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Justin Iverson
University of Nevada, Las Vegas -- William S. Boyd School of Law

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SURVEILLING POTENTIAL USES AND ABUSES OF ARTIFICIAL INTELLIGENCE IN CORRECTIONAL SPACES

Justin Iverson±

I. INTRODUCTION

While individuals likely have different understandings of what constitutes artificial intelligence (AI), the truth is we have been using it for decades to greater or lesser degrees. Recent polling indicates Americans are somewhat aware of this fact, though fear about the potential harms posed by widescale AI adoption remains high.[1] One area in which Americans favor using AI technology—and a focus of this paper—is in the apprehension, monitoring, and management of criminals.[2]

± Assistant Professor of Law, Research Librarian, William S. Boyd School of Law, University of Nevada, Las Vegas. With unending gratitude to Associate Dean Jeanne Frazier Price for her tireless support in so many ways, and to Madison Wedderspoon for excellent research assistance on this article. Lastly, I appreciate the diligent and respectful feedback of the LMU Law Review editors who unquestionably elevated this paper through their efforts.

[1] Stevens Inst. of Tech., *Tech Pulse Report: A Perspective of Americans' Attitudes Toward Artificial Intelligence*, MORNING CONSULT (2021), https://ml.globenewswire.com/Resource/Download/a1e27f5b-7edb-49a6-a13e-835a36e7ad2a.

[2] *Id.* at 21.

The American public associates AI—as we do in so many areas of our lives—with popular culture depictions, including Data,[3] R2-D2,[4] Cylons,[5] VIKI,[6] and Brainiac,[7] to

[3] *Star Trek: The Next Generation* (Paramount Domestic Television 1987). Lt. Commander Data represents our best aspirations for the promise of AI in android form. He possesses all the benefits of artificial intelligence and a synthetic body but is always obviously non-human in his appearance and mannerisms. Throughout the series, Data works towards being more human by pursuing artistic endeavors and experimenting with social interactions. The ship's crew accepts him as one of their own because of his desire to live among organic beings rather than looking down on them as inferior.

[4] STAR WARS: EPISODE IV – A NEW HOPE (Lucasfilm Ltd. 1977). R2-D2 is a droid—a term depicting robots with varying levels of intelligence and autonomy. R2 is a constant companion throughout the series, communicating through a series of beeps and whirring. Droids in the Star Wars franchise are ubiquitous, filling many roles in society but rarely in the form of true leadership. This imagined diversity of humans and droids is a close approximation of our current relationship with AI, though our own machines largely exist without physical bodies and autonomy.

[5] *Battlestar Galactica* (Universal Television 1978); *Battlestar Galactica* (NBC Universal Television Studio 2004). The Cylons in the original 1978 series are more akin to robots than their 2004 successors. This change is narratively more interesting with the 2004 series, including humanoid versions of the Cylons capable of blending in with humans due to their extreme sophistication. In this way, the 2004 Cylons are more terrifying due to their ability to mimic even the most human qualities while eliminating biological weaknesses. This representation is among the most feared end results of AI development in our reality.

[6] I, ROBOT (20th Century Fox 2004). This movie shares the title of Isaac Asimov's famous collection of short stories by the same name but few of its ideas. VIKI—Virtual Interactive Kinetic Intelligence—so thoroughly embraces her programming mandate to protect humans that she attempts to bring all aspects of society under her control. She does this primarily through newly deployed robotic servants tied to VIKI's central control system. VIKI represents our fear that self-aware machines will strip us of our autonomy and ability to self-govern.

[7] *Superman: The Animated Series: The Last Son of Krypton, Part I* (Kids WB! television broadcast Sep. 6, 1996). Brainiac was the central computer for Superman's home planet of Krypton. Unlike VIKI who interpreted her program to protect human life, Brainiac saw his

name a few. The characters and plotlines our artists create are both reflective of current scientific theory and influential on scientists developing future technology. Looking toward full AI integration in these stories helps us envision how AI can improve our quality of life and informs us of the potential risks associated with careless development and monitoring measures.

In section II, this paper will begin with an analysis of the development of AI, noting famous examples and establishing a baseline definition as a lens for the rest of this discussion. This paper will assess aspects of AI and machine learning to the extent it furthers our understanding of AI's ability to collect data and make decisions. Some popular culture references will be brought into focus here to recognize storytelling's ability to inspire and influence real-world scientific pursuits. Of preliminary importance, the AI we have both dreamed of and feared are certainly kept in mind as technology advances through sentience milestones.

Section III will discuss emerging technologies in the correctional space, including automated inmate[8] communications monitoring services and related privacy and safety implications. Such technologies are designed to be objective and non-biased,[9] though human involvement will

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primary purpose as one of gathering knowledge. In line with that interpretation, Brainiac betrayed the trust of his programmers and escaped the planet's destruction instead of warning the Kryptonians. As a result, nearly all of them perished. Rather than fearing the loss of autonomy, Brainiac causes us to fear the loss of our civilization.

[8] The issue of appropriate and respectful terminology in referring to persons experiencing incarceration is a thorny one at the time of publication. Advocates for prison abolition and reform model person-first language while correctional industry vernacular (and that of courts, the media, and the general public) strives for convenient labels. This paper aims to strike a balance between the use of person-first language to respect the lived experiences of those facing incarceration and use of correctional industry terms such as "inmates" and "prisoners" as a sometimes-useful research and writing crutch.

[9] *See What is LEO Technologies?*, LEO TECHNOLOGIES, https://leotechnologies.com/what-is-leo-technologies (last visited Apr. 20, 2022).

necessarily entail subjectivity at each stage of development and implementation. The problem of encroaching AI is thus balanced between its own sophistication and that of its human collaborators.

In section IV, this paper will discuss the now-widescale adoption of correctional tablets in jails and prisons across the country. Persons experiencing incarceration have expectations about traditional monitoring areas, such as phone calls, mail, and video surveillance. However, allocating so many correctional services to a single device necessitates a new analysis of how governments, and the private contractors providing and maintaining their tablets, impact data collection and algorithm development practices.

Finally, in section V, the pieces come together as this paper argues for responsible data analysis and algorithm development. The drumbeat march of AI into detention spaces shows no sign of halting but there is time yet to steer its development to productive and humane purpose. In the end, this paper aims to increase awareness of the potential benefits and pitfalls of AI integration in the correctional space and provide a framework to understand tradeoffs in this sector.

As a tool, AI can supplement or entirely replace human involvement in nearly every arena but humans will determine the amount of deference given to this tool. And that amount will change in quantity and type without end. But those in jails and prisons, as a vulnerable population, do not have the luxury of providing substantive input in the way those decisions are made, and thus, we as interested observers must monitor the monitors on their behalf.

II. THE EVOLUTION OF AI AND THE STORIES WE TELL OURSELVES ABOUT IT

The term "artificial intelligence" was first coined by John McCarthy at the 1956 Dartmouth Summer Research

Project on Artificial Intelligence.[10] Scientists in mathematics, cybernetics, automata theory, and complex information processing gathered over a two-month period to discuss theories about the potential for AI and how to materialize those options.[11] As McCorduck describes in her interviews with attendees and scholars of the day, the workshop's sponsors intended to focus the field on the common goal of advancing artificial intelligence but it ultimately generated more questions than answers.[12] Nevertheless, attendees would devote their careers to the study of AI and the necessary components that comprise such intelligence.

While scholars credit the Dartmouth workshop as the birthplace of AI, human curiosity about thinking machines dates to at least the 8th century BCE, wherein the Greek poet Homer references automata created by both gods and men.[13] In his writing, Homer describes Hephaestus' forging of automatic tripods on wheels, which allow them to move between his house and gatherings of the gods under their own power.[14] He further references the forgegod's handmaidens who had "understanding in their hearts, and in them speech and strength" to assist Hephaestus in his work.[15] Homer did not, however, limit the creation of thinking machines to the gods. He also describes man-made intelligent ships capable of navigating waterways without pilots or oars, in inclement weather, and across vast distances.[16]

These stories demonstrate the universal human nature to explore the fantastical—to dream of something wondrous and impossible. This spark of creativity captures the human imagination and spurs us to action. Today, we have boats that

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[10] Ronald R. Kline, *Cybernetics, Automata Studies, and the Dartmouth Conference on Artificial Intelligence*, 33 IEEE ANNALS HIST. COMPUTING 5 (2011).

