SENTENCING'S TECHNOLOGICAL COUNTERNARRATIVE

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ABSTRACT

Today, states are institutionalizing actuarial risk assessments into state sentencing structures to shape judicial discretion. Right now, debates about actuarial risk tools are shaped by a narrative oriented around changes in technology over time. This Article rebukes that narrative. Sentencing technologies change the social concepts that shape our human interactions. These technologies also obscure critical but problematic transformations in society that sustain the sociohistorical phenomenon of mass incarceration.

Since the rise of clinical rehabilitation in the 1960s, states have adopted numerous sentencing technologies to "improve" the distribution of punishment. This Article identifies three social concepts that altered through or alongside these technological sentencing interventions: "rehabilitation" mutated to risk management; "racial equality" mutated to technical formalism; and "dangerousness" and "recidivism risk" merged in social meaning. These altered social concepts, and not scientific advancement, underlie the proliferation of actuarial risk tools as sentencing reform today. They also obscure and legitimate the expansion of castigatory government surveillance in marginalized communities, resignation to racialize sentencing practices, and expansion of the carceral net.

By connecting technological interventions and conceptual transformations, this Article seeks to balance and expand debates about pragmatic technological sentencing reforms. Such reforms not only threaten to stall broader changes that address society's deeper issues of race, class, and power. They strip us of a language to resist the status quo by changing society's notions of justice along the way.

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TABLE OF CONTENTS

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INTRODUCTION

Actuarial risk tools are statistical assessments designed to predict a defendant's likelihood of engaging in recidivism in the future. The tools are controversial, and much ink has been spilled on their use at sentencing. This Article challenges on a common justification for tool use advanced by proponents: that actuarial risk assessments are nothing new to sentencing, historically speaking. From the "golden era" of clinical rehabilitation in the 1960s, to the creation of parole guidelines in the 1970s, to the creation of sentencing guidelines in the 1980s, policymakers have embedded actuarial risk assessments in the technologies we create to shape punishment outcomes. Proponents use this reality to justify the expansion of statistically robust actuarial risk tools as sentencing reform today. The argument goes like this: These tools are simply better at doing what humans already try to do. What's more, advocates claim, the tools may be used for a beneficent purpose – to address unnecessary reliance on incarceration in a pragmatic way. Since the tools have improved and can continue to improve technically, why not use them?

This Article complicates that argument. Sentencing technologies don't just do what humans do. They change how society understands what we do by altering the meaning of social concepts that shape our human interactions.[1] This Article examines how rehabilitation, racial equality, and dangerousness have altered through the obsessive pursuit of technological advancement. It connects the conceptual changes with critical social transformations that sustain the sociohistorical phenomenon of mass incarceration. This includes increased castigatory government surveillance in marginalized communities, resignation to racialized punishment practices, and legitimation of the expanding net of the carceral state. By illuminating obscured connections, this Article provides foundation to reframe and expand debates about technological sentencing reforms going forward.

Since the 1960s, states have incorporated risk assessments into the punishment technologies meant to shape sentencing outcomes. Recently, lawmakers, scholars and policymakers have encouraged states to adopt

[1] *See generally* BERNARD E. HARCOURT, AGAINST PREDICTION: PROFILING, POLICING, AND PUNISHING IN AN ACTUARIAL AGE (2007) [hereinafter AGAINST PREDICTION]; BERNARD E. HARCOURT, THE ILLUSION OF ORDER: THE FALSE PROMISE OF BROKEN WINDOWS POLICING (2001) [hereinafter THE ILLUSION OF ORDER]; MICHEL FOUCAULT, DISCIPLINE AND PUNISH: THE BIRTH OF THE PRISON (1977).

more statistically robust actuarial risk tools as sentencing reform. These tools rely on large datasets observing and aggregating offenders' behavior in the past. From an empirical standpoint, it is not clear that the tools reduce crime or incarceration. Indeed, there is every reason to believe that increasing emphasis on risk will not reduce crime *or* incarceration.[2] Yet tools continue to proliferate as sentencing reform in the states as a pragmatic and "smart" reform in the face of growing pressures to reduce reliance on incarceration.

Several debates swirl around tool proliferation as a policy matter, in scholarship, and in the courts. These debates are shaped by what this Article describes as the standard narrative of technological advancement. Advocates suggest that integrating this technology into the sentencing process is a natural step; an automated assessment of risk improves upon clinical—meaning unstructured—risk assessments and ensures the efficient allocation of resources.[3] These claims fit within the standard narrative about technology and society: technological improvements make tool use more acceptable and in fact preferable to human judgment. Logically, then, debates focus on whether and what makes tools more or less technically accurate. If the tools are accurate, or at least more accurate than older iterations, then their value at sentencing appears impervious.

Regardless whether these tools achieve their intended purpose, current debates about actuarial risk tools as sentencing reform are incomplete. They fail to address what else sentencing technologies do without scrutiny. This Article asserts that technological sentencing reforms change the social concepts that shape punishment and society. It identifies pivotal transformations in the meaning of socially conceived ideas of punishment *spurred by the introduction of technology itself* to destabilize risk tools' advance.[4] It analyzes the transformations to demonstrate two points: (1)

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[2] Actuarial risk tools at sentencing are sometimes discussed as "evidence-based sentencing." This term is misleading as it suggests that (1) judges do not consider evidence at sentencing already; and (2) the tools are supported by evidence that their use reduces crime. The first is patently false and the second is not borne out by data. In fact, there is reason to believe emphasis on risk *will not* reduce crime. *See* AGAINST PREDICTION, *supra* note __. This Article will not perpetuate those misconceptions, and so it does not use the term. For insight to how "rehabilitative" risk tools' may not reduce the pressures of mass incarceration, see, e.g., Jessica M. Eaglin, *Against Neorehabilitation*, 66 SMU L. REV. 189 (2013) [hereinafter *Neorehabilitation*].

