

ANALYSIS:

Policing in the age of the machine



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The rapid development of artificial intelligence (AI) is likely to bring significant changes to policing tools and techniques; Dr Jonathan Jackson and Ronald Winch of Birmingham City University argue that, as legislation lags behind the pace of technological development across society, policing needs to urgently develop and implement ethical and safe systems of governance to protect the model of policing by consent.

Technology has, throughout history, transformed how we live our lives. Public habits are now shaped by the ease and accessibility of technology, influencing how we shop, work,

communicate and perceive the world around us.

The police are not, of course, immune from these changes, continuously responding to [the shifting sands of the operational environment](#).

Whether it was the creation of the first fingerprinting lab in the Metropolitan Police in 1901, or the launch of the Police National Computer in 1980, technology has created opportunities for policing to prevent crime, protect the public and effectively detect those who commit offences.

It has radically altered the models of practice, creating overhauls in policy and practice which have manifested [a more educated, trained and professionalised force](#).

Policing is by its very nature subjective, challenging and politicised. [Rapid technological developments](#), climate change, international conflict and the global pandemic are just some of the areas which have contributed to a societal shift which urgently require officers and staff to examine our need for [better, more effective public protection](#).

While the majority of officers do an outstanding job in demanding situations, these challenges have at times been epitomised through lapses in professionalism, failure to provide services to the correct standards, and concerns about the service provided to specific communities. The positive impacts of technology are often countered by the challenges that it creates.

Ethical implications

Technological advancement has altered the dynamic of crime, with criminal groups operating in spaces which are largely ungoverned and not restricted by physical borders. Theft of a person's identity or data is far easier and more risk adverse than picking a person's pocket.

The rise of social media can further distort public perception of police actions, with truth becoming blurred by an ocean of murky ideologies and misunderstandings.

The history of policing continues to raise examples of cycles of reform, with actions creating reactions, where officers are re-examined and retrained to keep pace with the fluctuating beat.

The role and function of the police is a heavily debated topic within contemporary discourse; with divisions existing on all sides of the argument. Right, left, warriors or guardians, the varied approaches to what the public want their police to focus on can vary from state to state or house to house.

A person's perception of their function will often guide the direction of opinion as to [how staff should use technology](#). Those who see officers as enforcers may view technological advancement as far less concerning, with some utilising the often-familiar attitude of 'if I haven't done anything wrong, why worry?'.

But regardless of which side of the fence a person may sit, the ethical implications of tech being used as a tool of control is without doubt.

History regularly [shows us examples](#) as to how the temptation of many to abuse systems in pursuit of noble causes, can retune systems designed for positive intervention into methods of oppression.

The [growth in the use of artificial intelligence](#) (AI) now raises fundamental challenges of its operational implementation and ethical governance.

A shift in ownership of control

Once a source of some of the most famous science fiction films of all time, AI is now with us and [in operational use in England and Wales](#).

Sir Robert Peel, the hotly debated inventor of the 'new police', is purported to have said, "the police are the public and the public are the police", suggesting the core fundamentals of the model of policing by consent.

What Peel may have struggled to grasp is how this new digital revolution is creating a scenario in which policing is increasingly not carried out by the public empowered, but by algorithms.

Unlike previous technology innovations such as the bicycle, panda car or personal radio, which changed an officer's ability to carry out their roles, AI has the potential to remove decision making from the officers themselves. This shift in ownership of control raises huge ethical challenges which far outweigh the decisions made by Peel, Mayne, and Rowan in 1829.

AI within policing offers significant new opportunities to prevent and detect crime, to reduce harm and to safeguard communities.

Its uses are being explored by numerous UK forces, with examples around crime and disorder hotspot (cops on dots) analysis; predictive analysis and intervention with high-harm violent and serious acquisitive crime offenders; biometrics, including automatic facial recognition (AFR); drone technology; digital forensics; and intelligence analysis.

Professional policing practice steered by AI is controversial, prompting significant moral and ethical dilemmas, not least of which are the data protection and security issues that emerge from private sector involvement and the role of overseas companies from jurisdictions with very different records in human rights and police accountability.

Some AI-driven data analytics and predictive analysis prompt operational interventions in the lives of citizens – possibly from a young age and without criminal investigation or sanction.