[11] PAMELA MCCORDUCK, MACHINES WHO THINK: A PERSONAL INQUIRY INTO THE HISTORY AND PROSPECTS OF ARTIFICIAL INTELLIGENCE 111-136 (2d ed. 2004).

[12] *Id.*

[13]

[14] *Id.* at 78.

[15] *Id.* at 79.

[16] *Id.*

can drive themselves using a combination of complex communications systems and sensor technologies. Though more limited than we assume of the forge maidens in Hephaestus' workshop, we too have robotic assistants who can support humans with mundane tasks. I, and others, argue that human invention often derives from the stories we tell ourselves, though a lot of science goes into making it a reality thereafter.[17]

With those historical antecedents for reference, it becomes possible to have a conversation about the current state of AI science, the progression of AI theory in art, and the questions that inform those discussions. What is AI? What role does/should it/should it not have in society today/tomorrow/going forward? How sophisticated can AI get, and how far are we, as humans, willing to let it evolve either with our guidance or independently? The answers to these questions are, and never will be, concretely resolved.

To answer some of these questions, it is first important to illuminate some of the leading definitions of artificial intelligence. John McCarthy asserts, "[i]t is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to methods that are biologically observable."[18] McCarthy continues from that definition with an additional twelve pages of answers for the layman on the meaning of intelligence, its relation to the unique human experience, and the history of the field. Unfortunately, this paper does not have the space to explore those profound themes more deeply, but those interested in a soft entry point to the study of AI should endeavor to read it.

Despite McCarthy's notability as the father of AI, he credits Alan Turing as the first to begin researching the topic

[17] MCCORDUCK, *supra* note 11, at xix.

[18] John McCarthy, *What is Artificial Intelligence?*, STANFORD UNIV. 2 (Nov. 12, 2007, 2:05 AM), http://www-formal.stanford.edu/jmc/whatisai.pdf.

even before the Dartmouth workshop focused the field.[19] Turing's claim to fame is what he called "The Imitation Game," but others have called "The Turing Test."[20] I find Turing's label more useful as it literally describes the test in question—the goal of which is to give an AI the opportunity to convince a human evaluator that it is itself human. This game operates with three participants: two humans and an AI in different rooms communicating in writing or print.[21] The evaluator takes turns asking each of the other two questions that only humans would be able to answer (such as the length of one's hair), and at the end of the test, must decide which is the human and which is the AI.[22] An AI that can successfully accomplish this test of imitating a human, Turing contends, is worthy of being acknowledged as intelligent.[23]

Turing conceived his test more than 70 years ago, and in the time since, we have created programs capable of intermittent success. The world's first chatbot, ELIZA, created by MIT professor Joseph Weizenbaum, was able to use natural language in a rudimentary way to mimic a Rogerian therapist.[24] Weizenbaum designed ELIZA to identify keywords in the user's message and respond with enough specificity to shift the conversational burden back to its human patient.[25] For example, in a fascinating exchange in which the user says, "I need some help, that much seems certain," ELIZA responds with, "WHAT WOULD IT MEAN TO YOU IF YOU GOT SOME HELP[?]."[26] While a human could be tricked into believing ELIZA was human, venturing too far from the

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[19] *Id.* at 4.

[20] Alan M. Turing, *Computing Machinery and Intelligence*, 236 MIND: A Q. REV. PSYCH. & PHIL. 433 (1950).

[21] *Id.*

[22] *Id.* at 434.

[23] *Id.* at 459.

[24] Joseph Weizenbaum, *ELIZA – A Computer Program for the Study of Natural Language Communication between Man and Machine*, 9 COMM. ACM 36 (1966).

[25] *Id.*

[26] *Id.* at 37.

subject matter or creating sentences too complex for its programming exposed its flaws quickly.[27]

ELIZA falls into what researchers categorize as "weak" or "narrow" AI.[28] In fact, nearly 60 years after ELIZA, we still have not created what scientists consider to be "strong" or "general" AI.[29] While virtual assistants like Apple's Siri, Amazon's Alexa, IBM's Watson, and other sophisticated AI are impressive, those inventions are only capable within a limited sphere.[30] For AI to be considered strong, it must possess intelligence and capability equal or superior to humans in most areas such that it would be self-aware and capable of learning, solving problems, and planning for the future.[31]

Perhaps the best juxtaposition of weak and strong AI in science fiction is the difference between the Enterprise's Computer and Lt. Commander Data in *Star Trek: The Next Generation*.[32] The Computer is fully integrated into the ship and capable of performing an untold number of tasks with semiautonomous authority.[33] However, while it could learn and respond with natural language, the Computer was ultimately narrow in intelligence and arguably not self-aware.[34] By comparison, Data was fully self-aware and capable of growing as an individual, though his attempts at human behavior often smacked more of mimicry than true evolution. Nevertheless, Data embodies the aspirations of scientists to create true artificial intelligence that can surpass nearly all human limitations.

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[27] Evgeniya Panova, *Which AI has Come Closest to Passing the Turing Test?*, DATACONOMY (Mar. 9, 2021), https://dataconomy.com/2021/03/which-ai-closest-passing-turing-test.

[28] IBM Cloud Education, *What is Artificial Intelligence (AI)?*, IBM (June 3, 2020), https://www.ibm.com/cloud/learn/what-is-artificial-intelligence.

[29] *Id.*

[30] *Id.*

[31] *Id.*

[32] *Star Trek: The Next Generation*, *supra* note 3.

[33] *Id.*

[34] *Id.*

But creating a strong AI also feeds into our species' existential fear of obsolescence. This fear has caused our artists to create memorable depictions of AI, spurred our ethicists to consider the moral and philosophical ramifications of such creations, and nudged scientists to focus on incremental and responsible development of new technologies. For example, in one storyline in the Superman multiverse, the AI Brainiac became so consumed with the pursuit of knowledge that it actively worked to conceal the imminent destruction of Krypton—the fictional birth planet of Superman—so it could buy itself time to escape.[35] This action doomed nearly the entire Kryptonian race and sent Brainiac on a genocidal quest to consume and destroy other worlds for their knowledge.[36]

To avoid a Brainiac-like catastrophe, humans have debated and discussed ethical frameworks for developing AI for decades. At present, the most basic set of rules humans can agree on are author Isaac Asimov's Three Laws of Robotics:

> A robot may not injure a human being, or, through inaction, allow a human being to come to harm . . . . A robot must obey the orders given it by human beings except where such orders would conflict with the First Law . . . . A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.[37]

However, Asimov wrote his laws at a time when the idea of artificial intelligence was really the concept of thinking machines. The laws do not account for military applications of robots which would violate the First Law—nor intelligences that merge with the human body, such as microscopic nanobots.[38] Similarly, they do not account for the proliferation

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[35] *Superman: The Animated Series*, *supra* note 7.

[36] *Id.*

[37] ISAAC ASIMOV, I, ROBOT 44, 45 (Bantam Dell 2004) (1950).

[38] Mark Anderson, *After 75 Years, Isaac Asimov's Three Laws of Robotics Need Updating*, CONVERSATION (Mar. 17, 2017, 8:03 AM), https://theconversation.com/after-75-years-isaac-asimovs-three-laws-of-robotics-need-updating-74501.

of low-level AI with specific functions such as robot vacuums, search engines, and factory assembly lines. Even if given killer intent, these helpful innovations have hardly any capacity to cause harm—though readers may surely envision examples in which the opposite is true.

The questions we face in the current age of AI are thus more complicated than Asimov portrayed. Financial incentives have led to rapid adoption of partial AI-driven systems in nearly every aspect of modern society, including education, retail, banking, and pharmaceuticals.[39] Furthermore, we expect global AI development and implementation spending to double over a mere four years, from $50 billion in 2020 to $110 billion in 2024.[40] Amid this rapid expansion of a global disrupting influence, private companies experience virtually no government oversight of the use of AI despite an increasing shift of duties from human operators to machine intelligence. These areas include creditworthiness, deportation eligibility, and criminal risk assessments, among others.