[3] By clinical, I mean a model of prediction or diagnosis that is unstructured and primarily relies on the subjective judgment of an individual decisionmaker. *See infra* note xx. For critiques that encourage risk tools as part of a path towards modernizing sentencing, *see, e.g.*, Richard P. Kern & Meredith Farrar-Owens, *Sentencing Guidelines with Integrated Offender Risk Assessment*, 25 FED. SENT'G REP. 176 (2013); Jordan Hyatt et al., *Reform in Motion: The Promise and Perils of Incorporating Risk Assessments and Cost-Benefit Analysis into Pennsylvania Sentencing*, 49 DUQ. L. REV. 707, 713 (2011).

[4] This work builds from analyses critiquing the rise of actuarialism. *See* AGAINST PREDICTION, *supra* note __; Bernard E. Harcourt, *From the Ne'er Do Well to the*

the conceptual transformations sustain further tool expansion; and (2) they also obscure and legitimate problematic features of the sociohistorical phenomenon of mass incarceration. Thus, this Article concludes that actuarial risk tools as sentencing reform present a deeper threat than advocates currently acknowledge. As a technological sentencing reform, the tools threaten to strip society of the language to resist the status quo. By changing our conceptions of justice, the tools alter the foundation for resistance to the societal problems sustaining mass incarceration.

This Article identifies and analyzes three social concepts that altered through the proliferation of sentencing technologies. First, "rehabilitation" changed. Once connoting an egalitarian notion of reintegration and reform, the concept now refers to behavior management through government surveillance. The introduction of technology hollowed out this social concept. It now shares striking resemblance to incapacitation, meaning removal of opportunity to commit crime in future through punitive intervention. Yet because the term retains its positive association, society is less willing to critically engage with risk tools' advance. It also naturalizes the expansion of castigatory government surveillance into marginalized communities. Second, "racial justice" mutated. The term once referred to concerns about arbitrary sentencing and the impact of racialized inequities on sentence outcomes. The introduction of sentencing technologies facilitated interpreting those inequities as natural. As such, sentencing technologies reified structural racism under the auspice of scientific objectivity. It also deified "technical formalism" – meaning here a resistance to engagement with tools in the context of societal realities. This has reduced the normative basis to limit sentencing technologies. It also legitimates the survival of racialized punishment practices that disproportionately affect minorities. Third, "danger" and "risk" converged in social meaning. Whereas the two words once had different meanings, they are now considered the same concept in the context of punishment. This conflation strips society of the ability to discern distinction between threat of actual harm and transformations in the realities of punishment and society. It also legitimates the expansion of the carceral net.

Illuminating these conceptual changes counters the standard narrative. Thus, this Article provides an important but underappreciated reason to resist risk tools as sentencing reform, even if they are meant for beneficent

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Criminal History Category: The Refinement of the Actuarial Model in Criminal Law, 66 LAW & CONTEMP. PROBS. 99 (2003); Malcolm Feeley & Jonathan Simon, *The New Penology: Notes on the Emerging Strategy of Corrections and Its Implications*, 30 CRIMINOLOGY 449 (1992); Malcolm Feeley & Jonathan Simon, *Actuarial Justice: The Emerging New Criminal Law*, *in* THE FUTURES OF CRIMINOLOGY 173 (David Nelken ed., 1994). It also relies upon recent social histories of technology and mass incarceration. *See, e.g.*, ELIZABETH HINTON, FROM THE WAR ON POVERTY TO THE WAR ON CRIME: THE MAKING OF MASS INCARCERATION IN THE UNITED STATES (2016).

purpose. Because tools advance on the currency of the standard narrative, this reform shapes debate in ways that distract from larger transformations. Some would suggest this as its strength; actuarial risk tools provide a foundation for a bipartisan and depoliticized shift away from mass incarceration. Such claims are a ruse. Implementing risk tools have costs we all bear – it will change us. Sentencing technologies *already have* changed us, and not because our human values evolved. For those who genuinely want to address the sociohistorical phenomenon of mass incarceration as the status quo, the language to do so is more limited. Thus, this Article invites broader debates about punishment and society obscured by pragmatic technological reforms. This includes the effect of automation inside and outside the punishment context and its relationship to a shifting governmentality.

Ultimately this contribution invites a more holistic discussion of sentencing reforms on the basis of our human values, not technological possibilities. In the process, it enters three pressing discussions about punishment and society. First, this Article connects scholars critiquing pragmatic criminal justice reforms with those critiquing technological reforms.[5] In connecting the literatures, this contribution highlights that the concerns of technological reforms are deeper than just stalling broader reforms. The concern lies in changing our conceptions of justice. Second, it speaks to scholars critiquing the actuarial shift. It is not enough to destabilize risk tools by analyzing its effects on individual defendants. This Article encourages a shift in focus to destabilize the effects on society over time. Finally, this intervention joins a growing movement to recharge the humanities – here history and rhetoric – in the fight against mass incarceration.[6] It demonstrates the need to find a language to discuss this sociohistorical phenomenon that is broad enough to critique society, too. Though "bottom up" empirical literature can offer important insight to

[5] For a critique of pragmatic sentencing reforms, see, e.g., Benjamin Levin, *The Consensus Myth in Criminal Justice Reform*, 117 MICH. L. REV. 259 (2018) (distinguishing between "over" and "mass" reforms). For critique of technological reforms that undercut reforms to punishment and society, see, e.g., Amna Akbar, *Toward a Radical Imagination of Law*, 93 NYU L. REV. 405, 465-70 (2018) (critiquing police surveillance technologies as detracting from necessary police reform). *See generally* MICHELLE ALEXANDER, THE NEW JIM CROW: MASS INCARCERATION IN THE AGE OF COLORBLINDNESS 222, 226-231 (2010) (critiquing pragmatic criminal justice reforms that avoid race and emphasizing that without structural reforms the system of subordination will rebound in new form).