Also, autonomous decision making by AI systems risks undermining policing by consent, and calls into question police impartiality. The already recognised racial and demographic bias within data systems presents significant risks of analysis driving discriminatory practice.

Legislation lags behind

The pace of technological development has been seen to outstrip current legislative frameworks, with some AI applications falling into the cracks between the police code of ethics, data protection and human rights, as well as specific policing legislation including RIPA and PACE.

This continues to present moral, ethical, and operational challenges for forces in navigating the benefits that AI can bring to policing and community safety.

The 2020 case of [Bridges v South Wales Police](#), where the use of AFR was ruled unlawful by the Court of Appeal, indicates the levels of concern in the use of AI within matters of accountability and police legitimacy.

The court specifically questioned the lack of guidance in where AFR could be used, the qualities of databases, data protection risk assessments and whether South Wales Police could identify

whether the software had any racial or gender bias.

This judgment signposts the likely future thinking of AI deployments in policing, covering potential legislation and appropriate codes of practice. Government legislation looks some way off, and it's doubtful whether the Home Office and other departments have the current bandwidth to apply the levels of attention required.

The Government's [2021 National AI Strategy](#) presents an "ambitious ten-year plan to make Britain a global AI superpower". The document seeks the start of a step-change for AI in the UK and identifies the "power of AI to increase resilience, productivity, growth, and innovation across the private and public sectors".

However, it also indicates that guidance covering ethics and safety in AI within the public sector will be addressed in the "long-term, i.e., over the next 12 months and beyond". Due to the proximity of the next general election, this seems optimistic.

Police-driven governance

Calls for governance in AI has come from within policing. According to [Sir Stephen House](#), the former acting Commissioner of the Metropolitan Police, the lack of legislation gives the police service all sorts of problems in terms of parameters.

Policing wants and needs legislation to govern the use of AI. The sheer developing power of AI and its exponential reach into the daily lives of communities presents a new and testing challenge for police legitimacy and accountability that goes to the heart of policing by consent.

Leading academics have put the lack of general AI governance more starkly; in his [2021 Reith Lecture](#), Professor Stuart Russell used a policing metaphor to say: "We're in the Wild West and there isn't a Sheriff in sight."

To mitigate this, forces are examining ways in which accountability, legitimacy and community trust and confidence can be fixed within approaches to AI in policing.

Creditably, West Midlands Police and Crime Commissioner has implemented [an independent ethics committee](#) that involves community activists, academics and lawyers who meet regularly to scrutinise questions of legitimacy, technical developments, and operational practice.

This approach seeks to embed the established police Code of Ethics, that is intended to encourage personal responsibility and the exercise of professional judgement; empowering everyone in policing to always do the right thing.

The ethics committee works closely with West Midlands Police to develop ethical practice within the force's use of AI. A key part of the approach is to ensure that professional human decision-makers are always involved in the application of AI technology – particularly where and when it interfaces in the lives of people.

The technological revolution encompassing policing, means that it cannot afford not to seek the benefits presented by AI. Practice at all levels will fundamentally change with AI, doubtless to a greater extent than any other policing event since the Metropolitan Police Act 1829.

In the immediate absence of government legislation, the service needs to urgently act to develop and implement ethical and safe systems of governance to protect the future of our widely admired model of policing by consent.

Policing practitioners and academics from the UK and Europe will gather at BCU next month for a one-day conference focusing on the use of artificial intelligence in policing.

About the Authors

Jonathan Jackson is a Senior Lecturer in Policing and Security Studies at Birmingham City University (BCU). His academic interests are centred on policing and security in both the UK and internationally. He has been responsible for designing and validating undergraduate and postgraduate policing courses in the UK and overseas. Prior to taking on a role at BCU, Jonathan worked in custodial environments before making the transition into mainstream education. He continues to work closely with local and national police forces, the military and prison service as a researcher and critical friend.

Ron Winch is the MSc Policing and Intelligence Analysis Course Director and a Senior Teaching Fellow in Policing and Criminology at BCU. Prior to joining BCU, he served for more than 30 years with the Metropolitan Police Service and West Midlands Police. These included frontline CID roles, as well as senior command roles in local policing, public order policing, firearms policing and as a senior investigating officer for major and complex crime – including covert

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