# Everyday AI Ethics: From the Global to Local Through Facial Recognition

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## Introduction

Prominent discussions on AI ethics frameworks and other initiatives, take place at the international or national level, and especially those from the human rights approach may claim a universal or global application and significance.[[1]](#footnote-1) Outside of prominent countries such as those in North America, Europe, and East Asia,[[2]](#footnote-2) national—and within even the ‘prominent countries’, subnational (e.g. devolved regional or provincial administrations), and local level—discussions and activities around AI ethics have received less attention and instead are often overlooked in favor of supposedly more impactful, ‘higher-level’ discussions. However, this is a problem, as these higher-level discussions do not make much sense unless we have an understanding of how AI is encountered, negotiated, and contested on local levels.[[3]](#footnote-3)

Even within such prominent countries and regions, more local AI ethics discussions and practices may be overlooked or deemed less relevant and impactful for researchers, and possibly inconvenient for policy makers and corporations. Looking at the U.K. context where I am now based and which this chapter relates to, ‘impact’ in academia means ‘the demonstrable contribution that excellent research makes to society and the economy.’[[4]](#footnote-4) Research impact policy in the U.K. has led to research critical of government policy receiving lower scores than other kinds of policy-related research, and has been perceived by some academics ‘to bias research funding towards the interests of political ideology and big business.’[[5]](#footnote-5) The apparent national and international importance of certain AI ethics activities seem also to have attracted research and other forms of funding, at least partly on this presumably ‘impactful’ basis and the ensuing ‘economy of virtue’ whereby AI ethics is funded by Big Tech and produces output for Big Tech’s consumption.[[6]](#footnote-6)

Indeed, while I hold research projects funded by UK Research and Innovation (UKRI) on automation and AI topics, I am writing this paper on an ‘unfunded’ basis as it does not fit with the scope of these other projects. The UKRI is the U.K.’s public research funding body, but has a strong emphasis on ‘commercialisation’ guided by policies which lead to, as Finn puts it, ‘a commodification of domestic UK innovation.’[[7]](#footnote-7) Other work I’ve done on facial recognition and Scotland has also been during my non externally–funded research time allocated by my university employer and during my own time outside of official working hours. I believe this says something about competitive funding priorities in academic research that critical work on facial recognition in a more localized context of Scotland is not as attractive as research aiming to facilitate uses of AI and automation in health and manufacturing in the U.K. (for which I have received funding). This insight adds to those identified by other authors in this collection such as corporate priorities, government priorities and gender (and likely other) imbalances in who receives funding.[[8]](#footnote-8) However, this contribution also bears out Edwards’ view that unfunded research is ‘a space in which to confront and address the tensions generated by forms of academic identity pulling in different directions.’[[9]](#footnote-9) In my case, this meant giving me the opportunity to make ‘a creative and intellectually-driven contribution to knowledge’[[10]](#footnote-10) and resist my own neoliberal success in AI grant generation!

This paper also looks critically at AI ethics in the U.K. As mentioned above, critiques of U.K. government policy may score lower in research impact compared to other policy-oriented research. The U.K. government has invested heavily in AI, including in governance and policy aspects, supporting directly or indirectly a constellation of actors and initiatives such as the Alan Turing Institute, the Digital Catapult, and the Centre for Data Ethics and Innovation. The Ada Lovelace Institute, while ostensibly independent, was established ‘in collaboration’ with a number of U.K. government–funded bodies, including the Alan Turing Institute, and has received funding from UKRI. The U.K. has been active as a nation-state in global AI governance discussions as well as domestically with its own National AI Strategy, and more recently a policy paper outlining its ‘pro-innovation approach to regulating AI,’ which eschews legally binding norms in the process.[[11]](#footnote-11) The U.K.’s current AI approach is underpinning by a number of themes including a prioritising of ‘innovation’ and a cleavage with the European Union’s approach to data protection, moving closer to that of the U.S., both related to the U.K.’s post-Brexit geopolitical and economic stance.[[12]](#footnote-12) Ossewaarde and Gulenc find the British AI approach to be digitally utopian, technologically solutionist and leveraging British imperialism and leadership in the Industrial Revolution to project the U.K. as a neo-imperial post-Brexit ‘world leader’ in AI in the future, while glossing over the potentially de-democratizing ‘dark side’ of AI.[[13]](#footnote-13)

Furthermore, Ossewaarde and Gulenc identify a strong technocratic character to the U.K.’s AI policy.[[14]](#footnote-14) The very people involved in AI governance and ethics discussions and formulating any principles or rules are often ‘technically oriented’ experts, far removed from ordinary people and their experiences, therefore rendering AI governance a hitherto ‘elitist project.’[[15]](#footnote-15) AI ethics are also ‘primarily shaped by men,’ exhibit a more general ‘lack of diversity,’[[16]](#footnote-16) and are usually ‘framed by means of Western values, contexts, and concerns.’[[17]](#footnote-17)

I want to turn attention away from this somewhat elitist affair of devising high level (in various senses) AI principles to looking more at localized, everyday encounters with AI technologies and AI ethics which are manifesting in different parts of the world in response to actual problems with AI. I do this through the lens of a particular application of AI, in the form of facial recognition cameras and software, especially when used by law enforcement. This is a concrete example of localized engagements with AI and the formation of resistance which have led to forms of localized governance of AI in some places including the UK. Despite the lofty ideals and potential for large scale impact that more global initiatives on AI ethics and governance promise, and despite a more global approach probably being more appropriate for a globalized, transnational technology such as AI and applications including facial recognition, it is the everyday, localized encounter with AI technologies and AI ethics I consider in this chapter. The local and everyday have been largely overlooked and neglected by much of the AI ethics literature and activity to date, possibly due to the less ‘impactful’ perception of such encounters. Yet without an understanding of these local encounters, high-level AI ethics remain abstract, adrift, and often apolitical.

In any event, these everyday encounters are impactful in other ways when individuals and communities negotiate and contest certain AI uses in ways that may lead to change as policymakers and the law may respond to their wishes. This is clearly impactful in localities where it takes place but lacks acknowledgement and claims, whether implicit or explicit, to universality that conventional high-level AI ethics initiatives contain, and which is incentivized by impact in academic research.[[18]](#footnote-18) In the case of facial recognition at least, and perhaps more broadly, more AI ‘ethical’ attention given to this application in its local and everyday encounters can highlight or serve forms of activism, resistance, or critique, whereas ethical attention that aims at the more abstracted, higher or ‘universal’ level is frequently more in service of forces of capital and political power.[[19]](#footnote-19)

I start by considering the ways in which AI is an everyday technology already. I concentrate on facial recognition as an example of everyday AI that has invoked contestations over its use, and in some places resulted in curbs on it, with a particular focus on the U.K. Overall, this shows that a key point of encounter with AI, and thus a key site of ethical, legal, and political interrogation, is and must be the point at which individuals and communities engage with, and in some cases such as facial recognition, contest AI.[[20]](#footnote-20) Moving beyond the technocratic high level AI ethics norm formation, a consideration of these everyday encounters, including protest, social movements, and legal mobilization through litigation must be part of the AI ethics discussion, especially when, as in the case of the U.K., the everyday paints a different picture to the imaginaries of the U.K.’s high level AI strategies and policies.

## AI as an Everyday Technology

AI is becoming an everyday technology throughout the world, although it is often not considered in this way. The idea of the everyday in AI, and people’s everyday practices and experiences of AI, has been considered by some authors, including Burgess, Mitchell, and Highfield, who have aimed to:

get beyond the current hype and anxieties around self-driving cars, algorithms and robotics, and to achieve a more precise and grounded understanding of exactly what might be meant by automation, how and with what effects it is becoming entangled with everyday life and how investigating these relationships also helps us understanding processes of media change in society more broadly.[[21]](#footnote-21)

Further, Pink et al. recognize:

[d]iscussion of these automated technologies is often shrouded with narratives which highlight extreme and spectacular examples, rather than the ordinary mundane realities that characterise the overwhelming majority of people’s actual encounters with them.[[22]](#footnote-22)

As AI is penetrating our everyday lives, albeit in different ways and different contexts, this focus on the quotidian departs from much of the literature and other discussions on AI,[[23]](#footnote-23) which concentrates on the more global or abstracted levels—and also often occurs at a more elite level, as identified by Hagendorff above. It is the everyday where encounters with AI occur, even if that everyday encounter may look different in different scenarios.

However, it is also the everyday where people can fight back against technologies, including AI and automation, despite the passivity often implied by debate and literature. For Pink et al:

The ordinary citizen is represented as passively in thrall to manipulation and exploitation of the proponents of the digital data economy. Yet, the automation logic is not the same everywhere—nor does it operate with the same kind of intensity on every occasion of use or every geographical location. People can and do resist[…][[24]](#footnote-24)

As well as the encounter with AI for many if not most people being primarily on this everyday, localized level, much of the AI governance with ‘bite’ is also happening at this level, and, I argue, it has been overlooked by much of the AI debates to date. This governance can be shaped by individuals and communities encountering AI, negotiating it and in some cases resisting it, as they do with other data-driven surveillance technologies.[[25]](#footnote-25) It is this which I turn to later, by looking at how AI ethics is playing out at a grounded, local level, and how this relates, or not, to the ‘higher-level’ discussions and formulations of AI ethics, through the lens of facial recognition. First, I consider what an everyday law and ethics of AI means by engaging with ideas of the everyday from legal studies.