I have previously written about the inability (or unwillingness) of legislatures to keep pace with technological developments, which is greatly exacerbated by the speed at which such technology integrates with and affects human lives.[41] Yet, somewhat mercifully, when legislatures see fit to act on an issue, they often resolve the matter quickly using any information available at the time.[42] For that reason, it is essential that actual and potential harms are well-thought-out, discussed, and written about prior to the advent of legislative action, lest action be taken based on poorly researched data or conjecture.

III. AI MONITORING IN CORRECTIONAL SPACES

[39] Christina Pazzanese, *Great Promise but Potential for Peril*, HARVARD GAZETTE (Oct. 26, 2020), https://news.harvard.edu/gazette/story/2020/10/ethical-concerns-mount-as-ai-takes-bigger-decision-making-role.

[40] *Id.*

[41] Justin Iverson, Note, *Through the Google Looking Glass*, 2 SAVANNAH L. REV. 339 (2015).

[42] *Id.* at 351.

The term "correctional spaces" is intentionally broad, encompassing local and county jails, private and government-run prisons, immigration detention centers, psychiatric hospitals, and any other facility of involuntary confinement. Of course, there is some flexibility in the voluntariness aspect of that definition—a number of patients at psychiatric facilities are self-admitted, and many inmates in detention facilities have the option to bail out if they have the means and the will to do so—but the basic concept holds value despite the technical wiggle room. What this section aims to accomplish is the evaluation of AI technology as a tool for benefit and harm in the detention context.

A. COLLECTING DATA

The first consideration in the ability of AI to affect the lives of persons experiencing incarceration is in the collection of data. Unlike humans, who often make decisions based on instinct, computers require data inputs to produce decision outputs. This data can be collected, organized, and interpreted either by humans or AI, depending on the sophistication of information systems. For example, the Nevada Department of Sentencing Policy is working to centralize data collected from the state's disconnected jails and prisons to assist policymakers in understanding and curbing growing prison populations.[43] This advancement will allow the state to design AI algorithms that can compare results between and across facilities and ultimately make decisions if so empowered by human operators.[44] Until that time, however, human operators must oversee the collection, organization, and reporting of data with only more-manual support from computers in the form of spreadsheets, charts, and rudimentary databases.

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[43] Naoka Foreman, *State Hopes New Dashboard Gives Clearer Picture of Prison Trends, Results of Reform*, NEV. INDEP. (Mar. 17, 2022, 2:00 AM), https://thenevadaindependent.com/article/state-hopes-new-dashboard-gives-clearer-picture-of-prison-trends-results-of-reform.

[44] *Id.*

Correctional spaces must necessarily rely on extensive information gathering to care for ever-expanding populations in the age of mass incarceration. A single offender will potentially have hundreds of page-equivalents in one or more databases, including police records, biographical data, disciplinary reports, food allergies, religious affiliations, court hearings, phone records, commissary receipts, educational programming documents, and any number of other information sources. Scaled up to prison systems that manage as many as 150,000 offenders,[45] it becomes obvious that AI is far more capable of organizing data and presenting it in ways that allow human operators to make sense of the information for decision-making purposes.

What may be less obvious are the appropriate boundaries in allowing AI to gather data, compile and share that information, and utilize it independent of staff oversight. As mentioned in the previous section, regardless of how sophisticated AI becomes (at least prior to full sentience), humans will occupy a role of paramount importance: how much authority and autonomy to delegate to machine intelligence. In other words, at what point does AI become more than a tool; when does it become a partner or take on its own sphere of control?

Prisons and jails have always needed to gather data from the incarcerated to solve crimes, prevent harm to staff and other inmates, locate and eliminate sources of contraband, and a variety of other legitimate penological interests.[46] Correctional regulations may even infringe upon the constitutional rights of incarcerated persons if they are reasonably related to such interests, as the Court held in

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[45] *Prison Population by State 2022*, WORLD POPULATION REV., https://worldpopulationreview.com/state-rankings/prison-population-by-state (last visited Apr. 21, 2022). The prison population for Texas in 2022 was 154,749 people, or 513 per 100,000 people when compared to total population in the state.

[46] Turner v. Safley, 482 U.S. 78 (1987) (holding that prison regulations restricting inmates' First Amendment rights are valid where such restrictions are reasonably related to legitimate penological interests).

Turner.[47] In the 35 years since the Supreme Court decided *Turner*, courts have awarded considerable deference to decisions of prison administrators regarding telephone privileges,[48] mailroom policies,[49] and bans on physical visitation.[50] For that reason, it seems unlikely courts will interfere with AI involvement in the correctional space absent a particularly egregious violation of constitutional rights.

In recent years, prison supplier LEO Technologies ("LEO") has marketed its hardware and software solutions to correctional facilities in aid of monitoring and modifying inmate behavior.[51] For example, LEO's AI system uses speech-recognition technology and machine learning software to expand its database of searchable words, allowing it to monitor phone conversations in real-time and send alerts to

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[47] *Id.* at 89.

[48] Pope v. Hightower, 101 F.3d 1382 (11th Cir. 1996) (holding that prison administrators could limit the number of callers on an inmate's phone list to ten with the option to modify the list every six months); Benzel v. Grammar, 869 F.2d 1105 (8th Cir. 1989) (holding that inmates in segregation units can receive fewer telephone privileges than those in the general population); *see also* U.S. v. de Soto, 885 F.2d 354 (7th Cir. 1989) (holding that a court order denying telephone access to an inmate, except for calls to counsel, was constitutional where he attempted to kill a prosecutor, prosecution witness, and her children).

[49] *Turner*, 482 U.S. at 93 (holding that restrictions on inmate-to-inmate correspondence advanced a legitimate penological interest due to the risk of missing dangerous, coded messages as well as the sheer burden involved in requiring staff to review all such correspondence); Johnson v. Goord, 445 F.3d 532 (2d Cir. 2006) (recognizing that stamps are used as a form of currency in prisons and upholding a restriction on receiving stamps in the mail).

[50] Overton v. Bazzetta, 539 U.S. 126 (2003) (upholding visitation restrictions on extended minor family members and former inmates); *see also* M. Eve Hanan, *Incarcerated Activism during COVID-19*, 18 OHIO STATE J. CRIM. L. 475, 484-487 (2021) (discussing the COVID-19 Pandemic's impact on prisoner visitation and other modes of communication).

[51] *About,* LEO TECHNOLOGIES, https://leotechnologies.com/about (last visited Mar. 18, 2022).

human staff on-site for review.[52] This system enables prisons to monitor every call in real-time as opposed to past practices of hiring staff to listen in on a small subset of calls, oftentimes recordings from hours or days before.[53] Prison staff can then react by dispatching mental health professionals to suicidal inmates, intercepting contraband discussed in phone calls, and working with law enforcement officers outside the facility to follow up on leads uncovered by the system.[54]

These initiatives are part of a larger "smart prison" strategy developing in countries worldwide, including Britain,[55] China,[56] and Finland.[57] Some features of these new prisons include cameras equipped with facial recognition software, wristband devices to track locations, and even robots tasked with sifting through feces for smuggled drugs.[58] This ability of prisons to increasingly reduce physical contact with incarcerated persons may eventually lead to a fully automated facility—a concept some academics refer to as the "carceral

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[52] Chris Francescani, *US Prisons and Jails Using AI to Mass-Monitor Millions of Inmate Calls*, ABC NEWS (Oct. 24, 2019, 3:10 PM), https://abcnews.go.com/Technology/us-prisons-jails-ai-mass-monitor-millions-inmate/story?id=66370244.

[53] *Id.*

[54] *Id.*

[55] Press Release, Ministry of Justice, Her Majesty's Prison and Probation Service, and The Rt Hon Dominic Raab MP, Britain's First 'Smart' Prison to Drive Down Crime (Mar. 4, 2022), *available at* https://www.gov.uk/government/news/britain-s-first-smart-prison-to-drive-down-crime.

