Publishing.

Miller, Todd. 2019. "More Than A Wall: Corporate profiteering and the militarization of US
borders". Amsterdam: TNI and No More Deaths/No Más Muertes, September.

Miller, Todd. 2019. "Why climate action needs to target the border industrial complex". *Al Jazeera.* Accessed
May 2020.
https://www.aljazeera.com/opinions/2019/11/1/why-climate-action-needs-to-target-the-border-industrial-comp
lex/

Miller, Todd. 2020. "Border agents are allowed to operate 100 miles inside the US. That should worry us".
The Guardian. Accessed November 2020.
https://www.theguardian.com/commentisfree/2020/aug/08/border-agents-us-force#:~:text=The%20agency's%
20budget%20has%20also,100%20miles%20of%20the%20border

Muller, Benjamin J. 2005. "Chapter 6 Borders, bodies and biometrics: towards identity
management" in *Global Surveillance and Policing: Borders, Security, and Identity.* Edited by Elia Zureik and
Mark B. Salter. Cullompton, Devon; Willan Publishing.

Narahari, Nina. 2019. "UC Berkeley institute releases report on climate refugees". The Daily Californian.
Accessed May 2020.
https://www.dailycal.org/2019/12/12/uc-berkeley-institute-releases-report-on-climate-refugees/

Nielsen, Nikolaj. June 2011. "The European Parliament's revolving door", Brussels: Corporate
Europe Observatory. Accessed June 2020.
https://corporateeurope.org/sites/default/files/the_revolving_door_final.pdf

Nieto-Gomez, Rodrigo. 2014. "Walls, Sensors and Drones: Technology and Surveillance on the
US–Mexico Border". In Vallet, E. (ed.). Borders, Fences and Walls.

Mijente. 2020. "No Tech for Ice". Accessed May 2020. https://notechforice.com/

Office of the Australian Information Commissioner. October 2018. "Summary of the OAIC's
assessment of IBM's handling of personal information using SmartGate systems", Australian Government.
Accessed May 2020.
https://www.oaic.gov.au/privacy/privacy-assessments/summary-of-the-oaics-assessment-of-ibms-handling-of-
personal-information-using-smartgate-systems/

Pellerin, Hélène. 2005. "Chapter 4 Borders, migration and economic integration: towards a new

political economy of borders" in *Global Surveillance and Policing: Borders, Security, and Identity.* Edited by Elia Zureik and Mark B. Salter. Cullompton, Devon; Willan Publishing.

Privacy International, "ID card frequently asked questions", Accessed August 2020.
https://web.archive.org/web/20110903074029/https://www.privacyinternational.org/article/id-card-frequently-asked-questions#1

Ruppel, Oliver. 2014. "Intergovernmental Panel on Climate Change (IPCC) Calls for More Attention on Human Mobility". *UN Migration.* Accessed November 2020.
https://weblog.iom.int/intergovernmental-panel-climate-change-ipcc-calls-more-attention-human-mobility#_ftn16

Scholyer-Gray, Patrick, Jeong, Jay, and Zoltavkin, Yevhen. 2020. "Australia's National Digital ID is here, but the government's not talking about it". *The Conversation.* Accessed August 2020.
https://theconversation.com/australias-national-digital-id-is-here-but-the-governments-not-talking-about-it-130200

Sentas, Vicky and Pandolfini, Camilla. 2017. Policing Young People in NSW: A Study of the Suspect Targeting Management Plan. A Report of the Youth Justice. Coalition NSW (Sydney: Youth Justice Coalition NSW)

Smithberger, Mandy. 2018. "Brass Parachutes: The Problem of the Pentagon Revolving Door". *Project On Government Oversigh*t. Accessed June 2020.
https://www.pogo.org/report/2018/11/brass-parachutes/

United Nations Working Group on the Use of Mercenaries. 2020. "Call for submissions to the role of private military and security companies in immigration and border management and the impact on the protection of the rights of all migrants". Accessed May 2020.
https://www.ohchr.org/en/Issues/Mercenaries/WGMercenaries/Pages/Callroleprivatemilitary.aspx

van de Ploeg, Irma. 2002. "Biometrics and the body as information: Normative issues of the sociotechnical coding of the body" in *Surveillance As Social Sorting: Privacy, Risk and Automated Discrimination* edited by David Lyon. London and New York; Taylor & Francis Group.

Ventresca, Marc, J. and Mohr, John, W. 2002. "Archival Research Methods" in *The Blackwell Companion to Organizations, First Edition.* edited by Joel A. C. Baum. Malden, MA; Blackwell Publishers Ltd.

Vielhauer, Claus. (eds). 2017. *User-Centric Privacy and Security in Biometrics: Volume 4 of Security Series.* Germany; Institution of Engineering and Technology.

Volpicelli, Gian. 2020. "Inside Dominic Cummings's coronavirus meeting with big tech". *Wired*. Accessed May 2020. https://www.wired.co.uk/article/dominic-cummings-coronavirus-big-tech

Walia, Harsha. 2013. Undoing border imperialism. Accessed June 2019.
https://s3.amazonaws.com/arena-attachments/770323/6a088e6a4baa083e1f720982c0bff8b9.pdf

Wallach, Omri. 2020. "How Big Tech Makes Their Billions". *Visual Capitalist*. Accessed August 2020. https://www.visualcapitalist.com/how-big-tech-makes-their-billions-2020/

Wang, Jackie, 2018. "Carceral Capitalism". *The New Enquiry*. Accessed October 2019.
https://thenewinquiry.com/carceral-capitalism/

Warman, Matt. 2020. "Next steps outlined for UK's use of digital identity: Digital Identity Strategy Board develops new principles to boost secure use of digital identity." *Gov.uk.* Accessed October 2020. https://www.gov.uk/government/news/next-steps-outlined-for-uks-use-of-digital-identity

Woodward, Jr., J.D., Orlans, N.M. and Higgins, P.T. 2003. *Biometrics: Identity Assurance in the Information Age*. New York; McGraw-Hill.

World Bank. 2017. "Principles on Identification for Sustainable Development: Toward the Digital Age".
http://documents1.worldbank.org/curated/en/213581486378184357/pdf/Principles-on-identification-for-sustainable-development-toward-the-digital-age.pdf

Zibel, Alan. 2019. "Revolving Congress: The Revolving Door Class of 2019 Flocks to K Street", Public Citizen. Accessed June2020.
https://www.citizen.org/wp-content/uploads/revolvingcongress.pdf

Zuboff, Shoshana. 2019. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power.* New York; PublicAffairs.

Zureik, Elia. 2013. "Colonial oversight". Accessed May 2020.
https://www.redpepper.org.uk/colonial-oversight/