## Turning from AI Ethics to Law to the Everyday

Considerations of law- and norm-making need to be brought into this idea of everyday AI, as in some cases everyday negotiations and contestations of norms address AI ethics in more impactful or satisfactory ways than the higher level, abstracted AI ethics activities we have seen in recent years.

The turn to such high-level ethics initiatives in AI has been criticized by Wagner as ‘ethics washing’ since the ethics statements and initiatives usually lack legal or other forms of enforceability and accountability in their implementation.[[26]](#footnote-26) So, instead of being a complement for binding rights and responsibilities, they are a substitute for them. It is important to note that ethics is used in a specific way in the context of AI governance—i.e., to promote lists of non-binding norms often by nation-states and large corporations—and critiques of ethics relate to that specific situation and use, but ethics has a broader meaning since law and other normative schemes are also manifestations of applied ethics.[[27]](#footnote-27)

Yet legal enforceability of AI norms is not necessarily sufficient or appropriate alone to address issues pertaining to the unenforceability of AI ethics principles, since the content of those norms as well as their enforceability needs to be ‘good.’[[28]](#footnote-28) The Trump Administration in the U.S. adopted legally binding Executive Orders on AI, which mandated a deregulatory approach to the technology, an outcome with which critics of non-binding AI ethics are unlikely to seek or be satisfied.[[29]](#footnote-29) In any event, there are few legally enforceable AI ethics/governance initiatives, and those that do exist are not at the international level, but regional or national level instead.

At the international level, UNESCO member states recently adopted its Recommendation on the Ethics of Artificial Intelligence. This is significant since it is the first global standard on the topic, however it is not binding on signatory states, and it is merely ‘recommended’ that member states implement it on a ‘voluntary basis’ in their respective domestic jurisdictions.[[30]](#footnote-30) Much attention so far has been paid to efforts in the European Union (EU) to formulate its own legislation on AI, the EU AI Act, which is currently under discussion at the time of writing,[[31]](#footnote-31) and is notable as the first major attempt by a leading global jurisdiction to regulate AI in a binding way, albeit one as it currently stands that will not outlaw completely law enforcement use of facial recognition.[[32]](#footnote-32)

Here, though, I want to look at more everyday understandings, negotiations, and resistance of AI ethics norms and law, at the local or microcosmic rather than national or international level. In doing this, I seek to connect with scholarship on ‘everyday law’ or ‘legal socialisation’ in how people experience, form and respect (legal) norms,[[33]](#footnote-33) or as Sarat and Kearns put it, ‘how law’s consumers produce their own law and, in so doing, transform and reproduce state law.’[[34]](#footnote-34) This is because these understandings, negotiations, and resistances to AI uses—especially by the state and corporations—emanating from individuals and communities give us a sense of what AI uses people notice and what they find acceptable/unacceptable, which may in turn influence state law and corporate practices. Facial recognition technology is notable as its use has provoked physical protests in various parts of the world, in different contexts, and its use has formed the basis of litigation and policy change in the U.K.

On this point, I also want to link this discussion of everyday law to how law interacts with social movements and protest, an area understudied both by social movement scholars and legal scholars.[[35]](#footnote-35) This is significant for facial recognition as protest and campaigning have built up pressure, resulting in prohibitions or moratoriums on the practice, and contested its use through litigation. This also connects with the work done on ‘data activism’ by Milan and others, ‘which critically engages with the manifold impact of data on social life’ and includes ‘for instance, socio-technical practices that provide counter-hegemonic responses to the discrimination, social exclusion and privacy infringement that go hand in hand with big data’.[[36]](#footnote-36) Data activism has a particular emphasis on the ‘grassroots contentious processes [vis-à-vis datafication] expressed by laypersons, nongovernmental organizations and social movement networks alike.’[[37]](#footnote-37) Opposition to facial recognition both in social movement responses and legislation and policy responses constitute what Kazansky terms ‘resistance to data-driven surveillance.’[[38]](#footnote-38) Yet protest, social movements, and law/policy change have rarely been viewed in concert in the literature in this area on new technologies, especially AI.

I introduce these concepts as a backdrop for my inquiry into facial recognition as an everyday AI technology creeping into the lives of people around the world, and as a site of social movement data activist contestations that interact with the law and ethics of AI. More theoretical and empirical work is warranted on AI, activism, and ethics (including law) to give a deeper understanding, especially from the quotidian perspective of how normal, everyday people encounter and engage with these issues. Here I seek to introduce these topics, but more work could be done directly e.g. with those who influence, negotiate and in particular resist facial recognition from everyday perspectives and who are not typically involved in the ‘higher level’ AI ethics initiatives and norm forming.

Everyday AI law, ethics and protest is already a practical reality, as we see through examples such as demonstrations in England against the Department of Education about unfair outcomes in school leaving results in 2020 when they were determined by an algorithm (as traditional exams were cancelled due to the COVID-19 pandemic), at which young people chanted and held up placards saying ‘Fuck the Algorithm’. Kaun considers this as an example of Willim’s ‘mundanization’ of digital technologies i.e., ‘developing everyday understandings of complex technologies that have implications for our everyday lives’.[[39]](#footnote-39) The use of algorithms in the public sector has provoked broader controversies, such as the RoboDebt welfare surveillance scandal in Australia.[[40]](#footnote-40) Further examples of everyday AI ethics be found during the 2020-2021 Indian farmers’ protests where farmers understood the connections between plans for conglomerate Jio (which among many other business activities, operates a mobile network) to enter the agri-tech sector and use AI-powered trading platforms for farmers to consolidate its power, and many such farmers boycotted the operator by transferring their mobile service to a competitor.[[41]](#footnote-41)

These examples demonstrate that contestations over AI already occur in people’s everyday lives, and provoke localized action, including in the form of protest, which can lead to law and policy change. These everyday encounters with AI and its politics bring AI ethics (back) from distant policymakers and political and corporate elites to individuals and communities, recognizing their/our agency in negotiating and resisting technology applications. These contestations and resistances can address the enforceability gap critiqued by Wagner’s ‘ethics washing’ by provoking action and change to curb uses of AI on a grounded, local level, compared to the lofty and at times elitist AI ethics initiatives, which often lack ‘bite’ and tend not to prohibit or severely restrict certain AI uses and applications.

## Facial Recognition as Everyday AI

Here I want to focus on the application of AI in the form of facial recognition, and the everyday encounters people have had with it in different parts of the world that in some cases have given rise to everyday AI law and ethics. I concentrate on the U.K. experience of facial recognition, as it is the geographical location with which I am most familiar, and one in which we have experienced protest, policy, and legal events relating to everyday facial recognition use, as well as differing approaches in different parts of the U.K. to facial recognition use, which can be juxtaposed with the ‘pro-innovation’ and neo-imperialist high-level U.K. AI policy.

Facial recognition is a technology which identifies an individual from a digital image, usually by comparing the features of that person’s face to stored biometric images of faces in a database. Facial recognition can be ‘live’ when this image capture and analysis is done in real time, such as by a ‘smart’ CCTV camera in a public place, using AI. Controversies have surrounded facial recognition for its inaccuracies, especially in identifying women compared to men and people of color compared to white people, with ‘darker-skinned females the most misclassified group.’[[42]](#footnote-42) Furthermore, the conditions in which facial recognition technologies are being researched, developed, and trialed are proving controversial: such as Chinese facial recognition products used against Uyghurs and other ethnic minorities in Xinjiang/East Turkestan;[[43]](#footnote-43) and Clearview AI in the west which has scraped photos from social media without users’ knowledge or permission, and whose product is used by law enforcement in the U.S. and possibly Europe.[[44]](#footnote-44) Recently, these scraping processes by Clearview have attracted data protection infringement decisions and fines in the E.U., U.K., and Australia.[[45]](#footnote-45)

Facial recognition has been implemented in a wide variety of social, political, and economic contexts throughout the world, in both authoritarian regimes and (supposed) liberal democracies. Accordingly, it is becoming an everyday AI technology, encountered by the general public as they go about their business, especially in public places. Importantly, these everyday encounters with facial recognition have led to processes of negotiation and outright resistance in some cases from the general public. Facial recognition has been an object for social movement mobilizations, either specifically against the use of this surveillance technology, or as part of broader protests. Facial recognition has also seen the mobilisation of everyday law against it, and led to questions for how state law addresses it.