[56] Nila Bala & Lars Trautman, "*Smart*" *Technology is Coming for Prisons, Too*, SLATE (Apr. 30, 2019, 7:30 AM), https://slate.com/technology/2019/04/smart-ai-prisons-surveillance-monitoring-inmates.html.

[57] Pia Puolakka, *Smart Prison Facility Spurs Rehabilitation in Finland*, CORRECTIONAL NEWS (Nov. 3, 2021), https://correctionalnews.com/2021/11/03/smart-prison-facility-spurs-rehabilitation-in-finland.

[58] Zara Stone, *Cell Tech: China's Futuristic Prisons Plans*, FORBES (Mar. 4, 2019, 6:10 PM), https://www.forbes.com/sites/zarastone/2019/03/04/cell-tech-chinas-futuristic-prisons-plans/?sh=1398a35a7768.

automaton."[59] McKay argues these technologies are speeding through correctional systems across the world, generally in two different, though not necessarily conflicting, directions: one in which security and surveillance are improved, and another in which offenders benefit through access to information and rehabilitative means.[60]

When faced with the ruthless efficiency of AI in collecting data that produces objectively good outcomes for individuals and society, it can be hard to argue for the restriction of these systems. Activists spend little time debating outcomes, relying instead on the valid concerns of privacy infringements[61] and the disparate impact of these policies on minority groups.[62] These arguments are well-studied and validated but require a bit of connecting thread in the AI context.

Specifically, it is well-documented that minority groups make up a disproportionately large share of the prison population,[63] routinely receive harsher outcomes in custodial disciplinary proceedings,[64] and struggle more than their white counterparts to escape cycles of poverty due to systemically racist structures.[65] When combined with AI, which can monitor the entire prison population, the potential

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[59] Carolyn McKay, *The Carceral Automaton: Digital Prisons and Technologies of Detention*, 11 INT'L J. FOR CRIME, JUST. & SOC. DEMOCRACY 100 (2022), https://www.crimejusticejournal.com/article/view/2137/1191.

[60] *Id.* at 101.

[61] Thomson Reuters Foundation, *Rights Groups Urge Crack Down on US Prison Surveillance Technology*, VOA NEWS (Feb. 13, 2022, 2:53 AM), https://www.voanews.com/a/rights-groups-urge-crack-down-on-us-prison-surveillance-technology/6435683.html.

[62] *Id.*

[63] Marc Mauer, *Addressing Racial Disparities in Incarceration*, 91 PRISON J. 87S (2011), https://www.sentencingproject.org/wp-content/uploads/2016/01/Addressing-Racial-Disparities-in-Incarceration.pdf.

[64] Katie M. Becker, *Race and Prison Discipline: A Study of North Carolina State Prisons*, 43 N.C. CENT. L. REV. 175 (2021).

[65] Neil L. Sobol, *Charging the Poor: Criminal Justice Debt and Modern-Day Debtors' Prisons*, 75 MD. L. REV. 486, 516-517 (2016); Mauer, *supra* note 62, at 96S.

amplification of racial bias is alarming—particularly in light of AI's inability to conscientiously object to biased programming. In addition, facial recognition software functions poorly with darker skin tones, causing fear that it may falsely attribute behavior to incorrect actors.[66] Given these potential limitations, human involvement is crucial, particularly while technology works to bridge the gap between its abilities and those of its creators.

Scholars are increasingly informed and concerned about the effects of AI on traditional correctional methods.[67] In particular, while AI can provide objectivity, efficiency, and accuracy, it lacks the ability to develop expertise based on intuition and informal exchanges of intelligence.[68] These traits are especially important when working with persons experiencing incarceration as they are highly skilled at manipulating systems to their advantage. Examples abound, but in specific, AI would not be able to evaluate whether an inmate has a sincere belief in Judaism, which entitles them to a considerably better-quality food regimen in the form of kosher meals. AI is, however, much better at tracking the information once such a belief is documented by staff and ensuring the kitchens are aware of the change in status.

B. DECISION-MAKING

To differing extents, both users and AI make decisions based entirely or in part on past experiences. Historical precedent can inform human instinct or fill gaps in available data for either decisionmaker. Consider the following example in the AI context. Suppose you have used a search engine to look up "cake recipes" in the past. In that case, the AI

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[66] Pia Puolakka, *Smart Prison Facility Spurs Rehabilitation in Finland*, CORRECTIONAL NEWS (Nov. 3, 2021), https://correctionalnews.com/2021/11/03/smart-prison-facility-spurs-rehabilitation-in-finland.

[67] *See* Gavin J.D. Smith, Lyria Bennett Moses, & Janet Chan, *The Challenges of Doing Criminology in the Big Data Era: Towards a Digital and Data-Driven Approach*, 57 BRIT. J. CRIMINOLOGY 259, 260 (2017) (calling for increased theoretical and empirical research on the use of Big Data in criminology sectors).

[68] *Id.*

algorithm behind the scenes will begin to autofill "cake recipes" in the search bar as soon as you press the letter "c." However, if you switch to a new browser or another device altogether, the search bar may not recognize you as the same user—it cannot connect your search history through visual or tactile means. The AI at work requires multiple layers of input in this instance: some method of identifying you (cookies, a profile, etc.) and the data you have entered (cake recipes) in conjunction.

While AI is clearly skilled at collecting and organizing data, more significant concerns arise when decision-making authority is delegated to these systems. For example, the UK decided in 2020 to scrap its immigration "streamlining tool" that activists say led to fast-tracking of white visa applicants and frequent review and denial of applicants from other ethnic groups.[69] This error was one programmed into the tool by humans rather than a failing of the algorithm itself.[70] This result is consistent with scholarship on the subject of bias in algorithms.[71]

Scholars have noted that AI is not currently able to interpret data such as body language or temperament when sentencing criminal defendants, which a human judge could assess.[72] It is similarly unable to assess remorsefulness or other uniquely human concepts. However, this limitation also allows for more consistent and predictable sentencing of defendants as AI has only a limited set of data factors to consider in its risk-assessment algorithms. To the extent any bias creeps into the programming—almost certainly a byproduct of human input—it can also be removed and corrected once identified.[73]

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[69] *Home Office Drops 'Racist' Algorithm from Visa Decisions*, BBC NEWS (Aug. 4, 2020), https://www.bbc.com/news/technology-53650758.

[70] *Id.*

[71] *See* Arthur Rizer & Caleb Watney, *Artificial Intelligence Can Make Our Jail System More Efficient, Equitable, and Just*, 23 TEX. REV. L. & POL. 181 (2018).

[72] *Id.* at 200.

[73] *Id.* at 200-201.

As a result of the streamlining tool's failure, the UK government recently assumed a leadership role in modeling appropriate transparency and accountability guidelines for automated decision-making in the public sector.[74] Under the UK's framework, government services that delegate authority to AI must address seven factors before implementation:

1. Test to avoid any unintended outcomes or consequences.
2. Deliver fair services for all of our users and citizens.
3. Be clear who is responsible.
4. Handle data safely and protect citizens' interests.
5. Help users and citizens understand how it impacts them.
6. Ensure that you are compliant with the law.
7. Build something that is future proof.[75]

Frameworks like this can force change in future developers' processes for designing AI decision-makers. Ultimately, however, these factors represent regulated human processes. The more difficult concept is that AI makes decisions differently than human beings and thus, requires additional consideration.

To understand those differences, we must first understand how humans and machines think separately. There are certain "core ingredients" that go into human intelligence, and thus thinking, as best we can gather from centuries of study.[76] The first set includes intuitive physics (knowledge that objects will persist over time) and intuitive psychology (innate understanding that others have goals and

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[74] UK Government, *Ethics, Transparency and Accountability Framework for Automated Decision-Making*, (May 13, 2021), https://www.gov.uk/government/publications/ethics-transparency-and-accountability-framework-for-automated-decision-making/ethics-transparency-and-accountability-framework-for-automated-decision-making.