[6] *See* Benjamin Levin, *Rethinking the Boundaries of "Criminal Justice,"* 15 OHIO ST. J. CRIM. L. 619 (2018) (reviewing THE NEW CRIMINAL JUSTICE THINKING (Sharon Dolovich & Alexandra Natapoff eds., 2017) (calling for more engagement with the humanities inside legal scholarship); HINTON, *supra* note __(responding to demand outside legal scholarship); Sara Mayeux, *The Idea of "The Criminal Justice System,"* 45 AM. J. CRIM. L. 55 (2018) (at intersection).

how law works on the ground versus on the books, it means little without a language to give those outcomes meaning. By challenging a reform where debate is dominated by discourse on statistical methods, this Article offers an important illustration of need for that complementary humanist approach.

This Article unfolds in four parts. Part I introduces risk tools as a reform and frames key debates about tools in the context of the standard narrative about technological advancement. Part II destabilizes that narrative. By examining rise of actuarial risk assessments in previous sentencing technologies since 1960s to today, it illuminates obscured social debate and context for tools advance. Part III offers substance of the counternarrative – it highlights transformations to social concepts through and alongside the expansion of technological infrastructure. Part IV discusses the value of this counternarrative and reframes debate for broader discourse on society going forward.

I. THE RISE OF ACTUARIAL RISK TOOLS TO ADDRESS THE PRESSURES OF MASS INCARCERATION

With more than 1.5 million people in prison and the majority individuals of color, the United States remains squarely within the crisis of mass incarceration.[7] Since the 2000s, law and policymakers have been forced to confront the pressures mass incarceration places on the states.[8] In the process, "mass incarceration" has transformed into two overlapping but diverging concepts – a sociohistorical phenomenon within which the criminal justice system has expanded and facilitated the massive surveillance and incarceration of the U.S. population with a particular focus on black communities in urban centers[9] or a social and economic

[7] Between 1970 and 2010, the number of people incarcerated in state and federal prisons jumped from 196,000 to more than 1.6 million. *Compare* BUREAU OF JUSTICE STATISTICS BULLETIN, PRISONERS 1925-81 2 tbl.1 (1982) *with* E. ANN CARSON, BUREAU OF JUSTICE STATISTICS, PRISONERS IN 2016 3 tbl.1 (2018). In 1950, the U.S. incarcerated just over 200,000 people, today it incarcerates 2.2 million. In 1950, the prison population was 70% white; today it is 60% black and brown. Though minimal decreases have occurred in recent years, these reductions are largely attributed to court order for reductions in California's prison population, see Brown v. Plata, 563 U.S. 493 (2011), and federal guidelines reduction of drug sentences, see Jessica M. Eaglin, *The Drug Court Paradigm*, 53 AM. CRIM. L. REV. 595 (2016). Like the overall number of prisoners, the racial disparities in prisons remains relatively stable compared to its exponential increase in recent decades.

[8] For explanation of the dynamics that make the states, more so than the federal government, susceptible to economic pressures to confront the cost of corrections, see Rachel E. Barkow, *Panel Four: The Institutional Concerns Inherent in Sentencing Reform: Federalism and the Politics of Sentencing*, 105 COLUM. L. REV. 1276, 1305-06 (2005).

[9] *See, e.g.*, MICHELLE ALEXANDER, THE NEW JIM CROW: MASS INCARCERATION IN THE AGE OF COLORBLINDNESS (2010); LOIC WACQUANT, PUNISHING THE POOR: THE

mishap of incarcerating too many people for too long for no good public safety reason.[10] Though divergent in both solutions and approach, "mass incarceration" is increasingly referred to as a social problem that demands a bipartisan solution.[11]

A common bipartisan solution offered to address the pressures of mass incarceration at sentencing is the expansion of actuarial risk assessment tools.[12] This Part describes the advance of actuarial risk tools at sentencing in relation to mass incarceration. Section A describes the proliferation of actuarial risk tools as a pragmatic sentencing reform in recent years. Section B introduces the technological advancement narrative that shapes discourse on the tools as a legitimate sentencing reform in policy debates, court rulings, and scholarship. Part C identifies this standard narrative's shortcomings.

A. Actuarial Risk Tools as Sentencing Reform

Actuarial risk tools are meant to standardize not the sentence outcome but the assessment of recidivism risk. The tools rely on static and dynamic "risk factors" to standardize the assessment of the defendant's likelihood of engaging in specified behavior defined as "recidivism" in the future. Risk factors can include anything that statistically correlates with the occurrence of behavior defined as recidivism in observations of previously arrested or convicted individuals. Common "static" factors – meaning those that cannot be changed – include gender, age, and criminal history.[13] Common "dynamic" factors – meaning those that can be changed through interventions – include antisocial attitudes, drug dependency, family ties, social affiliation, education and employment.[14] Based on the presence or absence of various factors accorded a predetermined weight, the tools estimate individual defendants' "recidivism risk."

NEOLIBERAL GOVERNMENT OF SOCIAL INSECURITY (2009); JONATHAN SIMON, GOVERNING THROUGH CRIME: HOW THE WAR ON CRIME TRANSFORMED AMERICAN DEMOCRACY AND CREATED A CULTURE OF FEAR (2007).

[10] *See supra* note xx; *see also* WILLIAM R. KELLY, FROM RETRIBUTION TO PUBLIC SAFETY: DISRUPTIVE INNOVATIONS OF AMERICAN CRIMINAL JUSTICE (2017).

[11] Levin, *supra* note __.

[12] *See, e.g.*, Cecelia Klingele, *The Promises and Perils of Evidence-Based Corrections* (summarizing trend in sentencing and corrections). Note two caveats here. First, actuarial risk tools are entering a variety of criminal justice contexts that are simply outside the scope of this Article. For example, whether and how risk tools fit into pretrial detention proceedings is not germane to the critique launched here, even if the implications of this project may overlap. Second, introducing risk tools to sentencing is a *common*, but not *only* and not yet *necessary* reform either. *See infra* Part IV.A.