Facial recognition and CCTV cameras have been the site of protest and actual destruction in various locations globally. During protests in Iran in 2019 against government increases to petrol prices,[[46]](#footnote-46) footage emerged of protestors disabling and destroying CCTV cameras in different locations in the country, including Shiraz and Tehran.[[47]](#footnote-47) In more recent protests in the Khuzestan province in 2021, there is also footage which appears to show similar attacks on CCTV cameras.[[48]](#footnote-48) There is an extensive surveillance infrastructure in Iran and in particular since the 2019 protests, after which, according to Akbari, ‘CCTV cameras became compulsory in cafes, universities, and even kindergartens. Traffic control cameras mushroomed in big cities,’ with ‘the government actively us[ing] CCTV/traffic cameras’ footage in tackling political dissent.’[[49]](#footnote-49)

Also in 2019, suspected facial recognition CCTV cameras were the target of protestors against the extradition bill and national security law in Hong Kong, where a ‘lack of trust in technology persists’.[[50]](#footnote-50) Not only did were ‘face masks, umbrellas and lasers … routinely used by demonstrators to blind CCTV cameras … thereby render[ing] facial recognition ineffective’,[[51]](#footnote-51) protestors:

also took down new ‘smart’ lampposts, where their full technological capabilities have not been disclosed, installed by the Government during a protest against surveillance and increasing prevalence of facial recognition technologies.[[52]](#footnote-52)

Protestors not only took down the lampposts but also ‘dissected’ them by opening up their ‘black boxes’ to see exactly what components and equipment was inside, including whether facial recognition equipment was contained within, as the Hong Kong government had claimed that the lampposts merely monitored air quality and traffic.[[53]](#footnote-53) Some smart lampposts did have cameras inside them and while it seems that these cameras did not have facial recognition capacity, independent experts considered that it would not be difficult to modify the cameras to include such capabilities.[[54]](#footnote-54) In any event, the Hong Kong authorities decided not to activate certain features of the smart lampposts due to privacy concerns.

In both the Iranian and Hong Kong examples, the possibility or reality of facial recognition technologies in public places has prompted protests and mobilizations, which can be conceptualized as part of broader movements responding to material circumstances and against state power. However, significant in both movements is the popular suspicion and physical targeting of (possible) facial recognition CCTV, which demonstrate forms of citizen resistance against aspects of the digital data (political) economy. In the case of Hong Kong, this contributed to the Hong Kong authorities deciding not to implement certain aspects of the smart lampposts, which in the context of the National Security Law was a notable and rare positive response to the protestors’ concerns, and also demonstrates government responsiveness to citizen concerns in the general context of top-down smart city initiatives such as that of Hong Kong.[[55]](#footnote-55)

## Facial Recognition, Everyday AI Law and Ethics in the UK

Facial recognition as everyday AI, and contestations around it, have been prominent in the U.K., and mobilization against facial recognition has resulted in litigation and policy change, and divergence between the approach in different parts of the U.K. Live facial recognition technology has been used in different parts of the U.K. to police public places, to mounting levels of controversy and legal challenge. For these reasons, I consider it an interesting case study of everyday AI ethics (and law), and how activities from individuals and communities at a more localized level in encountering, negotiating and resisting AI can be impactful for governing AI more generally. Furthermore, the differences in approach to facial recognition within the U.K. also demonstrate the importance of looking at the local level as well as the national, continental, and international. As mentioned above, the U.K. has a pro-innovation techno-solutionist approach to AI at the ‘high’ level, but the ‘dark side’ of AI and democratic contestations around it are only clear if we look at these more localized encounters between facial recognition and the general public. Contestations around facial recognition resulting in law and policy change can also be seen in the U.S., where some municipalities have prohibited police use of facial recognition, including San Francisco, which was the first to do so.[[56]](#footnote-56) Two states, Virginia and Vermont, have also banned police use of facial recognition throughout their territory.[[57]](#footnote-57) Local-level mobilization against problematic uses of AI such as live facial recognition can lead to prohibitions, and in a snowballing effect can circulate to inspire prohibitions elsewhere, forming bottom-up and more critical norms around AI in distinction to the top-down but often toothless AI ethics initiatives.

There is a recent history of proposals to use and actual uses of facial recognition technology, especially by the police and law enforcement, in controversial contexts within the U.K., even in Scotland, which more recently introduced a moratorium on these uses. For example, the Scottish Professional Football League (SPFL) intended to introduce facial recognition technology in Scottish (soccer) football stadiums as far back as 2016, in a context of heightened surveillance of football fans using cameras and worsening relationships between fans and the police.[[58]](#footnote-58) Various supporters’ groups spoke out against the plans, including by unveiling anti-facial recognition banners at matches.[[59]](#footnote-59) Police Scotland also signalled that they wanted to use live facial recognition in their broader activities, not just vis-à-vis football fans, and Glasgow, Scotland’s largest city, bought facial recognition–enabled cameras for the city center in 2015, but these have not been used due to privacy and human rights concerns.[[60]](#footnote-60) In both cases, pressure and concern from those against whom the technology would be used caused public authorities to reconsider and refrain from using facial recognition, although in the latter case this also involves a waste of public money in buying technology that has never been used. This is ironic given the ways in which the police have been encouraged to turn to private tech providers such as facial recognition providers as a supposed cost-cutting exercise in the context of austerity and privatization.[[61]](#footnote-61)

During 2020, the Scottish Parliament’s Justice Sub-Committee considered police use of facial recognition technology. A consultation process was held to which I along with various other academics, and civil society groups contributed, most of us contesting the use of facial recognition by police, and pointing to discriminatory aspects of it and prohibitions in other places especially US cities. The Committee concluded that there was ‘no justifiable basis for Police Scotland to invest in this technology’, principally due to the gender and racial discrimination the technology implicates.[[62]](#footnote-62) Since then, there has been a moratorium on the use of live facial recognition technology by police in Scotland.

This contrasts with the approach taken in England and Wales - which are the same jurisdiction, Scotland and Northern Ireland each being the other two jurisdictions which make up the UK. According to Big Brother Watch:

Police forces in the UK have rolled out automatic facial recognition at a pace unlike any other democratic nation in the world. Leicestershire Police, South Wales Police and the Metropolitan Police have deployed this technology at shopping centres, festivals, sports events, concerts, community events – and even a peaceful demonstration. One police force even used the surveillance tool to keep innocent people with mental health issues away from a public event.[[63]](#footnote-63)

In London, the Metropolitan Police have used facial recognition at events and in areas with large Black and Minority Ethnic (BAME) populations, such as in Stratford, East London, and at the Notting Hill Carnival in 2016 and 2017, despite the inaccuracies facial recognition produces for Black people. This is also in spite of the already strained relationship between the Met Police and Black communities.[[64]](#footnote-64) Specific surveillance and data-gathering activities have impacted Black communities disproportionately, including the gathering of data for the Met Police’s controversial ‘Gangs Matrix’ database on individuals suspected of gang activity, a majority of whom were Black.[[65]](#footnote-65) The U.K. data protection authority, the Information Commissioner’s Office (ICO), found that the matrix was not compliant with data protection law, with the Met Police ordered not to destroy it but to bring it in line with these norms. The matrix remains controversial and at the time of writing is subject to another legal challenge led by civil liberties and human rights NGO Liberty, this time on the grounds of infringing racial discrimination law as well as human rights, data protection, and public law principles.[[66]](#footnote-66)

While in the U.K. facial recognition cameras have not been physically attacked, unlike in the Iranian and Hong Kong contexts, they have still provoked a visceral response from at least some members of the public when used in everyday public places. On understanding that facial recognition cameras were deployed in public, some individuals have covered their faces to protect their privacy, with at least one person being fined by the police for doing so.[[67]](#footnote-67) Football fans in Scotland were also prompted to unveil banners specifically against the use of facial recognition in the stadium. These may be seen as part of broader contestations of the ‘hyper-militarization’ of U.K. police, which Weitzberg identifies as a trend that includes facial recognition use.[[68]](#footnote-68) There is limited support for facial recognition among the public more generally and even scepticism from some parts of the police themselves. A national survey by the Ada Lovelace Institute of public attitudes to facial recognition showed that a majority of the public wanted government restrictions on police use of facial recognition and opposed commercial use of the technology.[[69]](#footnote-69) Urquhart and Miranda’s research with frontline U.K. police officers showed also that even the position of police officers was ‘mainly one of scepticism and disbelief in the technology.’[[70]](#footnote-70)

Critics of live facial recognition in the U.K. have also mobilized the law, specifically human rights and data protection law, through litigation, resulting in ‘the first major successful legal challenge to police use of automated facial recognition technology anywhere in the world.’[[71]](#footnote-71) A civil liberties campaigner, Ed Bridges, challenged South Wales Police’s use of live facial recognition, on the basis that it breached the right to privacy, data protection law and equality laws. At first instance, the High Court found that while facial recognition did interfere with the public’s rights, its use by the South Wales Police was lawful due to safeguards in the framework governing the use of facial recognition.[[72]](#footnote-72) However, this decision was overturned on appeal, with the Court of Appeal finding that the use of live facial recognition did breach human rights, there were ‘fundamental deficiencies’ in the governing framework and that the police force had not ensured that the software used was unbiased on grounds of race and sex.[[73]](#footnote-73) South Wales Police will not appeal this decision. Yet, as with the ICO’s aforementioned decision about the Met Police’s Gangs Matrix, the Court of Appeal did not find facial recognition use per se by the police to be illegal in public places, just that there were not appropriate safeguards in place: indeed ‘the decision still affirms the role of automated facial recognition in modern policing and law enforcement.’[[74]](#footnote-74)