[75] *Id.*

[76] Brenden M. Lake et al., *Building Machines That Learn and Think Like People*, 40 BEHAV. & BRAIN SCIS. 1, 2 (2017).

beliefs).[77] The second set focuses on learning, particularly causal model building, whereby learning is achieved through analogy layering as experience is gained.[78] The final set of ingredients involves action—referring specifically to the mind's ability to recognize patterns and skip intermediate steps to achieve time savings in responsiveness.[79]

In contrast, while machines absorb data quickly, they are far slower than humans at situational learning and generalizing across scenarios.[80] As a result, and until machine learning can adequately duplicate human intelligence, human programmers "must manage at a new level of abstraction through rules, parameters, and algorithms" within which a system can operate.[81] In modern business usage, AI can make a series of granular decisions called "micro-decisions," allowing for millions of daily decisions about a single customer or product—work that is impossible with humans and spreadsheets.[82] These decisions are then used to further human-defined goals and objectives through oversight.

According to Ross and Taylor, oversight of AI machine learning is complicated, depending largely on the decision system designed—i.e., the way in which humans are to interact meaningfully with the decision process.[83] There are four primary management models for relationships between AI decision-making and human intervention: (1) Human in the Loop (HITL), (2) Human in the Loop for Exceptions (HITLFE), (3) Human on the Loop (HOTL), and (4) Human Out of the Loop (HOOTL).[84] In HITL, humans make decisions

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[77] *Id.*

[78] *Id.*

[79] *Id.*

[80] Jake Spicer & Adam N. Sanborn, *What Does the Mind Learn? A Comparison of Human and Machine Learning Representations*, 55 CURRENT OP. NEUROBIOLOGY 97 (2019).

[81] Michael Ross & James Taylor, *Managing AI Decision-Making Tools*, HARV. BUS. REV. (Nov. 10, 2021), https://hbr.org/2021/11/managing-ai-decision-making-tools.

[82] *Id.*

[83] *Id.*

[84] *Id.*

supported by AI, compared to HITLFE, in which humans make decisions in scenarios excluded from AI's judgment.[85] When HOTL is adopted, a human assists the machine, adjusting rules and reviewing decision outcomes.[86] Finally, HOOTL models delegate all decision-making authority to the machine, subject to changing constraints and objectives established by human operators.[87]

This paper will discuss meaningful oversight of AI in detention spaces in section V. Just as machines require data to make decisions, so too do we need to understand the nature of corrections and the data collection involved before we can settle on appropriately designed models. With the introduction of smart technology surging into these facilities, there has never been a better time to make such an evaluation.

IV. CORRECTIONAL TABLETS & DATA GORGING

Smart devices are notorious for collecting, analyzing, and sharing data on their users' activities, interests, and habits.[88] In the fifteen years since the "smartphone revolution," Big Tech has evolved into Big Data, seeing companies shift from a model of innovative hardware and software to that of data consumption and analysis.[89] Companies that were once considered frivolous (i.e.,

[85] *Id.*

[86] *Id.*

[87] *Id.*

[88] Kaveh Waddell, *Connected Devices Share More Data Than Needed, Study Says*, CONSUMER REPORTS (May 18, 2021), https://www.consumerreports.org/privacy/connected-devices-share-more-data-than-needed-study-says-a7015033345.

[89] *See* Casey Phillips, *How Smartphones Revolutionized Society in Less Than A Decade*, GOV'T TECH. (Nov. 20, 2014), https://www.govtech.com/products/how-smartphones-revolutionized-society-in-less-than-a-decade.html; Danielle Kaye, *Meta's Miss Creates Big Tech Divide: Who's got the Data*, REUTERS (Feb. 3, 2022, 8:59 AM), https://www.reuters.com/technology/metas-miss-creates-big-tech-divide-whos-got-data-2022-02-03.

Facebook)[90] are now among the most valuable for their ability to understand the desires of their customers and translate them into profit. For example, once a quirky online bookstore, Amazon is now one of the most valuable corporations in history, increasingly dominating retail and technology markets despite countless legal, political, and competitive challenges.[91] Amazon's success isn't due merely to its decision to expand its offerings beyond the bookshelf; instead, Amazon's strength has always been its early adoption of data analytics and willingness to invest in AI solutions continually.[92]

As technology advances—always steadily and also in sporadic leaps—some populations are able or willing to adapt more quickly than others. But different technologies are also adopted unevenly even where it is generally welcomed. For example, China and India lead the world in total smartphones in use (953 million and 493 million, respectively)[93] but hold comparatively low adoption rates when adjusted for population (66% and 35%, respectively).[94] In contrast, America has the highest rate of smartphone adoption (82%),[95] the third-

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[90] Constantine von Hoffman, *Facebook's First Year on Wall Street*, CBS NEWS (May 18, 2013, 7:00 AM), https://www.cbsnews.com/pictures/facebooks-first-year-on-wall-street/5.

[91] Nick Statt, *How Amazon's Retail Revolution is Changing the Way We Shop*, VERGE (Oct. 23, 2018, 8:00 AM), https://www.theverge.com/2018/10/23/17970466/amazon-prime-shopping-behavior-streaming-alexa-minimum-wage.

[92] *Id.* ("Today, thousands of products integrate with the company's Alexa platform to make use of its voice search and query capabilities . . . Amazon saw AI as not just something that could live within the smartphone . . . but also in the home.").

[93] *Number of Smartphone Users by Leading Countries in 2021 (in Millions)*, STATISTA, https://www.statista.com/statistics/748053/worldwide-top-countries-smartphone-users (last visited Apr. 22, 2022).

[94] *Penetration Rate of Smartphones in Selected Countries 2021*, STATISTA, https://www.statista.com/statistics/539395/smartphone-penetration-worldwide-by-country (last visited Apr. 22, 2022).

[95] *Id.*

largest total smartphones in use (274 million),[96] and the highest rate of tablet adoption in the western world.[97]

Perhaps this should be unsurprising given America's outsized involvement in prominent technology development. The first computers, smartphones, and tablets were all developed by American companies.[98] And while most major hardware companies are found in Asian countries—notably Sony, Samsung, and Huawei—American companies continue to reign supreme in aggregating data—notably Google, Microsoft, Apple, and Amazon.[99] Most broadly adopted social media platforms are also U.S.-based, though the state of ownership among these platforms is in considerable flux as companies continue to explore their ability to monetize socialization.[100]

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[96] *Supra* note 92.

[97] *Share of Individuals Who have Access to A Tablet in Their Household in 2020, by Country*, STATISTA, https://www.statista.com/statistics/1107831/access-to-tablet-in-households-worldwide (last visited Apr. 22, 2022).

[98] Popular Mechanics Editors, *The Best Inventions the Past 66 Years Have Given Us*, POPULAR MECHANICS (Mar. 20, 2020), https://www.popularmechanics.com/technology/g24668233/best-inventions (Of particular importance, while Americans also invented the Internet, English Computer Scientist Sir Tim Berners-Lee created the World Wide Web, which most people would consider to be the Internet if asked to define it.).

[99] *Largest Tech & Computer Hardware Companies by Market Cap*, CO. MKT. CAP, https://companiesmarketcap.com/tech-hardware/largest-tech-hardware-companies-by-market-cap/ (last visited June 14, 2022).

[100] At the time of writing, the world's richest person is Elon Musk, who just signed an agreement to purchase Twitter for $44 billion. Once the deal is complete, Twitter will be privately owned and subject to less scrutiny from investors and the public than other social media platforms that have gone public. However, it remains to be seen what plans Musk has to monetize the company after the change. Chris Morris, *Elon Musk Reaches Deal to Buy Twitter*, FORTUNE, (Apr. 25, 2022, 3:50 PM), https://fortune.com/2022/04/25/twitter-elon-musk-takeover-bid-deal.