[13] *See* Eaglin, *supra* note 7, at 72 fn.59.

[14] *See id*.

Tools vary in how they define recidivism, which is a fluid concept in the criminal justice system.[15] For purposes of this discussion, the most common tools used at sentencing define recidivism as the likelihood of an individual being rearrested for any behavior within a few years of release.[16] The tool relies on this data to produce a quantitative estimate that people who share the defendant's characteristics will engage in specified behavior in the future.[17] That estimate is derived from weighted assessment of various static and dynamic factors selected on the basis of empirical research, convenience, and social policy.[18] Court officials use the tool – which can be publicly or privately developed – to calculate a risk score for an individual defendant.

Though a risk score does not define an outcome for a defendant at sentencing, the tools are clearly meant to "control, order or influence the behavior of [the judge]."[19] Law and policymakers encourage judges to consider actuarial risk tools' outcomes to "inform sentencing decisions about appropriate community supervision, treatment interventions, and services for the offender."[20] This translates into three primary functions for the sentencing judge: the decision regarding the length of punishment and/or community supervision, the location of that term through incarceration or community supervision and the imposition of conditions of supervision.[21] Typically, judges will receive the actuarial risk tool's estimates as part of the presentence report. That report, prepared by an

[15] *See id.* at 75-78 (discussing various options and significance at sentencing).

[16] In addition to standard actuarial risk tools, some jurisdictions use "risk-and-needs assessments" as well. *See* Cullen, *supra* note xx, at 349 (discussing "RNR" paradigm in corrections). These tools not only predict whether a defendant will commit a crime in the future, but identify their specific risks – like risk of drug abuse – to inform decisions about treatment needs. The distinction means little in the *sentencing* context (as opposed to corrections) as risk and needs assessments facilitate incapacitative interventions just as much as traditional risk tools. *See, e.g.,* Loomis v. Wisconsin, 371 Wis.2d 235 (Wisc. 2016) (court referencing risks and needs as part of rationale to sentence defendant to longest term available under the statute of conviction).

[17] Risk tools convey knowledge about people *like* the defendant. *See, e.g.,* Hamilton, *supra* note__; Starr, *supra* note xx. Moreover, risk tools do not predict what people like defendants do so much as predict what happens to people in defendant's current situation. In other words, risk tools estimate the likelihood of a defendant *returning* to the criminal justice apparatus on the basis of other legal actors, like police, unless interventions occur. Even the most dynamic tools, then, are somewhat static in their ability to predict the future given the uncertainty of human nature. *See, e.g.*, Dawinder S. Sidhu, *Moneyball Sentencing*, 56 B.C. L. REV. 671 (2015) (critiquing how risk tools frame defendants as static entities).

[18] Eaglin, *supra* note __, at 79-80, 101-104.

[19] Julia Black, *Critical Reflections on Regulation*, 27 AUST. J. LEGAL PHIL. 1, 26 (2002).

[20] NAT'L CENTER FOR STATE COURTS, CENTER FOR SENTENCING INITIATIVES, http://www.ncsc.org/microsites/csi/home/Evidence-Based-Sentencing.aspx (promoting sentencing practices that protect the public and reduce recidivism).

[21] *See, e.g.*, Erin Collins, *Punishing Risk*, 107 GEO. L.J. __ (2018).

officer of the court, offers background information to the judge regarding the offense and offender in advance of sentencing.

While risk assessment tools have been around and debated for decades,[22] it was not until 2001 that a state – Virginia – incorporated an actuarial risk assessment tool to directly shape judicial sentencing discretion.[23] By the late 2000s, several states began to follow suit as a part of an effort to reduce the pressures of mass incarceration. Particularly after the 2008 economic crisis, states budgets were pinched and a newfound attention to criminal justice reform emerged after decades of punitive policies. Public and private coalitions began endorsing the use of publicly and privately developed actuarial risk tools in the states as part of a comprehensive agenda to reduce recidivism while saving states correctional costs.[24] By 2017, at least thirteen states required the use of actuarial risk tools at sentencing.[25] In 2017, the American Law Institute endorsed the institutionalization of actuarial risk tools into state sentencing structures. With this decision, risk tools promise to further expand in coming years.

These tools are advanced as an improvement upon "clinical" assessments of risk – meaning estimates of likelihood conducted by persons without structure – including possibly judges at sentencing.[26] The tools are meant to "nudge" judges towards less punitive alternatives to incarceration for defendants identified as low-risk.[27] Oppositely, tools

[22] *See, e.g.,* AGAINST PREDICTION (locating rise of actuarial techniques in parole during 1930s).

[23] *See* BRIAN OSTROM, NAT'L CENTER FOR STATE COURTS, OFFENDER RISK ASSESSMENT IN VIRGINIA: A THREE STAGE EVALUATION (2002) (implemented in 2001, institutionalized 2002).

[24] Cecelia Klingele, *The Promises and Perils of Evidence-Based Corrections*; 91 NOTRE DAME L. REV. 537 (2016) (NIC; JRI; private organizations; philanthropists); *see also* Juliene James et al., *A View from the States: Evidence-Based Public Safety Legislation*, 102 J. CRIM. L. & CRIMINOLOGY 821 (2012) (discussing convergence of different actors to implement evidence-based criminal justice reforms).

[25] Notably, this likely underestimates the number of states that use actuarial risk tools now. It only includes those states that statutorily require consideration of an actuarial risk tool as part of the sentencing process. *Compare* Starr, *supra* note 7, at 809 fn. 11 (compiling list of 20 states that use risk tools); *with* Eaglin, *supra* note 7, at 114-15 (2017) (noting the various ways that risk tools enter sentencing).

[26] *See, e.g.*, Melissa Hamilton, *Adventures in Risk: Predicting Violent and Sexual Recidivism in Sentencing Law*, 47 ARIZ. ST. L.J. 1, 8 (2015) (distinguishing clinical and actuarial assessments as line between unstructured and structured decisionmaking about risk); *see also* PAUL E. MEEHL, CLINICAL VERSUS STATISTICAL PREDICTIONS (1954) (foundational research on distinction).