In light of the above, with live facial recognition use by police in Scotland effectively banned, yet permitted with some limitations in England and Wales, there is a ‘North–South Divide’ as Lynch has termed it, regarding police use of live facial recognition as an everyday AI application in public places in the UK:

If you find yourself walking in some parts of London or Wales, for example, live facial recognition technology will now be able to scan your face without consent and you may even be subject to an on-the-spot identity check (particularly if you are a woman or an ethnic minority). In Scotland, however, you will not have to worry about this—at least for now.[[75]](#footnote-75)

However, police use of facial recognition is only part of the picture. There have been other controversial uses of facial recognition in everyday U.K. life, including in Scotland. During 2021, facial recognition technology was used at nine schools in North Ayrshire to facilitate quicker and contactless payment for canteen lunches.[[76]](#footnote-76) The ICO urged the local authority to take a less intrusive approach to ensure compliance with necessity and proportionality requirements, and it seems that the use of facial recognition was suspended shortly after.[[77]](#footnote-77) While this may have nipped facial recognition in schools in the bud in Scotland, a supermarket, the Co-op (which is traditionally considered an ethical retailer) is using live facial recognition in stores in the south of England for safety and security reasons, although this is opposed by digital rights group Big Brother Watch, which has led a #StopCoopSpying social media campaign.[[78]](#footnote-78) At the time of writing, the Co-op is the subject of a complaint to the ICO by Big Brother Watch and digital rights agency AWO.[[79]](#footnote-79)

Everyday encounters and contestations of facial recognition in the UK demonstrate how the public meets AI in the form of facial recognition in their quotidian lives, through police deployment in public places, to its use in schools and supermarkets. The most successful influencing of policymakers can be seen in the Scottish Parliament’s moratorium on police use of live facial recognition. Legal challenges and use of the ICO’s complaints process especially by activists and NGOs have produced some success in reining in facial recognition but are not outright victories. The unwillingness of the ICO or courts to find the highly intrusive use of facial recognition in public places illegal outright demonstrates only partial success in a bottom-up norm forming, although this may also reflect a deference on behalf of these bodies towards the U.K. Parliament which they might find to be the more appropriate body to impose such a ban. Yet we are still waiting for such action, despite such calls bolstered recently by Matthew Ryder QC’s Independent Review of the Governance of Biometric Data in England and Wales, who recommended that a new legislative framework for all uses of biometric technologies, and legally binding codes of practice for police and other users of live facial recognition respectively were needed; until these are implemented, all live facial recognition use should cease.[[80]](#footnote-80)

Norms developed in localized contexts can circulate more internationally. Sometimes this is due to circulations of national or global capital, in the cases of laws and policies developed in California in the U.S., and increasingly the effect of European Union law and policy more globally, with the ‘Brussels effect’ of its governance mechanisms influencing law and policy elsewhere due to the EU’s status as the world’s largest trading bloc and its active stance in developing and circulating its law and regulation beyond its borders.[[81]](#footnote-81) This may also be the case for the EU’s proposed AI Act, which may follow the GDPR in forming a de facto global norm,[[82]](#footnote-82) and one which at the moment, as mentioned above, will not prohibit outright the use of facial recognition, even by law enforcement.

Yet, the Scottish example shows how other forms of norm circulation are possible which are not in the service of global capital and power where the local prohibitions on police facial recognition use in other parts of the world being referenced by the Scottish Parliament Justice Sub-Committee in its call for a moratorium on police use of live facial recognition in Scotland. This shows that norms developed locally through negotiation and contestation of AI uses can also circulate more globally and influence activities elsewhere, leading potentially to a snowballing effect of localized AI norms that can be leveraged by social movements, protests, and legal mobilizations in other geographical contexts.

At a ‘high level’, the U.K. has set out its public research funding approach to AI and its policy intentions as regards a ‘light touch’ non-binding governance of AI, including facial recognition. This demonstrates a further cleavage with the EU’s intention to regulate AI. It can be seen as part of the U.K.’s post-Brexit trajectory, which also involves a distancing from the E.U.’s data protection regime, and accords with Ossewaarde and Gulenc’s aforementioned observations of the U.K.’s AI approach as digitally utopian, technologically solutionist, and neo-imperial.[[83]](#footnote-83) Contestations over facial recognition use in practice in individuals’ and communities’ everyday encounters in British public spaces demonstrate how these logics are perpetuated but also resisted, especially when facial recognition is used as part of the U.K.’s hyper-militarized law enforcement targeting BAME communities. In some cases these mobilizations can lead to litigation (albeit with only limited success so far) and localized policy change, where the opportunities present themselves. Researchers, activists, and others in the U.K. may find limited prospects in influencing the U.K. government centrally, but this case study of facial recognition shows pressure can be exerted via litigation. There may be more opportunities in influencing more localized structures of governance, such as the devolved administrations in Scotland, Wales, and Northern Ireland, where there may be more prospect of impact. Currently, these devolved administrations are governed by political parties which are not the Conversative party in power in the U.K. Parliament, and there may be a desire to distinguish their policies from that of the U.K. government for political reasons (heightened in the Brexit and COVID-19 contexts), leading to fragmentation and differentiation in policy and governance.[[84]](#footnote-84) Furthermore, there may be fewer attempts from global capital, especially Big Tech firms, to influence these administrations in ways favorable to their interests. Such conditions present possibilities for localized negotiation and resistance to AI and which have been realized to some degree in reining in facial recognition, and which can be juxtaposed to the laissez-faire ‘pro-innovation’ approach of the U.K. government to AI.

## Conclusion

Practices and applications of AI and AI ethics are occurring right here, right now throughout the world at local and everyday levels, with members of the general public encountering the technology in its myriad forms. These encounters—and negotiations and contestations—are rarely the focus, however, of AI ethics discussions and initiatives. Through the case study of facial recognition in the U.K., I have demonstrated how looking at the local is key to understanding how AI ethics plays out, is formed, and informed in practice, producing at times law and policy change with ‘bite’, which serve individuals and communities rather than state power and capital, a ‘bite’ the ethics-washed higher-level AI ethics initiatives often lack. Accordingly, we need to engage more with social movements and everyday law and policy in localities seeking to build, form, and inform better AI. This is where real change, which does not necessarily serve political and economic power, can happen, now.

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# References

Ada Lovelace Institute. ‘Beyond Face Value: Public Attitudes to Facial Recognition technology’, 2019, https://www.adalovelaceinstitute.org/report/beyond-face-value-public-attitudes-to-facial-recognition-technology/.

Akbari, Azadeh. ‘The Threat of Automating Control: Surveillance of Women’s Clothing in Iran’, in Aleš Završnik and Vasja Badalič (eds) *Automating Crime Prevention, Surveillance, and Military Operations*, Cham: Springer, 2021, pp. 183–99.

Beraldo, Davide and Milan, Stefania. ‘From Data Politics to the Contentious Politics of Data’, *Big Data & Society* 6.2 (2019).

Bietti, Elettra. ‘From Ethics Washing to Ethics Bashing: A View on Tech Ethics from Within Moral Philosophy’, Proceedings of ACM FAT\* Conference,2020, https://ssrn.com/abstract=3513182.

Big Brother Watch. ‘Face Off: The Lawless Growth of Facial Recognition in UK Policing’, 2018, http://bigbrotherwatch.org.uk/wp-content/uploads/2018/05/Face-Off-final-digital-1.[pdf](http://bigbrotherwatch.org.uk/wp-content/uploads/2018/05/Face-Off-final-digital-1.pdf).

Bradford, Anu. *The Brussels Effect: How the European Union Rules the World*. Oxford: Oxford University Press, 2020.

Buolamwini, Joy and Gebru Timnit. ‘Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification’ in Proceedings of the 1st Conference on Fairness, Accountability and Transparency, PMLR 81, 2018, 77–91.

Burgess, Jean, Mitchell, Peta, and Highfield, Tim. ‘Automating the Digital Everyday: An Introduction’, *Media International Australia*, 166.1 (2018): 6–10.

Chubb, Jennifer and Reed, Mark. ‘The Politics of Research Impact: Academic Perceptions of the Implications for Research Funding, Motivation and Quality’, *British Politics* 13 (2018): 295–311.

Daly, Angela. ‘Algorithmic Oppression with Chinese Characteristics: AI Against Xinjiang's Uyghurs’ in *Artificial Intelligence: Human Rights, Social Justice and Development: Global Information Society Watch 2019 Report,* 2019, pp. 108–112.

Daly, Angela, Devitt, S. Kate and Mann, Monique. ‘AI Ethics Needs Good Data’ in Pieter Verdegem (ed) *AI for Everyone? Critical Perspectives*, London: University of Westminster Press, 2021, pp. 103–22.

Daly, Angela, Hagendorff, Thilo, Hui, Li, Mann, Monique, Marda, Vidushi, Wagner, Ben, and Wang, Wayne Wei. ‘AI, Governance and Ethics: Global Perspectives’ in Hans Micklitz, Oreste Pollicino, Amnon Reichman, Andrea Simoncini, Giovanni Sartor and Giovanni De Gregorio (eds) *Constitutional Challenges in the Algorithmic Society*, Cambridge: Cambridge University Press, 2022, pp. 182–201.