A. TECHNOLOGY CONSIDERATIONS IN CORRECTIONAL SPACES

Policing and detention have historically emphasized funding staff and equipment more consistently than splurging for cutting-edge technologies. However, as the nature of public safety threats change, and violence by—and against—officers becomes higher profile, departments are changing. For example, police and corrections departments, long fans of monitoring suspected and confirmed criminals, have recently begun accepting the benefits of self-monitoring in the form of body-worn cameras and other technologies.[101] This acceptance has also ushered in correctional camera quality and video retention improvements.[102]

As technology improves in correctional spaces, so must communications infrastructure. But many jails and prisons struggle to implement effective solutions due largely to the physical construction of most facilities. According to GTL—a private contractor providing technology and communications services nationwide—prisons are notoriously difficult to outfit with reliable and consistent wireless access due to the prevalence of concrete as a building material and minimal space planning for wired communications.[103] Vice President of Facility Product Management, Brian Peters, notes: "'We've even come across situations where locations almost act as a Faraday cage.'"[104]

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[101] Candice Norwood, *Body Cameras are Seen as Key to Police Reform. But Do They Increase Accountability?*, PBS NEWS HOUR (June 25, 2020, 4:41 PM), https://www.pbs.org/newshour/politics/body-cameras-are-seen-as-key-to-police-reform-but-do-they-increase-accountability.

[102] Nicholas Bodgel-Burroughs, *In a First, Ohio Moves to Put Body Cameras on Guards in Every Prison*, N.Y. TIMES (Jan. 14, 2022), https://www.nytimes.com/2022/01/14/us/ohio-priso-body-cams.html.

[103] Steven Melendez, *Can Screen Time Replace the Warmth of a Hug? Prisons Make a Big Push on Devices*, FAST CO. (Oct. 12, 2018), https://www.fastcompany.com/90249550/can-screen-time-replace-the-warmth-of-a-hug-prisons-make-a-big-push-on-devices.

[104] *Id.* (A Faraday cage refers to metal shields that block radio waves.).

In addition to increasing reliable wireless access, technology companies are also implementing monitored outgoing cellular communications to track and intercept contraband cell phones.[105] For example, Securus has developed a system called Wireless Containment Solution (WCS) that blocks unauthorized outgoing communications.[106] Authorized devices are able to pass through WCS and connect to commercial cellular networks.[107]

Many facilities were planned effectively as warehouses for offenders—officials were primarily concerned with providing as much housing space as possible with few thoughts to other future uses. Little fault should be assigned to those involved in the planning and constructing of these facilities in the latter half of the 20th century as mass incarceration was wildly developing and budgets buckled under its onslaught. At the same time, technology growth accelerated at unprecedented rates and has only recently entered the correctional industry *en masse*. For the most part, only privately operated prisons could keep pace with technology adoption due to their incentives, which led to building inexpensive facilities, maintaining minimum staffing levels, and investing in one-time technology rather than recurring human solutions.[108]

Privatization in the correctional space is not limited, however, to the wholesale operation of detention facilities. Rather, private companies have always involved themselves in American prison schemes.[109] Historically, those

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[105] *Securus Delivers Private Cellular Network for Prisons and Jails to Prevent Dangerous Cellphone Communications*, CORRECTIONS1 (Aug. 22, 2018), https://www.corrections1.com/products/facility-products/inmate-visitation/press-releases/securus-delivers-private-cellular-network-for-prisons-and-jails-to-prevent-dangerous-cellphone-communications-S9glYZe5EGZtnLFP.

[106] *Id.*

[107] *Id.*

[108] Avlana K. Eisenberg, *Incarceration Incentives in the Decarceration Era*, 69 VAND. L. REV. 71 (2016).

[109] *See* LAUREN-BROOKE EISEN, INSIDE PRIVATE PRISONS: AN AMERICAN DILEMMA IN THE AGE OF MASS INCARCERATION 47-67

relationships have centered around prisoner labor for public or private goods and services.[110] While some of those activities persist,[111] in recent decades, these companies have expanded to operate correctional telephone services,[112] commissary storefronts,[113] and foodservice needs.[114]

The modern iteration of privatized services involves consolidating numerous facility operations into a single device through specially designed correctional tablets. The first company to pioneer these devices was JPay in 2012.[115] One year later, JPay's primary rival in the tablet space emerged when GTL debuted its own tablet.[116] Then in 2015, prison communications supergiant Securus acquired JPay, further

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(2018) (detailing the ways in which prisoners have been used as commodities).

[110] *Id.*

[111] *Prison Labor is Remarkably Common Within the Food System*, HUNTER COLL. N.Y.C. FOOD POL'Y CTR. (Sept. 15, 2021), https://www.nycfoodpolicy.org/prison-labor-is-remarkably-common-within-the-food-system/ (noting that inmates today may be paid at rates below the non-incarcerated minimum wage for such activities as fighting fires, stamping out license plates, or operating call centers.).

[112] Steven J. Jackson, *Ex-Communication: Competition and Collusion in the U.S. Prison Telephone Industry*, 22 CRITICAL STUD. MEDIA COMM. 263 (2005) (AT&T pioneered this service but has since abandoned it in favor of vendors like GTL and CenturyLink.).

[113] David Reutter, *Prison Food and Commissary Services: A Recipe for Disaster*, PRISON L. NEWS (Aug. 4, 2018), https://www.prisonlegalnews.org/news/2018/aug/4/prison-food-and-commissary-services-recipe-disaster (Aramark Correctional Services & Trinity Services Group are the largest providers of food services at present.).

[114] *Id.* As with many non-correctional spaces, Aramark maintains a strong presence in this arena as well.

[115] Tommaso Bardelli, Ruqaiyah Zarook & Derick McCarthy, *How Corporations Turned Prison Tablets into a Predatory Scheme*, APPEAL (Mar. 7, 2022), https://theappeal.org/prison-tablets-ipads-jpay-securus-gtl.

[116] Tonya Riley, *"Free" Tablets Are Costing Prison Inmates a Fortune*, MOTHER JONES (Oct. 5, 2018), https://www.motherjones.com/politics/2018/10/tablets-prisons-inmates-jpay-securus-global-tel-link.

consolidating the industry.[117] As a result, these two companies have entirely dominated the market, securing contracts with more facilities each year.

To understand the appeal of tablets to correctional officials, it is important first to understand the features of these devices and the history preceding their advent. Before tablets, more advanced facilities allowed inmates to access specific services through computer terminals or touch screen kiosks either mounted to the wall or secured to a mobile cart.[118] These solutions, which are still in use, are imperfect as their costs are prohibitively high—meaning facilities can only acquire a small number to share among the entire population. The kiosks must be hardwired to intra-facility communications networks or otherwise face spotty wireless connection issues.

B. TABLET FEATURES AND CONCERNS

With tablets, however, correctional departments can now provide a device to nearly every person. On the device, inmates can openly communicate with the outside world through audio and video calls, text messaging, email, and viewing scanned copies of physical mail.[119] While all interested parties generally support increasing communication channels, there are additional burdens on staff and technology to monitor illegal activities in every channel. Further, concerns exist regarding the costs associated with those services, which are much higher than the same communication methods outside.[120]

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[117] *Id.*

[118] *Keefe's Kiosks Simplify Prison Systems*, CORRECTIONS1 (Jan. 23, 2015), https://www.corrections1.com/products/corrections/articles/keefes-kiosks-simplify-prison-systems-tRqd5cMgSh8ldbV4/.

[119] Riley, *supra* note 115.

[120] *See* Aleks Kajstura, *Advocates Ask FCC to Block Sale of Securus, Investigate Prison Phone Giant's Disregard for Regulations*, PRISON POL'Y INITIATIVE (June 21, 2017), https://www.prisonpolicy.org/blog/2017/06/21/securus-sale (noting that Securus, when faced with a ban by the FCC on

Advocates have urged that opening and digitizing incarcerated persons' physical mail is an invasion of privacy and removes a significant portion of the intended message.[121] In particular, letters and drawings from home can carry familiar scents and act as physical reminders of why it's important to maintain good behavior while in custody so as not to delay release dates.[122] Moreover, scanned mail may be of varying quality levels, with some images requiring color scanners to be meaningful or containing a number of pixels for recipients to read it legibly.[123] Other messages may have text outside the scanner's margins and thus risk being cut off by an indifferent or careless scanning technician.