[27] On Amir & Orly Lobel, *Stumble, Predict, Nudge: How Behavioral Economics Informs Law and Policy*, 108 COLUM. L. REV. 2098 (2008); Richard Thaler & Cass Sunstein, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, & HAPPINESS (2008). In these instances, the information from the tool would encourage judges to reduce sentences, allow community-based sanctions, and inform particular treatment mandates. The

should encourage judges to increase sentences for higher-risk defendants on the basis that criminal supervision is more necessary.[28] In theory, considering this information should reduce *unnecessary* reliance on incarceration. The idea is that the tools identify low-risk offenders within certain categories of (low-level and nonviolent) offenders particularly suited for diversion. This information alerts judges to change their sentencing practices in line with budgetary limits and the limited safety concerns.

States are incorporating risk tools into the sentencing process in a variety of ways and to varying degrees based upon the unique state structure. In Virginia, for example, the tools are adopted as a structured component to the sentencing process. There are two risk tools that operate in the state in tandem with the state's advisory sentencing guidelines. Court administrators attach the state's nonviolent offender risk assessment to presentence reports for defendants convicted of specific drug and property offenses.[29] The assessment sheet characterizes defendants as high-, medium-, or low-risk on the basis of an eleven-factor weighted assessment developed with data from Virginia itself.[30] Defendants identified as low-risk are automatically recommended for diversion from prison to alternative sanctions, which include jail, probation, and other incapacitative alternatives to incarceration.[31] The second tool, designed for sex offenders specifically, can increase the range of the sentence that a defendant can expect under the state's sentencing guidelines for certain

internal regulatory mechanisms at play include anything other than a direct command, including such factors as shaming, fear of crime, and fear of public backlash. *See* Kelly Hannah-Moffat, *Actuarial Sentencing: An "Unsettled" Proposition*, 30 JUSTICE QUARTERLY 270, 289 (2013) ("It is possible that those who promote risk approaches do not share the goal or reducing crime or of matching offenders with the programs that "work," but rather who seek only to manage populations defensibly.").

[28] *See, e.g.*, MODEL PENAL CODE: SENTENCING § 6.09B (endorsing this practice); Sonja B. Starr, *The Odds of Justice: Actuarial Risk Predictions in the Criminal Justice System*, 29 CHANCE 49 (2016) (summarizing empirical study of students assessing risk tools demonstrates more punitive when presented with higher risk score for same offense); *see also* Collins, *supra* xx (discussing case where judge later reduced a sentence after reflecting on the anchoring effect of the risk score towards a more severe sentence).

[29] BRIAN OSTROM, NAT'L CENTER FOR STATE COURTS, OFFENDER RISK ASSESSMENT IN VIRGINIA: A THREE STAGE EVALUATION (2002); Richard P. Kern & Meredith Farrar-Owens, *Sentencing Guidelines with Integrated Offender Risk Assessment*, 25 FED. SENT'G REP. 176 (2013).

[30] *See id*.

[31] BRANDON L. GARRETT ET AL., UNIV. VA. CRIM. J. POL'Y REFORM PROJECT, NONVIOLENT RISK ASSESSMENT IN VIRGINIA SENTENCING: THE SENTENCING COMMISSION DATA.

sex crimes.[32] The Model Penal Code: Sentencing endorses this structured approach to risk-based sentencing.[33]

Most other states incorporate risk tools in a less structured manner. In Ohio, the state endorses the adoption of actuarial risk tools created by a state-endorsed public institution.[34] While the state retains sentencing guidelines to inform their discretion, judges are mandated to consider actuarial risk tools as part of the sentencing process if the judge orders a presentence investigation report.[35] In Missouri, the state sentencing commission provides the outcome of an actuarial risk tool's assessment in all sentence reports as part of its sentencing information structure.[36] The tool is developed by the commission, administered on all defendants, and provided to the judge along with a report on cost savings.[37]

Though this trend is controversial, it appears to have traction. The role of predictions of future dangerousness in the distribution of punishment was highly contentious in the 1970s and 1980s. Notions of selective incapacitation – the idea that incapacitating high-risk offenders would

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[32] Richard P. Kern & Meredith Farrar-Owens, *Sentencing Guidelines with Integrated Offender Risk Assessment*, 25 FED. SENT'G REP. 176 (2013).

[33] Am. Law Inst., MODEL PENAL CODE: SENTENCING § 6B.09 *d-e* and cmt. (2017) (endorsing Virginia's approach to incorporating actuarial risk tools at sentencing). Other states have attempted to follow in Virginia's footsteps in recent years. For example, Pennsylvania just finished developing an actuarial risk tool for sentencing after years of study and notice-and-comment. PA. COMM'N ON SENTENCING, PROPOSALS PUBLISHED IN PENNSYLVANIA BULLETIN: ANNEX B (2017). Wisconsin also adopted a commercial risk tool in hopes of replicating Virginia's sentencing process while saving money. Joe Fontaine, A History of Wisconsin Sentencing – Part XXVI-XXVIII, http://correctionssentencing.blogspot.com/2007/05/history-of-wisconsin-sentencing-part_18.html.

[34] *See* OHIO REV. CODE § 5120.114(A) (requiring that courts use the Ohio Risk Assessment System (ORAS) risk tool "if a court orders an assessment of an offender for sentencing"); OHIO ADMIN. CODE § 5120-13-01 (Ohio Department of Rehabilitation and Correction selected ORAS); *see also* Eaglin, *supra* note 7 (discussing origin of ORAS in public-private partnership with University of Cincinnati).