Daly, Angela. ‘Neo-Liberal Business-As-Usual or Post-Surveillance Capitalism with European Characteristics? The EU’s General Data Protection Regulation in a Multi-Polar Internet’ in Rolien Hoyng and Gladys Pak Lei Chong (eds), *Critiquing Communication Innovation: New Media in a Multipolar World*, East Lansing: Michigan State University Press, 2022 (forthcoming).

Davies, Pascale. ‘UK Schools Suspend Use of Controversial Facial Recognition Technology’, *Euronews*, 25 October 2021, https://www.euronews.com/next/2021/10/18/schools-in-scotland-start-using-facial-recognition-on-children-paying-for-lunch.

Dearden, Lizzie. ‘Police Stop People for Covering Their Faces From Facial Recognition Camera then Fine Man £90 After he Protested’, *The Independent*, 31 January 2019, https://www.independent.co.uk/news/uk/crime/facial-recognition-cameras-technology-london-trial-met-police-face-cover-man-fined-a8756936.html.

Edwards, Rosalind. ‘Why Do Academics Do Unfunded Research? Resistance, Compliance and Identity in the UK Neo-liberal University’, *Studies in Higher Education* 47.4 (2022): 904–14.

Elliott, Ian, Bottom, Karin, Carmichael, Paul, Liddle, Joyce, Martin, Steve, and Pyper, Robert. ‘The Fragmentation of Public Administration: Differentiated and Decentered Governance in the (dis)United Kingdom’, *Public Administration* 100.1 (2022): 98–115.

Ewick, Patricia and Silbey, Susan. *The Common Place of Law: Stories from Everyday Life,* Chicago: University of Chicago Press, 1998.

Feathers, Todd. ‘Facial Recognition Is Racist. Why Aren’t More Cities Banning It?’, *Vice*, 25 May 2021, https://www.vice.com/en/article/4avx3m/facial-recognition-is-racist-why-arent-more-cities-banning-it.

Finn, Mike. *British Universities in the Brexit Moment : Political, Economic and Cultural Implications*. Bingley: Emerald Publishing, 2018.

Gleeson, Sean. ‘How Smart are Hong Kong’s Lampposts?’, *AFP Fact Check*, 4 September 2019, https://factcheck.afp.com/how-smart-are-hong-kongs-lampposts.

Hagendorff, Thilo. ‘The Ethics of AI Ethics: An Evaluation of Guidelines’, *Minds & Machines* 30 (2021):99–120.

Hagendorff, Thilo. ‘Blind Spots in AI ethics’, *AI Ethics* (2021)*.*

Hamed, Assiah. ‘Co-op Defends Facial Recognition Cameras in Bristol Stores Amid Claims of ‘Orwellian’ Surveillance’, *Bristol Post*, 9 December 2021, https://www.bristolpost.co.uk/whats-on/shopping/co-op-defends-facial-recognition-6302476 (accessed 1 February 2022).

Hamilton-Smith, Niall, McBride, Maureen, and Atkinson, Colin. ‘Lights, Camera, Provocation? Exploring Experiences of Surveillance in the Policing of Scottish Football’, *Policing and Society* 31.2 (2021): 179–94.

Heikkilä, Melissa. ‘The Walls are Closing in on Clearview AI’, *MIT Technology Review*, 24 May 2022, https://www.technologyreview.com/2022/05/24/1052653/clearview-ai-data-privacy-uk/

Hunton Andrews Kurth. ‘UK Court of Appeal Finds Automated Facial Recognition Technology Unlawful in Bridges v South Wales Police’, 12 August 2020, https://www.huntonprivacyblog.com/2020/08/12/uk-court-of-appeal-finds-automated-facial-recognition-technology-unlawful-in-bridges-v-south-wales-police/.

Jobin, Anna, Ienca, Marcello, and Vayena, Effy. ‘The Global Landscape of AI Ethics Guidelines’, *Nature Machine Intelligence* 1 (2019): 389–99.

Kaun, Anne. ‘Suing the Algorithm: the Mundanization of Automated Decision-making in Public Services Through Litigation’, *Information, Communication & Society* (2021).

Kazansky, Becky, Torres, Guillen, van der Velden, Lonneke, Wissenbach, Kersti, and Milan, Stefania. ‘Data for the Social Good: Towards a Data-Activist Research Agenda’ in Angela Daly, S. Kate Devitt and Monique Mann (eds) *Good Data*, Amsterdam: Institute of Network Cultures, 2019, pp. 244–59.

Kazansky, Becky. ‘“It Depends on Your Threat Model”: The Anticipatory Dimensions of Resistance to Data-driven Surveillance’, *Big Data & Society* 8.1 (2021).

Kazim, Emre, Almeida, Denise, Kingsman, Nigel, Kerrigan, Charles, Koshiyama, Adriano, Lomas, Elizabeth and Hilliard, Airlie. ‘Innovation and opportunity: review of the UK’s national AI strategy’, *Discover Artificial Intelligence* 1.14 (2021): 1–10.

Kewalramani, Manoj and Seth, Rohan. ‘Networked Protests & State Responses: The Case of Hong Kong 2019-2020’, Takshashila Discussion Document 2020-03, 2020, https://ssrn.com/abstract=3580591.

Lee, Dave. ‘San Francisco is First US City to Ban Facial Recognition’,*BBC,* 15 May 2019, https://www.bbc.co.uk/news/technology-48276660.

Leung, Kevin and Lee, H.Y. ‘Implementing the Smart City: Who Has a Say? Some Insights from Hong Kong’, *International Journal of Urban Sciences*(2021): 1–25.

Long, Lisa and Joseph-Salisbury, Remi. ‘Black Mixed-race Men’s Perceptions and Experiences of the Police’, *Ethnic and Racial Studies* 42.2 (2019): 198–215.

Lu, Alex Jiahong. ‘Toward Everyday Negotiation and Resistance Under Data-Driven Surveillance’, *Interactions* 29.2 (2022): 34–8.

Lynch, Euan. ‘The Use of Live Facial Recognition Technology in Scotland: A New North-South Divide?’, *UK Human Rights Blog*, 25 February 2020, https://ukhumanrightsblog.com/2020/02/25/the-use-of-live-facial-recognition-technology-in-scotland-a-new-north-south-divide/.

Mann, Monique. ‘Social (In)security and Social (In)justice: Automation in the Australian Welfare System’ in *Artificial intelligence: Human rights, social justice and development: Global Information Society Watch 2019 Report,* 2019, pp. 68–72.

McCann, Michael. ‘Law and Social Movements: Contemporary Perspectives’, *Annual Review of Law and Social Science* 2.1 (2006): 17–38.

McGowran, Leigh. ‘The Issues with the EU’s Draft Regulation on Facial Recognition AI’, *Silicon Republic*, 17 May 2022, https://www.siliconrepublic.com/enterprise/the-issues-with-the-eus-draft-regulation-on-facial-recognition-ai.

Mega, Marcello. ‘Cops Fear Gangsters are Evading Law as Glasgow’s Facial Recognition Cameras Remain Mothballed’, *Daily Record*, 11 August 2020, https://www.dailyrecord.co.uk/news/scottish-news/scots-cops-fear-gangsters-evading-22499468.

Moule, Richard, Burruss, George, Gifford, Faith, Parry, Megan, and Fox, Bryanna. ‘Legal Socialization and Subcultural Norms: Examining Linkages Between Perceptions of Procedural Justice, Legal Cynicism, and the Code of the Street’, *Journal of Criminal Justice* 61(2019): 26–39.

Nijjar, Jasbinder. ‘Police–school Partnerships and the War on Black Youth’, *Critical Social Policy*, 41.3 (2021): 491–501.

ÓhÉigeartaigh, Seán, Whittlestone, Jess, Liu, Yang, Zeng, Yi, and Liu, Zhe. ‘Overcoming Barriers to Cross-cultural Cooperation in AI Ethics and Governance’, *Philosophy and Technology* 33 (2020): 571–93.

Ossewaarde, Marinus and Gulenc, Erdener. ‘National Varieties of Artificial Intelligence Discourses: Myth, Utopianism, and Solutionism in West European Policy Expectations’, *Computer* 53.11 (2020): 53–61.

Parida, Tulsi and Ashok, Aparna. ‘Consolidating Power in the Name of Progress: Techno-solutionism and Farmer Protests in India’ in Frederike Kaltheuner (ed), *Fake AI,* Manchester: Meatspace Press, 2021, pp. 161–9.

Phan, Thao, Goldenfein, Jake, Mann, Monique, and Kuch, Declan. ‘Economies of Virtue: The Circulation of “Ethics” in Big Tech’, *Science as Culture*, 31.1 (2022): 121–35.

Pink, Sarah, Ruckenstein, Minna, Berg, Martin and Lupton, Deborah. ‘Everyday Automation: Setting a Research Agenda’ in Pink, Sarah, Berg, Martin, Lupton, Deborah, and Ruckenstein, Minna (eds) *Everyday Automation: Experiencing and Anticipating Emerging Technologies*, London: Routledge, 2022, pp. 1–20.