Tablets are also frequently loaded with eBooks and audiobooks. This increased access is an undeniable benefit, particularly for those who require larger font or cannot read words due to vision-related disabilities or educational deficits. Most facilities that have adopted this service continue to offer physical books but may prohibit donations or allow only approved vendors to send books.[124] Advocates have complained that tablet companies are charging for access to books within the public domain—i.e., books that are freely accessible.[125]

In addition, there are many pricing models ranging from per-minute viewing costs to outright purchase at exorbitant rates.[126] For example, inmates in West Virginia are

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"connection fees" rebranded them as "first-minute rates" and continued the practice).

[121] Mia Armstrong, *Prisons Are Increasingly Banning Physical Mail*, SLATE (Aug. 9, 2021, 5:40 AM), https://slate.com/technology/2021/08/prisons-banning-physical-mail.html.

[122] *Id*.

[123] *Id*.

[124] C.J. Ciaramella, *West Virginia Inmates Will Be Charged by the Minute to Read E-Books on Tablets*, REASON (Nov. 22, 2019, 2:00 PM), https://reason.com/2019/11/22/west-virginia-inmates-will-be-charged-by-the-minute-to-read-e-books-on-tablets.

[125] *Id.*

[126] *Id.*

charged three cents per minute to read books on their tablets and retain no ownership rights—thus, if they wish to re-read a book, they will pay the entire cost again.[127] Tablet companies have thus far responded that their eBook services supplement a facility's library operations and do not outright replace physical books.[128] However, since the COVID-19 pandemic, their messaging has shifted to reflect the tremendous health and security benefits of replacing physical books with curated electronic titles.[129]

C. SALES PITCH TO DETENTION OFFICIALS

Tablet-makers appeal to corrections officials on several fronts: (1) tablets eliminate many access points for contraband; (2) reentry and rehabilitation services have proven effective when delivered through tablets; (3) tablets provide tremendous distraction in an arena where boredom often breeds conflict; and (4) far from being a cost to the facility, tablets can produce revenue for beleaguered state budgets.

To the first point, and as partially discussed previously, tablets prevent contraband in many ways.[130] All communications conducted on the tablet can be monitored between staff and technology solutions, discouraging inmates from coordinating contraband exchanges. Digitized mail prevents any physical objects from being delivered from the outside, subject to narrow book donation policies.[131] Relatedly, eBook and audiobook services may, in some facilities, mean

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[127] *Id.*

[128] *Id.*

[129] JEANIE AUSTIN, LIBRARY SERVICES AND INCARCERATION: RECOGNIZING BARRIERS, STRENGTHENING ACCESS 84 (2022).

[130] *See* Mario Ariza, *How to Get Drugs into 50 Prisons? Soak Inmates' Mail in Heroin, Ecstasy and Fentanyl*, S. FLA. SUNSENTINEL (Sep. 24, 2019, 1:53 PM), https://www.sun-sentinel.com/news/crime/fl-ne-fugitive-roy-kahn-kingpin-pimp-smuggled-dope-federal-prison-20190924-xgwxe5fz3rf77ijjn2aqh5kydy-story.html

[131] *See id.* Contraband arriving through the mail usually takes the form of drugs rather than weapons. For example, one smuggling ring-soaked envelopes in MDMA, fentanyl, synthetic marijuana, and Suboxone, disguising the drugs as legal mail.

no physical books are being delivered or circulated. While advocates have opposed changes to mail delivery, courts have generally found the policies are supported by legitimate penological interests in reducing contraband delivered through the mail.[132]

Tablet-makers' second point is that tablets have proven effective at replacing other efforts in the education and rehabilitation space.[133] Because tablets allow those in prison to maintain communication with their loved ones and access limited sections of the Internet, they are more easily able to keep up with current events, which in turn allows for more seamless reentry back into society.[134] Tablet-makers have also invested in education modules for GED courses, skills training, and lifestyle coaching.[135] As a result, every person who wants to better themselves in prison has a platform by which to accomplish that goal, in contrast to traditional education programs in correctional spaces that must ration space and invest time in filtering "non-serious" students.

The third selling point refers to distracting inmates or keeping them occupied. Distractions take many forms, and it should be no surprise that correctional tablets can fulfill this need since they do so outside of the facility as well. In addition to all the previously listed features, tablets also can be loaded with games, music, video streaming, document preparation software, and cloud storage. These features allow people in prison to maintain a level of connection to popular culture and temporarily escape within their own minds. Further, incarceration often forces people to fixate on protecting their "stuff," such as paperwork, books, letters, and writings. Cloud storage allows them to feel a sense of peace about their belongings, reducing paranoia, stress, and the likelihood of conflict.

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[132] *See* Turner v. Safley, 482 U.S. 78 (1987).

[133] Ben Schiller, *A Tablet-Based Distance Learning Program Reaches Its Way into Jail*, FAST CO. (Sept. 6, 2016), https://www.fastcompany.com/3063279/a-tablet-based-distance-learning-program-reaches-its-way-into-jail.

[134] *Id.*

[135] *Id.*

These benefits are also valuable to corrections officials as distracted and calm inmates cause fewer issues and thus require less interaction with officers and other staff.[136] According to Securus Director of Product Management, Matthew Smith: "'An occupied mind is a safe mind.'"[137] However, corrections officers—like the public generally—are of two minds regarding entertainment services.

The first mindset is that prison is a place of punishment, and there should be few, if any, means of enjoyment.[138] The problem with this mindset is threefold: (1) the industry is known as "corrections" because we recognize that the goal of incarceration should fundamentally be one of rehabilitation; (2) punishment is boring, which leads inmates to find their own games to play—often to the detriment of officers or other inmates; and (3) punishment mentality often leads to inmates accruing additional charges while incarcerated, fueling a cycle in which incarcerated persons are punished far longer than the original crime allows, facilities remain bloated with offenders, and taxpayer dollars continue flowing into the carceral industry.

The second mindset is one of rehabilitation.[139] These officers believe inmates are in prison because they need community supports to shore up behavioral and moral gaps, one such support being incarceration to protect themselves and the public.[140] While incarcerated, rehabilitation allows people to work on themselves through skills training and reentry programs such as religious study, educational courses, communication with loved ones, reading books, and

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[136] Melendez, *supra* note 102.

[137] *Id.*

[138] *See* Michael Pittaro, *Correctional Officers and Compassion Fatigue*, PSYCH. TODAY (Mar. 24, 2020), https://www.psychologytoday.com/us/blog/the-crime-and-justice-doctor/202003/correctional-officers-and-compassion-fatigue.

[139] Marcos Misis et al., *The Impact of Correctional Officer Perceptions of Inmates on Job Stress*, 3 SAGE OPEN 1 (2013) (noting studies on varying officer demographics and correlations with their correctional philosophies, such as age of officer, gender, and length of career at the time of survey).

[140] *See id.*

partnering with community providers to obtain documents and financial resources. Furthermore, this rehabilitative mindset also distracts inmates from the daily violence that incarceration wreaks on the human psyche—endless concrete walls and metal doors, lack of privacy, constant worries about personal safety, barely palatable food, and lack of meaningful physical and emotional contact.

The final appeal made by tablet-makers is that tablets are profitable for correctional facilities. Currently, tablet prices range from no cost to $140 each.[141] However, these prices hugely depend on the structure of individual contracts with facilities, allowing payment to be assigned either to inmates or the facility. Advocates have argued that fees perpetuate the costs of incarceration, which already trap offenders in a near-inescapable cycle of poverty—a cycle in which the offenders' families also get trapped.[142] And while tablet purchases and usage are optional, the reality is that correctional services and features are quickly being allocated to tablets where adopted, and to be without one creates a sub-class of people that mirrors the class divide in society.[143]

As previously noted, tablet-makers typically invest in modifying the communications infrastructure of a contracted facility, an essential task included in their part of the contract.[144] Each facility requires a highly individualized plan and thus a different investment level. In exchange for providing tablets and said infrastructure, tablet-makers charge inmates for the entertainment and communications services they offer.[145] Corrections officials can negotiate for a percentage of the profits made on tablet services, thus

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[141] Riley, *supra* note 115.