[35] *See* OHIO REV. CODE § 5120.114(A); *see also* OHIO JUDICIAL CONFERENCE, POLICY STATEMENT ON THE OHIO RISK ASSESSMENT SYSTEM AND RISK AND NEEDS ASSESSMENT TOOLS (2015), *available at* http://ohiojudges.org/Document.ashx?DocGuid=9e4c2814-6ffa-4018-9156-88fea13bf95e.

[36] The Missouri Sentencing Advisory Commission provides judges with specific information about past practices to encourage judges to exercise discretion consistently. It maintains an interactive website that allows judges to input information about a defendant. Depending on the factors put into the computer, a judge will see how other judges sentenced a defendant in similar circumstances. Ryan W. Scott, *The Skeptic's Guide to Information Sharing at Sentencing*, 2013 UTAH L. REV. 355, 355-56. Note that Missouri adheres to a "sentencing information system" that developed as an alternative to the guidelines movement. These critiques have more to do with method of implementation rather than the introduction of risk technologies in general. *See id*.

[37] Michael Wolff, *Missouri Provides Cost of Sentences and Recidivism Data: What Does Cost Have to Do with Justice?*, 24 FED. SENT'G REP. 161 (2012).

save costs and reduce crime – have been sharply criticized on basis of cost and social justice concerns.[38] More recently, scholars and policymakers have spoken out against risk tools proliferation at sentencing, often attracting much criticism.[39] Despite meaningful critiques, enthusiasm for the tools' advance remains constant.

B. The Technological Advancement Narrative

Actuarial risk tools enjoy broad enthusiasm for their use in part because a narrative of technological advancement shapes debates about the tools in policy circles, academic scholarship, and the courts. This section identifies the narrative and illuminates its impact on debates in these three arenas.

There is a standard narrative about technological advancement in society. The narrative is as follows: Technology fixes problems by standardizing outcomes. As technology improves, humans are more capable of relying upon them without human costs.[40] This narrative creates an orientation around how the tools improve and the ways we measure those tools. It detracts focus from the effects tools have on society. Implicitly, we presume that better tools mean a better society.

This technological advancement narrative is imprinted onto debates about actuarial risk tools as sentencing reform. The notion is that states have been using the wrong tool or not enough tools at sentencing. This unspoken narrative sustains the emphasis on technical accuracy in ongoing debates while philosophical and social justice concerns are diminished.

Policymakers emphasize that risk tools can fix problems. As they emphasize, standardization prevents the potential of arbitrary decisionmaking if individual judges do assess risk. Furthermore tools can reduce unnecessary reliance on incarceration by objectively identifying those offenders most capable of diversion. Because the tools process more information beyond human capacity, they offer a costless improvement upon current sentencing practices.

Key to the policy argument is the "costless" component of the technological advancement narrative. For example, the American Law Institute ("ALI") recently suggested that given the current state of criminal justice, tools provide an objective means to cope with the pressures of

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[39] It is important to emphasize here that these critiques focus exclusively on sentencing. Att'y Gen. Eric Holder Remarks at the Nat'l Ass'n of Crim. Defense Lawyers 57th Annual Meeting, Aug. 1, 2014, https://www.justice.gov/opa/speech/attorney-general-eric-holder-speaks-national-association-criminal-defense-lawyers-57th; Anna Maria Barry-Jester et al., *The New Science of Sentencing*, THE MARSHALL PROJECT, Aug. 4, 2015; Sonja B. Starr, Op-Ed, *Sentencing, By the Numbers*, N.Y. TIMES, Aug. 10, 2014.

[40] For an interesting take on the origin of this belief, see, e.g., HUNTER HEYCK, THE AGE OF SYSTEM (2015).

mass incarceration.[41] The ALI notes that risk tools can save limited financial resources and avoid victimization. As they explain, "[i]f used as a tool to encourage sentencing judges to divert low-risk offenders from prisons to community sanctions, risk assessments conserve scarce prison resources for the most dangerous offenders, reduce the overall costs of the corrections system, and avoid the human costs of unneeded confinement to offenders, offenders' families, and communities."[42] Incorporating actuarial risk tools into sentencing also avoids victimization because "[i]f prediction technology shown to be reasonably accurate is not employed, and crime-preventive terms of confinement are not imposed, the justice system knowingly permits victimizations in the community that could have been avoided."[43] Moreover, because the tools are more accurate than humans based on fifty years of social science research, the ALI suggests that incorporating risk tools is a pragmatic reform supported by data-driven research.[44] Though not indicative of all policy perspectives on the matter, the ALI's stance is representative of leading justifications for tool adoption.[45]

This narrative fuels policy debates' emphasis on accuracy as well. For example, risk tools appeared frequently in the news after ProPublica published a report and article suggesting that the tools are "racist." As the report suggested, popular risk tools like COMPAS miscategorize black defendants more frequently than white. The tools stayed in the news when COMPAS responded with reports that it is technically accurate regardless of race. More recently, a study indicating that tools are no more accurate than humans brought the issue back to the fore. At the same time, this narrative operates to displace policy critiques that do not emphasize accuracy. As example, when then-attorney general Eric Holder critiqued risk tools as being anathema to our criminal justice values, he was excoriated. Primary among the responses were studies demonstrating tool accuracy. It is as if the accuracy of the tool defines our criminal justice values.

Notable academic debates, too, adhere to the technological advancement narrative. Scholars are quick to tell you how much the tools have changed in the last fifty years.[46] Indeed, genealogies of risk

[41] *See, e.g.*, Christopher Slobogin, *A Defense of Modern Risk-Based Sentencing*, (forthcoming 2018) (draft on file with author); *see also* Am. Law Inst., Model Penal Code: Sentencing § 6.09B. *See also* Kelly Hannah-Moffat, *Punishment and Risk*, in THE SAGE HANDBOOK OF PUNISHMENT AND SOCIETY 129 (2013) (genealogy of tools and cautious optimism).

[42] MODEL PENAL CODE: SENTENCING § 6.09B (2017).

[43] *Id.*

[44] *Id.*

[45] See also Brennan Center; Vera; Nat'l Center for State Courts.