Rezende, Isadora Neroni. ‘Facial Recognition in Police Hands: Assessing the ‘Clearview Case’ From a European Perspective’, *New Journal of European Criminal Law* 11.3 (2020): 375–89.

Ruthven, Graham. ‘The Criminalization of Scottish Soccer Fans’, *Vice*, 23 February 2016, https://www.vice.com/en/article/9apyad/the-criminalization-of-scottish-soccer-fans.

Ryder, Matthew. ‘Independent Legal Review of the Governance of Biometric Data in England and Wales (‘The Ryder Review’)’, Ada Lovelace Institute (2022), https://www.adalovelaceinstitute.org/wp-content/uploads/2022/06/The-Ryder-Review-Independent-legal-review-of-the-governance-of-biometric-data-in-England-and-Wales-Ada-Lovelace-Institute-June-2022.pdf.

Sarat, Austin and Kearns, Thomas (eds) *Law in Everyday Life*, Ann Arbor: University of Michigan Press, 1995.

Scottish Parliament Justice Sub-Committee on Policing. ‘Facial Recognition: How Policing in Scotland Makes Use of This Technology’, SP Paper 678, 1st Report (Session 5), 2020, https://sp-bpr-en-prod-cdnep.azureedge.net/published/JSP/2020/2/11/Facial-recognition--how-policing-in-Scotland-makes-use-of-this-technology/JSPS0520R01.pdf.

Shahi, Afshin and Abdoh-Tabrizi, Ehsan. ‘Iran’s 2019-2020 Demonstrations: The Changing Dynamics of Political Protests in Iran’, *Asian Affairs* 51.1 (2020): 1–41.

Sharma, Suneet. ‘Case Law: R (Bridges) v Chief Constable of South Wales Police: The Use of Facial Recognition Software by the Police is Lawful’, *Inforrm blog*, 6 September 2019, https://inforrm.org/2019/09/06/case-law-r-bridges-v-chief-constable-of-south-wales-police-the-use-of-facial-recognition-software-by-the-police-is-lawful-suneet-sharma/.

U.K. Government. ‘National AI Strategy’, 21 September 2021, https://www.gov.uk/government/publications/national-ai-strategy.

U.K. Government. ‘Establishing a Pro-innovation Approach to Regulating AI’, 20 July 2022, https://www.gov.uk/government/publications/establishing-a-pro-innovation-approach-to-regulating-ai.

UKRI Economic and Social Research Council. ‘Defining Impact’, https://www.ukri.org/councils/esrc/impact-toolkit-for-economic-and-social-sciences/defining-impact/.

UNESCO. ‘UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence’, 25 November 2021, https://en.unesco.org/news/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence.

Urquhart, Lachlan and Miranda, Diana. ‘Policing faces: the present and future of intelligent facial surveillance’, *Information & Communications Technology Law*, 31:2 (2022): 194-219.

Veale, Michael and Zuiderveen Borgesius, Frederik. ‘Demystifying the Draft EU Artificial Intelligence Act—Analysing the Good, the Bad, and the Unclear Elements of the Proposed Approach’, *Computer Law Review International* 22.4 (2021): 97–112.

Wagner, Ben. ‘Ethics as an Escape from Regulation: From ‘Ethics-Washing’ to Ethics-Shopping?’ in Bayamlioglu, Emre, Baraliuc, Irina, Janssens, Liisa, and Hildebrandt, Mireille (eds) *Being Profiled: Cogitas Ergo Sum: 10 Years of Profiling the European Citizen*, Amsterdam: Amsterdam University Press, 2018, pp. 84–9.

Weale, Sally. ‘ICO to Step in After Schools Use Facial Recognition to Speed Up Lunch Queue’, *Guardian*, 18 October 2021, https://www.theguardian.com/education/2021/oct/18/privacy-fears-as-schools-use-facial-recognition-to-speed-up-lunch-queue-ayrshire-technology-payments-uk.

Weitzberg, Keren. ‘A Very British Problem: The Evolution of Britain’s Militarised Policing Industrial Complex’, Report for Campaign Against the Arms Trade and Netpol, 2022, https://caat.org.uk/app/uploads/2022/08/A-Very-British-Problem-WEB.pdf.

White, Nadine. ‘Met Police Faces Legal Action Over ‘Racist’ Gangs Matrix Database’, *Independent*, 1 February 2022, https://www.independent.co.uk/news/uk/home-news/met-police-gangs-matrix-database-b2004293.html.

Willim, Robert. ‘Imperfect Imaginaries:Digitisation, Mundanisation, and the Ungraspable’ in Gertraud Koch (ed) *Digitisation: Theories and Concepts for Empirical Cultural Research*, Abingdon: Routledge, 2017, pp. 53–77.

Wong, Janis. ‘Protests Decentralised: How Technology Enabled Civil Disobedience by Hong Kong Anti-extradition Bill Protesters’, *LawArXiv*, 2020, https://osf.io/preprints/lawarxiv/efvwn/.

Wong, Pak-Hang. ‘Cultural Differences as Excuses? Human Rights and Cultural Values in Global Ethics and Governance of AI’, *Philosophy and Technology* 33 (2020): 705–15.

Zalnieriute, Monika. ‘Burning Bridges: The Automated Facial Recognition Technology and Public Space Surveillance in the Modern State’, *Science and Technology Law Review*, 22.2 (2021): 284–307.