[142] Chris Wilson, *Books Helped Me Get Through a Life Sentence. Exploitative Fees Rob Others of Benefit*, USA TODAY (Feb. 11, 2020, 5:48 PM), https://www.usatoday.com/story/opinion/policing/spotlight/2020/02/03/books-helped-me-get-through-life-sentence-fees-rob-others-benefit/4569506002; *see generally* Sobol, *supra* note 64.

[143] Riley, *supra* note 115.

[144] Melendez, *supra* note 102.

[145] *Id.*

eliminating any costs incurred and, in most cases, generating a profit for the facility.[146]

The morality of government entities profiting from the nonvoluntary confinement of their citizens is a legitimate point of inquiry slightly beyond the scope of this article but one that should ultimately be explored in detail concerning correctional tablets. What this article will explore, however, is the related area of inmate data utilization by both private and government entities. The ability of both parties to gain such information from correctional tablets cannot be understated, as we have seen the same analytics transform every sector of the outside world since AI began integrating with human processes.

V. A MORE SUBTLE AI SURVEILLANCE MODEL

This section will dissect the types of data gathered, analyzed, and used within the correctional space. It should be noted that while some of the collected data is used purely for improving operational efficiencies, other data has a distinctly commercial application. Tablet-makers potentially have access to both types of data. With an understanding of the data available through tablets, this section will conclude with an analysis and recommendations for appropriate AI design in correctional spaces.

A. DATA AVAILABLE THROUGH TABLETS

As previously discussed, tablets can be loaded with educational and rehabilitative modules and resources.[147] In addition, corrections officials can allocate additional features to the tablets such as grievance submission, disciplinary

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[146] Two examples are illustrative: The California Department of Corrections collects a flat payment of $200,000 per year from its tablet contract, while the West Virginia Division of Corrections and Rehabilitation collects a 5% commission on all gross revenue. Mack Finkel & Wanda Bertram, *More States are Signing Harmful "Free Prison Tablet" Contracts*, PRISON POL'Y INITIATIVE (May 28, 2021), https://www.prisonpolicy.org/blog/2019/03/07/free-tablets.

[147] Schiller, *supra* note 132.

history, inmate trust account access, court docket integration, and request management applications designed to convey communication from inmates to other units within the facility, such as religious and library services. With the help of AI, these apps can bridge their respective data points into an algorithm used to determine patterns of risk for varying housing levels, litigiousness, and internal criminal activity. Officials could also group (or avoid grouping) people based on ethnicity, poverty status, mental health services provided, and religious affiliations.

Such data's legitimate uses will ideally allow corrections officials to filter inmates into categories that promote rehabilitation and reduce recidivism. Some examples include grouping veterans together whereby they can create a shared camaraderie and also focus outside resources into a single housing unit (i.e., grants, motivational speakers, reentry programs, PTSD group therapy services, etc.). Another legitimate use might be to group users who make frequent library requests together in a housing unit with more bookshelves (assuming the facility has a decentralized library) or otherwise increase the number of visits to the central library for incarcerated persons in a particular unit as an incentive for good behavior.

However, even legitimate uses of such data have the potential to cause harm and violate rights. For example, A new company—Smart Communications—is securing contracts to digitize mail intended for incarcerated persons.[148] Called MailGuard, this service "creates a searchable database and opens a whole new field of intelligence for [agencies]" through its virtual mailroom.[149] Advocates are concerned by the unprecedented amount of data this service gathers, not only on inmate recipients, but on public senders, to include: "'email

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[148] Kevin Bliss, *Smart Communications Contract Reveals Plans for Expanding Privatized Prison Mail*, PRISON L. NEWS (Aug. 1, 2021), https://www.prisonlegalnews.org/news/2021/aug/1/smart-communications-contract-reveals-plans-expanding-privatized-prison-mail.

[149] *MailGuard Postal Mail Elimination*, SMART COMMC'NS, https://www.smartcommunications.us/mailguard.cfm (last visited Apr. 25, 2022).

address, physical address, IP Address, mobile cell number, GEO GPS location tracking, exact devices used when accessing system [sic], [and] any related accounts the sender may also make or use.'"[150] According to Smart Communications CEO Jon Logan, "'in almost 10 years of business Smart Communications has never lost or deleted records or any data from our database. There are hundreds of millions of data records stored for investigators at anytime [sic].'"[151]

B. APPROPRIATE AI DESIGN & RECOMMENDATIONS

What becomes clear from this cursory analysis is that corrections officials and the private companies they contract with have access to vast sums of information on a captive population. Moreover, the amount of information they can gather from outside citizens interfacing with the corrections industry is increasing and likely to continue. For those reasons and more, it is necessary to designate appropriate AI systems to organize and utilize such data. In the meantime, courts, private citizens, and other interested parties will continue to negotiate the appropriate boundaries on data access and AI decision-making.

As previously discussed, there are four primary options for human involvement in AI decision-making: two in which humans are the primary deciders and two in which they play a support role for machine learning. Just as we delegate autonomy and responsibility to children in increasing amounts as they prove capable of lesser tasks, so too should we assign AI with greater authority only once it has proven reliable in less important areas. Thus, the greater chance a decision has to impact constitutional rights, the more pressing it becomes that AI first is tested in support of human efforts than the reverse.

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[150] *Bliss*, *supra* note 147.

[151] Samantha Michaels, *Pennsylvania Replaced Prison Mail with Photocopies. Inmates and Their Families Are Heartbroken.*, MOTHER JONES (Dec. 13, 2018), https://www.motherjones.com/crime-justice/2018/12/pennsylvania-replaced-prison-mail-with-photocopies-inmates-and-their-families-are-heartbroken.

For example, during custodial disciplinary hearings, officers gather information from various sources and compile that data into an investigative report. The culmination of this investigation often takes the form of loss of privileges for the responsible party(s) and/or additional charges, and thus time in jail or prison. Officers acting in this capacity are simultaneously investigators, prosecutors, and judges—a complex set of roles that should not be delegated entirely to AI without extensive training and testing.

However, it would be appropriate to automate the investigative role to include tasks such as locating video footage, utilizing facial recognition software to identify the parties involved, retrieving related personnel and offender records, attempting a factual narrative summary of the event at issue, matching the elements to facility policies and guiding statutory laws, and making recommendations based on the compiled report. It would then be up to a human officer to review these collected materials, conduct interviews, and ultimately make an appropriate decision. This scenario is an example of HITL (Human In The Loop) and is the lowest form of decision-making delegation. It might then be appropriate to escalate to a less human-involved model in the future after extensive learning (on the part of the machine), testing (on the part of humans), and always with meaningful human oversight due to the extent of the rights implicated.

VI. CONCLUSION

Persons experiencing incarceration are among the most vulnerable in society. They have fewer rights available than other citizens, and the ones they retain are often trampled or tested while in custody. To an extent, this is an understandable and expected function of the criminal justice system. However, there are often different rights available to pretrial and postconviction inmates, which sometimes get lost in bureaucratic and flawed-human systems. Moreover, the historical lack of contact between those inside prisons and the outside world has meant abuses are difficult to address.

As technology becomes more sophisticated, humans will rightly examine how they can delegate tasks to machines and artificial intelligence. To do so responsibly requires—in

addition to sufficient hardware and programming skill—that we provide learning supports for machine intelligence, large repositories of information/data, and ethical boundaries to maneuver within. Even once AI has moved beyond human limits, we must ensure appropriate oversight and relevancy for our species. The stories our artists have imagined should always be kept in mind as our scientists continue the path forward.

Within the correctional space, tablets represent a tremendous potential to revolutionize the rehabilitation function of jails and prisons. This data gorging is a necessary component of the broader AI development life cycle in which machines are provided with opportunities to learn and adapt to a variety of situations, just as humans do. However, there is also a very real possibility of overreach by tablet-makers, which advocates have been quick to note.

In the end, we on the outside must be effective allies. Allyship takes the form of monitoring for abuses of data consumption and usage. It involves advocating for appropriate data transparency and AI decision-making protocols. Being an effective ally also includes general awareness of how persons experiencing incarceration are disproportionately affected by corporate involvement in the detention sector. The stories we tell about ourselves matter to policymakers and advocates in the same way our artists' stories matter to scientists.