[46] *See, e.g.*, Christopher Slobogin, *The Civilization of Criminal Law*, 58 VAND. L. REV. 121, 144-156 (2005) (emphasizing that "risk management techniques, like risk

technology are pervasive.[47] Scholarship will detail how tools have advanced to predict more accurately and assess more things than just risk, including needs.[48] To be sure, vigorous debates continue regarding improvements in the data,[49] accuracy and reliability of the outcomes,[50] and the connection between production of information and implementation.[51] Further analysis connects these debates to how it relates to sentencing.[52] Yet these arguments suggest that *if* the tools are getting better, then it is time for humans to catch up by using them correctly. These scholars often, but not always, expand focus beyond actuarial risk tools as sentencing reform. Rather, tool proliferation at sentencing is just one of many "algorithmic" reforms meant to improve the administration of criminal justice.[53]

Alternatively, punishment scholars are keen to focus on actuarial risk tools' overlap with criminal history. Advocates emphasize that criminal history is used as a crude predictor of recidivism risk. If actuarial risk tools are better than criminal history at predicting risk, then the tools should be implemented at sentencing.[54] In essence, this is the "this is what we've always done" argument. It silences the philosophical and public policy reality that states have, until recently, focused on criminal history at sentencing to the exclusion of various risk factors.[55] What matters is whether and how many factors can be included to maintain a satisfactory level of social scientific accuracy rather than whether and how many

assessment methods, have improved immensely over the past few decades" as basis for prevention-oriented sentencing); Christopher Slobogin, *A Defense of Modern Risk-Based Sentencing* (forthcoming draft on file with author) (emphasizing improved accuracy of risk tools over time and over human judgment).

[47] For genealogies of the tools, *see, e.g*., John Monahan and Jennifer L. Skeem, *Risk Assessment in Criminal Sanctioning*, 12 ANN. REV. CLINICAL PSYCHOL. 489 (2016); Kelly Hannah-Moffat, *Punishment and Risk*, in THE SAGE HANDBOOK OF PUNISHMENT & SOCIETY (2013); Jonathan Simon, *Reversal of Fortune: The Resurgence of Individual Risk Assessment in Criminal Justice*, ANN. REV. L. & SOC. SCI. 397 (2005).

[48] *See, e.g*., Cullen, *supra* note __ (risk and needs); Huq, *supra* note __ (suggesting that advanced tools could be trained to reflect "both the costs and benefits of coercion").

[49] *See, e.g*., Ferguson, Minn. L. Rev. (2017).

[50] *See, e.g*., Huq, *supra* note __ (detailing challenges to measuring whether tools accurate on basis racial justice).

[51] *See, e.g*., Stevenson, Minn. L. Rev. (2018); Garrett & Monahan, Judging Risk (on file with author).

[52] *See, e.g*., Slobogin, *supra* note __ (advancing his fit, validity, and fairness principles for sentencing and policing); accord Erin Collins, Punishing Risk (warning that tools created for corrections an off purpose use at sentencing); Eaglin, Constructing Recidivism Risk (warning that tool construction implicates sentencing policy).

[53] *See, e.g*., Anupam Chander, *The Racist Algorithm?*, 115 MICH. L. REV. 1023 (2017); Huq, *supra* note __.

[54] *See, e.g*., Nancy J. King; Richard Frase, Sentencing Enhancements

[55] *See, e.g*., Michael Tonry, Legal and Ethical Problems with Risk Assessments, Fed. Sent'g Rep. (2014).

factors converge with or contradict sentencing policy. This, too, illuminates an orientation toward accuracy that only makes sense within the narrative of technological advancement.

This narrative bleeds into the courts as well. Putting aside the question of how to challenge tools in court, it is clear that courts are most concerned with technical accuracy. Actuarial risk tools consider factors excluded from sentencing policy due to constitutional or public policy disapproval.[56] Yet because the tools are offered under the umbrella of risk and risk is not connected to a specific sentencing outcome, courts have resisted consideration of their construction as a substantive matter. For example, in *Malenchik v. State*, the Indiana Supreme Court explicitly located technical accuracy at the center of its ruling about actuarial risk tools' advance at sentencing.[57] In a more recent decision, *Loomis v. Wisconsin*, the Wisconsin Supreme Court converged on the history of risk tools' advancement and the possibility of technical accuracy when denying a defendant's constitutional due process challenges to actuarial risk tools at sentencing.[58] Consistent with the standard narrative, the court concludes without analysis that consideration of more technically accurate risk tools is beneficial to both the criminal justice system and the defendant.[59] This remained persuasive to the court even though the defendant explicitly objected to tool use, even if the tool was accurate.[60]

In summary, the orientation around accuracy is the technological advancement narrative at work in sentencing reform debates. Through it, the pursuit of technical knowledge is defining and shaping sentencing, rather than sentencing shaping and defining the pursuit of technical knowledge. Within the narrative, this development is minimized; it is even worthy of celebration. The implicit conclusion is this: technology is

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[56] Eaglin, *Against Neorehabilitation*, at 215 (policy claim); Starr, *supra* note __ (making constitutional and policy claim); Sidhu, *supra* note __ (making statutory claim based on the federal Sentencing Reform Act).

[57] *See* Malenchik v. State, 928 N.E.2d 564, 570-73 (Ind. 2010). Anthony Malenchik pled guilty to receiving stolen goods and being a habitual offender. The trial judge sentenced him to six years imprisonment with two years suspended – the maximum sentence available given defendant's plea agreement. In explaining its decision, the court referenced the LSI-R and SASSI scores included in the defendant's presentence investigation report. Defendant appealed the sentence to Indiana's Supreme Court. There, the court considered a variety of challenges to use of information produced by actuarial risk tools, some raised by the defendant and several raised by amici as well.