1. Pak-Hang Wong, ‘Cultural Differences as Excuses? Human Rights and Cultural Values in Global Ethics and Governance of AI’, *Philosophy and Technology* 33 (2020): 705–715. [↑](#footnote-ref-1)
2. Seán ÓhÉigeartaigh, Jess Whittlestone, Yang Liu, Yi Zeng and Zhe Liu, ‘Overcoming Barriers to Cross-cultural Cooperation in AI Ethics and Governance’, *Philosophy and Technology* 33 (2020): 571–593. [↑](#footnote-ref-2)
3. I thank Xaroula Kerasidou for this point. [↑](#footnote-ref-3)
4. UKRI Economic and Social Research Council, ‘Defining Impact’, https://www.ukri.org/councils/esrc/impact-toolkit-for-economic-and-social-sciences/defining-impact/. [↑](#footnote-ref-4)
5. Jennifer Chubb and Mark Reed, ‘The Politics of Research Impact: Academic Perceptions of the Implications for Research Funding, Motivation and Quality’, *British Politics* 13 (2018): 302. [↑](#footnote-ref-5)
6. Thao Phan, Jake Goldenfein, Monique Mann and Declan Kuch, ‘Economies of Virtue: The Circulation of ‘Ethics’ in Big Tech’, *Science as Culture* 31.1 (2022): 121–35. [↑](#footnote-ref-6)
7. Mike Finn, *British Universities in the Brexit Moment: Political, Economic and Cultural Implications*, Bingley: Emerald Publishing, 2018, p. 97. [↑](#footnote-ref-7)
8. See Cath & Keyes, Pink, & Richardson in this collection [↑](#footnote-ref-8)
9. Rosalind Edwards, ‘Why do Academics do Unfunded Research? Resistance, Compliance and Identity in the UK Neo-liberal University’, *Studies in Higher Education*, 47.4 (2022): 912. [↑](#footnote-ref-9)
10. Edwards, ‘Why do academics do unfunded research?’, 912. [↑](#footnote-ref-10)
11. U.K. Government, ‘National AI Strategy’, 21 September 2021, https://www.gov.uk/government/publications/national-ai-strategy; U.K. Government, ‘Establishing a pro-innovation approach to regulating AI’, 20 July 2022, https://www.gov.uk/government/publications/establishing-a-pro-innovation-approach-to-regulating-ai. [↑](#footnote-ref-11)
12. Emre Kazim, Denise Almeida, Nigel Kingsman, Charles Kerrigan, Adriano Koshiyama, Elizabeth Lomas and Airlie Hilliard, ‘Innovation and Opportunity: Review of the UK’s National AI Strategy’, *Discover Artificial Intelligence* 1.14 (2021): 1–10. [↑](#footnote-ref-12)
13. Marinus Ossewaarde and Erdener Gulenc, ‘National Varieties of Artificial Intelligence Discourses: Myth, Utopianism, and Solutionism in West European Policy Expectations’, *Computer* 53.11 (2020): 53–61. [↑](#footnote-ref-13)
14. Ossewaarde and Gulenc, ‘National Varieties of Artificial Intelligence Discourses’. [↑](#footnote-ref-14)
15. Thilo Hagendorff, ‘Blind Spots in AI ethics’, *AI Ethics* (2021). [↑](#footnote-ref-15)
16. Thilo Hagendorff, ‘The Ethics of AI Ethics: An Evaluation of Guidelines’, *Minds & Machines* 30 (2020), 99–120, 105. [↑](#footnote-ref-16)
17. Hagendorff, ‘Blind Spots in AI ethics’*.*  [↑](#footnote-ref-17)
18. I thank Jake Goldenfein for this point. [↑](#footnote-ref-18)
19. I thank Jake Goldenfein for this point. [↑](#footnote-ref-19)
20. I thank Jake Goldenfein for this point. [↑](#footnote-ref-20)
21. Jean Burgess, Peta Mitchell and Tim Highfield, ‘Automating the Digital Everyday: An Introduction’, *Media International Australia*, 166.1 (2018): 6-10, 6. [↑](#footnote-ref-21)
22. Pink, Ruckenstein, Berg and Lupton, ‘Everyday Automation: Setting a Research Agenda’. [↑](#footnote-ref-22)
23. See for example, Anna Jobin, Marcello Ienca and Effy Vayena, ‘The Global Landscape of AI Ethics Guidelines’, *Nature Machine Intelligence* 1 (2019): 389–99. [↑](#footnote-ref-23)
24. Pink, Ruckenstein, Berg and Lupton, ‘Everyday Automation: Setting a Research Agenda’, 8. [↑](#footnote-ref-24)
25. Alex Jiahong Lu, ‘Toward Everyday Negotiation and Resistance Under Data-Driven Surveillance’, *Interactions* 29.2 (2022). [↑](#footnote-ref-25)
26. Ben Wagner, ‘Ethics as an Escape from Regulation: From ‘Ethics-Washing’ to Ethics-Shopping?’, in Emre Bayamlioglu, Irina Baraliuc, Liisa Janssens and Mireille Hildebrandt (eds) *Being Profiled: Cogitas Ergo Sum: 10 Years of Profiling the European Citizen*, Amsterdam: Amsterdam University Press, 2018, pp. 84–9. [↑](#footnote-ref-26)
27. Elettra Bietti, ‘From Ethics Washing to Ethics Bashing: A View on Tech Ethics from Within Moral Philosophy’, Proceedings of ACM FAT\* Conference,2020, https://ssrn.com/abstract=3513182. [↑](#footnote-ref-27)
28. Angela Daly, S. Kate Devitt and Monique Mann, ‘AI Ethics Needs Good Data’, in Pieter Verdegem (ed) *AI for Everyone? Critical Perspectives*, London: University of Westminster Press, 2021. [↑](#footnote-ref-28)
29. Angela Daly, Thilo Hagendorff, Li Hui, Monique Mann, Vidushi Marda, Ben Wagner and Wayne Wei Wang, ‘AI, Governance and Ethics: Global Perspectives’ in Hans Micklitz, Oreste Pollicino, Amnon Reichman, Andrea Simoncini, Giovanni Sartor and Giovanni De Gregorio (eds) *Constitutional Challenges in the Algorithmic Society*, Cambridge: Cambridge University Press, 2022. [↑](#footnote-ref-29)
30. UNESCO, ‘UNESCO member states adopt the first ever global agreement on the Ethics of Artificial Intelligence’, 25 November 2021, https://en.unesco.org/news/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence. [↑](#footnote-ref-30)
31. See for example, Michael Veale and Frederik Zuiderveen Borgesius, ‘Demystifying the Draft EU Artificial Intelligence Act—Analysing the Good, the Bad, and the Unclear Elements of the Proposed Approach’, *Computer Law Review International* 22.4 (2021): 97–112. [↑](#footnote-ref-31)
32. Leigh McGowran, ‘The Issues with the EU’s Draft Regulation on Facial Recognition AI’, *Silicon Republic*, 17 May 2022, https://www.siliconrepublic.com/enterprise/the-issues-with-the-eus-draft-regulation-on-facial-recognition-ai. [↑](#footnote-ref-32)
33. See for example, Patricia Ewick and Susan Silbey, *The Common Place of Law: Stories from Everyday Life,* Chicago: University of Chicago Press, 1998; Richard Moule, George Burruss, Faith Gifford, Megan Parry and Bryanna Fox, ‘Legal Socialization and Subcultural Norms: Examining Linkages Between Perceptions of Procedural Justice, Legal Cynicism, and the Code of the Street’, *Journal of Criminal Justice* 61 (2019): 26–39. [↑](#footnote-ref-33)
34. Austin Sarat and Thomas Kearns (eds) *Law in Everyday Life*. Ann Arbor: University of Michigan Press, 1995, p. 9. [↑](#footnote-ref-34)
35. Michael McCann, ‘Law and Social Movements: Contemporary Perspectives’, *Annual Review of Law and Social Science* 2.1 (2006): 17–38. [↑](#footnote-ref-35)
36. Becky Kazansky, Guillen Torres, Lonneke van der Velden, Kersti Wissenbach, and Stefania Milan, ‘Data for the Social Good: Towards a Data-Activist Research Agenda’, in Angela Daly, S. Kate Devitt and Monique Mann (eds), *Good Data*, Amsterdam: Institute of Network Cultures, 2019, 246. [↑](#footnote-ref-36)
37. Davide Beraldo and Stefania Milan, ‘From Data Politics to the Contentious Politics of Data’, *Big Data & Society’* 6.2 (2019): 2. [↑](#footnote-ref-37)
38. Becky Kazansky, ‘“It Depends on your Threat Model”: The Anticipatory Dimensions of Resistance to Data-driven Surveillance’, *Big Data & Society* 8.1 (2021): 1. See also Lu, ‘Toward Everyday Negotiation and Resistance Under Data-Driven Surveillance’. [↑](#footnote-ref-38)
39. Anne Kaun, ‘Suing the Algorithm: The Mundanization of Automated Decision-making in Public Services Through Litigation*’, Information, Communication & Society* (2021); Robert Willim, ‘Imperfect imaginaries:Digitisation, mundanisation, and the ungraspable’ in Gertraud Koch (ed), *Digitisation: Theories and Concepts for Empirical Cultural Research*, Abingdon: Routledge, 2017. [↑](#footnote-ref-39)
40. Monique Mann, ‘Social (In)security and Social (In)justice: Automation in the Australian Welfare System’ in *Artificial Intelligence: Human Rights, Social Justice and Development: Global Information Society Watch 2019 Report,* 2019*,* pp. 68–72. [↑](#footnote-ref-40)
41. Tulsi Parida and Aparna Ashok, ‘Consolidating Power in the Name of Progress: Techno-solutionism and Farmer Protests in India’ in Frederike Kaltheuner (ed), *Fake AI*, Manchester: Meatspace Press, 2021, pp. 161–9. [↑](#footnote-ref-41)
42. Joy Buolamwini and Timnit Gebru, ‘Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification’in Proceedings of the 1st Conference on Fairness, Accountability and Transparency, PMLR 81, 2018, 1. [↑](#footnote-ref-42)
43. Angela Daly, ‘Algorithmic Oppression with Chinese Characteristics: AI Against Xinjiang's Uyghurs’ in *Artificial Intelligence: Human Rights, Social Justice and Development: Global Information Society Watch 2019 Report,* 2019, pp. 108–12. [↑](#footnote-ref-43)
44. Isadora Neroni Rezende, ‘Facial Recognition in Police Hands: Assessing the ‘Clearview case’ from a European Perspective’, *New Journal of European Criminal Law* 11.3 (2020): 375–89. [↑](#footnote-ref-44)
45. Melissa Heikkilä, ‘The Walls are Closing in on Clearview AI’, *MIT Technology Review*, 24 May 2022, https://www.technologyreview.com/2022/05/24/1052653/clearview-ai-data-privacy-uk/. [↑](#footnote-ref-45)
46. Afshin Shahi and Ehsan Abdoh-Tabrizi, ‘Iran’s 2019–2020 Demonstrations: The Changing Dynamics of Political Protests in Iran’, *Asian Affairs* 51.1 (2020): 1–41. [↑](#footnote-ref-46)
47. See for example, @DrParchizadeh, ‘Protesters in Tehran sabotage the police CCTV so that they can’t be identified, arrested and killed by the regime. [#IranProtests](https://twitter.com/hashtag/IranProtests?src=hashtag_click)’, Twitter post, 16 November 2019, 4:25PM, https://twitter.com/DrParchizadeh/status/1195739605460496385. [↑](#footnote-ref-47)
48. @javidirani30, ‘Last night, Monday, July 19th, Ahwazi youths in Alavi alley disabled CCTV cameras#Khuzestan#IranProtests’, Twitter post, 20 July 2021, 8:45AM, https://twitter.com/javidirani30/status/1417390100720279569. [↑](#footnote-ref-48)
49. Azadeh Akbari, ‘The Threat of Automating Control: Surveillance of Women’s Clothing in Iran’, in Aleš Završnik and Vasja Badalič (eds) *Automating Crime Prevention, Surveillance, and Military Operations*, Cham: Springer, 2021, 186. [↑](#footnote-ref-49)
50. Janis Wong, ‘Protests Decentralised: How Technology Enabled Civil Disobedience by Hong Kong Anti-extradition Bill Protesters’, *LawArXiv*, 2020, https://osf.io/preprints/lawarxiv/efvwn/. [↑](#footnote-ref-50)
51. Manoj Kewalramani and Rohan Seth, ‘Networked Protests & State Responses: The Case of Hong Kong 2019–2020’, Takshashila Discussion Document 2020-03, 2020, https://ssrn.com/abstract=3580591. [↑](#footnote-ref-51)
52. Wong, ‘Protests Decentralised’, 6. [↑](#footnote-ref-52)
53. ‘Hong Kong: Anti-surveillance Protestors Tear Down ‘Smart’ Lamp-post’, *Guardian*, 26 August 2019, https://www.theguardian.com/world/video/2019/aug/26/hong-kong-anti-surveillance-protesters-tear-down-smart-lamp-post-video. [↑](#footnote-ref-53)
54. Sean Gleeson, ‘How Smart are Hong Kong’s Lampposts?’, *AFP Fact Check*, 4 September 2019, <https://factcheck.afp.com/how-smart-are-hong-kongs-lampposts>. [↑](#footnote-ref-54)
55. Kevin Leung and H.Y. Lee, ‘Implementing the Smart City: Who Has a Say? Some Insights from Hong Kong’, *International Journal of Urban Sciences*, 2021, 1–25. [↑](#footnote-ref-55)
56. Dave Lee, ‘San Francisco is First US City to Ban Facial Recognition’,*BBC,* 15 May 2019, https://www.bbc.co.uk/news/technology-48276660. [↑](#footnote-ref-56)
57. Todd Feathers, ‘Facial Recognition Is Racist. Why Aren’t More Cities Banning It?’, *Vice*, 25 May 2021, https://www.vice.com/en/article/4avx3m/facial-recognition-is-racist-why-arent-more-cities-banning-it. [↑](#footnote-ref-57)
58. Niall Hamilton-Smith, Maureen McBride and Colin Atkinson, ‘Lights, Camera, Provocation? Exploring Experiences of Surveillance in the Policing of Scottish Football’, *Policing and Society* 31.2 (2021): 179–94. [↑](#footnote-ref-58)
59. Graham Ruthven, ‘The Criminalization of Scottish Soccer Fans’, *Vice*, 23 February 2016, https://www.vice.com/en/article/9apyad/the-criminalization-of-scottish-soccer-fans. [↑](#footnote-ref-59)
60. Marcello Mega, ‘Cops Fear Gangsters are Evading Law as Glasgow’s Facial Recognition Cameras Remain Mothballed’, *Daily Record*, 11 August 2020, https://www.dailyrecord.co.uk/news/scottish-news/scots-cops-fear-gangsters-evading-22499468. [↑](#footnote-ref-60)
61. Keren Weitzberg, ‘A Very British Problem: The Evolution of Britain’s Militarised Policing Industrial Complex’, Report for Campaign Against the Arms Trade and Netpol, 2022, https://caat.org.uk/app/uploads/2022/08/A-Very-British-Problem-WEB.pdf. [↑](#footnote-ref-61)
62. Scottish Parliament Justice Sub-Committee on Policing, ‘Facial Recognition: How Policing in Scotland Makes Use of This Technology’, SP Paper 678, 1st Report (Session 5), 2020, https://sp-bpr-en-prod-cdnep.azureedge.net/published/JSP/2020/2/11/Facial-recognition--how-policing-in-Scotland-makes-use-of-this-technology/JSPS0520R01.pdf. [↑](#footnote-ref-62)
63. Big Brother Watch, ‘Face Off: The Lawless Growth of Facial Recognition in UK Policing’, 2018, http://bigbrotherwatch.org.uk/wp-content/uploads/2018/05/Face-Off-final-digital-1.pdf. [↑](#footnote-ref-63)
64. See for example, Lisa Long and Remi Joseph-Salisbury, ‘Black Mixed-race Men’s Perceptions and Experiences of the Police’, *Ethnic and Racial Studies* 42.2 (2019): 198–215. [↑](#footnote-ref-64)
65. Jasbinder Nijjar, ‘Police–school Partnerships and the War on Black Youth’, *Critical Social Policy* 41.3 (2021): 491–501. [↑](#footnote-ref-65)
66. Nadine White, ‘Met Police Faces Legal Action Over ‘Racist’ Gangs Matrix Database’, *Independent*, 1 February 2022, https://www.independent.co.uk/news/uk/home-news/met-police-gangs-matrix-database-b2004293.html. [↑](#footnote-ref-66)
67. Lizzie Dearden, ‘Police Stop People for Covering their Faces from Facial Recognition Camera Then Fine Man £90 After he Protested’, *The Independent*, 31 January 2019, https://www.independent.co.uk/news/uk/crime/facial-recognition-cameras-technology-london-trial-met-police-face-cover-man-fined-a8756936.html. [↑](#footnote-ref-67)
68. Weitzberg, ‘A Very British Problem’. [↑](#footnote-ref-68)
69. Ada Lovelace Institute, ‘Beyond Face Value: Public Attitudes to Facial Recognition Technology’, 2019, https://www.adalovelaceinstitute.org/report/beyond-face-value-public-attitudes-to-facial-recognition-technology/. [↑](#footnote-ref-69)
70. Lachlan Urquhart and Diana Miranda, ‘Policing Faces: The Present and Future of Intelligent Facial Surveillance’, *Information & Communications Technology Law* 31.2 (2022): 194-219, 198. [↑](#footnote-ref-70)
71. Monika Zalnieriute, ‘Burning Bridges: The Automated Facial Recognition Technology and Public Space Surveillance in the Modern State’, *Science and Technology Law Review*, 22.2 (2021): 284-307, 287. [↑](#footnote-ref-71)
72. Suneet Sharma, ‘Case Law: R (Bridges) v Chief Constable of South Wales Police: The Use of Facial Recognition Software by the Police is Lawful’, *Inforrm blog*, 6 September 2019, https://inforrm.org/2019/09/06/case-law-r-bridges-v-chief-constable-of-south-wales-police-the-use-of-facial-recognition-software-by-the-police-is-lawful-suneet-sharma/. [↑](#footnote-ref-72)
73. Hunton Andrews Kurth, ‘UK Court of Appeal Finds Automated Facial Recognition Technology Unlawful in Bridges v South Wales Police’ 12 August 2020, https://www.huntonprivacyblog.com/2020/08/12/uk-court-of-appeal-finds-automated-facial-recognition-technology-unlawful-in-bridges-v-south-wales-police/; see also Urquhart and Miranda, ‘Policing Faces’. [↑](#footnote-ref-73)
74. Zalnieriute, ‘Burning Bridges’. [↑](#footnote-ref-74)
75. Euan Lynch, ‘The Use of Live Facial Recognition Technology in Scotland: A New North–South Divide?’, *UK Human Rights blog*, 25 February 2020, https://ukhumanrightsblog.com/2020/02/25/the-use-of-live-facial-recognition-technology-in-scotland-a-new-north-south-divide/. [↑](#footnote-ref-75)
76. Sally Weale, ‘ICO to Step In After Schools Use Facial Recognition to Speed Up Lunch Queue’, *Guardian*, 18 October 2021, https://www.theguardian.com/education/2021/oct/18/privacy-fears-as-schools-use-facial-recognition-to-speed-up-lunch-queue-ayrshire-technology-payments-uk. [↑](#footnote-ref-76)
77. Pascale Davies, ‘UK Schools Suspend Use of Controversial Facial Recognition Technology’, *Euronews*, 25 October 2021, https://www.euronews.com/next/2021/10/18/schools-in-scotland-start-using-facial-recognition-on-children-paying-for-lunch. [↑](#footnote-ref-77)
78. Asssiah Hamed, ‘Co-op Defends Facial Recognition Cameras in Bristol Stores Amid Claims of ‘Orwellian’Ssurveillance’, *Bristol Post*, 9 December 2021, https://www.bristolpost.co.uk/whats-on/shopping/co-op-defends-facial-recognition-6302476. [↑](#footnote-ref-78)
79. ‘Southern Co-operative’s Use of Facial Recognition on Customers Prompts Legal Complaint’, *Sky News*, 27 July 2022, https://news.sky.com/story/co-ops-use-of-facial-recognition-on-customers-prompts-legal-complaint-12659309. [↑](#footnote-ref-79)
80. Matthew Ryder, ‘Independent Legal Review of the Governance of Biometric Data in England and Wales (‘The Ryder Review’)’, Ada Lovelace Institute, 2022, https://www.adalovelaceinstitute.org/wp-content/uploads/2022/06/The-Ryder-Review-Independent-legal-review-of-the-governance-of-biometric-data-in-England-and-Wales-Ada-Lovelace-Institute-June-2022.pdf. [↑](#footnote-ref-80)
81. Anu Bradford, *The Brussels Effect: How the European Union Rules the World*. Oxford: Oxford University Press, 2020. [↑](#footnote-ref-81)
82. Angela Daly, ‘Neo-Liberal Business-As-Usual or Post-Surveillance Capitalism With European Characteristics? The EU’s General Data Protection Regulation in a Multi-Polar Internet’, in Rolien Hoyng and Gladys Pak Lei Chong (eds) *Critiquing Communication Innovation: New Media in a Multipolar World*, East Lansing: Michigan State University Press, 2022 (forthcoming). [↑](#footnote-ref-82)
83. Ossewaarde and Gulenc, ‘National Varieties of Artificial Intelligence Discourses’. [↑](#footnote-ref-83)
84. Ian Elliott, Karin Bottom, Paul Carmichael, Joyce Liddle, Steve Martin, and Robert Pyper, ‘The Fragmentation of Public Administration: Differentiated and Decentered Governance in the (dis)United Kingdom’, *Public Administration* 100.1 (2022): 98–115. [↑](#footnote-ref-84)