[58] 881 N.W.2d 749 (Wisc. 2016). Eric Loomis pled guilty to fleeing a police officer and operating a car without the owner's consent. The trial court imposed the maximum sentence available under the statute, including 7 years of incarceration. The trial court, explaining its decision, referenced the LSI-R as a relevant factor. Loomis appealed his sentence. The appellate court certified appeal to the Wisconsin Supreme Court, which issued its decision in July 2016.

[59] Cite

[60] Cite

changing and we should change with it. The following section sets the foundation to complicate that conclusion.

C. The Narrative's Shortcoming

These debates are lopsided, but the technological advancement narrative obscures their one-sided nature. To be sure, the technology around actuarial risk tools is changing. The datasets are getting bigger, the algorithms are getting more complex, and the computers are getting stronger.[61] But to characterize those technological advancements as the basis for the expansion of actuarial risk tools overlooks how human values and realism once combined to limit the incorporation of risk technologies into sentencing structures. This is no small step in the expansion of actuarial techniques. Rather, it reflects a significant transformation in and of itself.

To start, it is not a foregone conclusion that technological advancements improve sentencing or society. The narrative orients focus around debates of technical accuracy, as much scholarship and public policy does. It assumes social benefits. Debates on technical accuracy of tools cannot encompass the full implications of risk tools entering sentencing, a point I develop more fully in Part IV. That focus obscures critical transformations that have occurred in *society* facilitated through a turn toward technology. This standard narrative, or discourse, has the effect of masking social transformations which only historical content can illuminate.[62] As a political tactic, it neutralizes the importance of history as a reason for pause now.

Yet history is a critical component to the standard narrative. In policy debates, scholarship and court rulings, advocates draw on history to bolster their claims of tool legitimacy as sentencing reform. For example, the ALI draws from the 1962 Model Penal Code references to persistent offenders and dangerous, mentally abnormal defendants to suggest that consideration of recidivism risk is not new, but perhaps more constrained with the adoption of a tool.[63] Scholars similarly suggest that tool use is at least more transparent than past practices.[64] Furthermore, they emphasize

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[61] For an overview of that literature, *see id*. *See also* Andrew Ferguson, WASH. U. L. REV. (2017).

[62] Michel Foucault, *Lecture One*, in POWER/KNOWLEDGE (1980).

[63] MODEL PENAL CODE: SENTENCING § 6.09B (2017).

[64] See, e.g., Reitz, *Risk Discretion at Sentencing*, Fed. Sent'g Rep. (2017). There is a deep irony to this rationale. While risk tools are meant to bring *transparency* to sentencing, the construction of most tools is incredibly opaque – developers often refuse to release information about their design and the policy choices embedded in the tools. *See* Jessica M. Eaglin, *Constructing Recidivism Risk*, 67 EMORY L.J. 59 (2017). The ALI rightfully encourages the use of risk tools developed by state agencies explicitly to avoid this dilemma. MODEL PENAL CODE: SENTENCING § 6.09B (2017). This practice is the

the persistent use of actuarial risk assessments in earlier punishment technologies. They additionally critique tool detractors for their failure to account for this historical reality.[65] Together, these explanations suggest that because states already do or should encourage risk-based sentencing, actuarial risk tools can improve that practice.

The result is a deeply one-sided discourse about whether and why we might limit or prohibit actuarial risk tools at sentencing. Advocates bolster claims with the historical past practice argument while critics are quick to sidestep their presence. But both fail to account for the decision by states *not* to introduce actuarial risk tools at sentencing in the recent past and why. In this sense, both critics and advocates are often selectively historical. Obscured by the narrative is the simple historical reality that risk assessments may not be new, but our orientation around technical accuracy is. This shift has everything to do with changes in society left underscrutinized because of the narrative shaping debates.

The remainder of this Article reignites history to destabilize this pervasive standard narrative shaping risk tools debates. The aim is to use the *social* history of punishment technologies to construct a novel counternarrative. This, in turn, can facilitate a more balanced and holistic debate about risk tools' proliferation today as part of any response to mass incarceration.

This project builds from the work of scholars that have studied the rise of *actuarialism*, meaning the preoccupation with statistical predictions of risk. On the one hand, scholars suggest that the orientation toward risk is part of a larger shift toward managing offenders rather than rehabilitating them in response to a loss of faith in government at the end of the twentieth century.[66] As the "new penology" emerged in the 1970s with the decline of rehabilitation, government shifted towards techniques of aggregation and bureaucratization to manage groups rather than rehabilitate individuals.[67] These scholars emphasize the darker side of this

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exception, not the rule, among states adopting risk assessment tools for sentencing. *See* Jessica M. Eaglin, *Constructing Recidivism Risk*, 67 EMORY L.J. 59 (2017) (sentencing); Rebecca Wexler, *Life, Liberty, and Trade Secrets: Intellectual Property in the Criminal Justice System*, 70 STAN. L. REV. 1343 (2018) (describing lack of transparency concerns in technologies proliferating across the entire criminal justice system, including risk tools at sentencing).

[65] *See, e.g.*, Reitz, supra note __; Nancy J. King, supra note __.

[66] DAVID GARLAND, THE CULTURE OF CONTROL: CRIME AND SOCIAL ORDER IN CONTEMPORARY SOCIETY (2001); Jonathan Simon & Malcolm Feeley, *The New Penology*, 30 CRIMINOLOGY 449 (1992); JONATHAN SIMON, POOR DISCIPLINE: PAROLE AND THE SOCIAL CONTROL OF THE UNDERCLASS, 1890-1990 (2003).

[67] *See* Feeley & Simon, *The New Penology*, 30 CRIMINOLOGY 449, 454 (1992) (noting rise of systems theory as part of a turn toward actuarial techniques); Malcolm Feeley & Jonathan Simon, *Actuarial Justice: The Emerging New Criminal Law*, in THE FUTURE OF CRIMINOLOGY 173, 185-93 (1994) (exploring intellectual origin).

turn. The largest problem with risk tools is the loss of individualized engagement on the basis of particulars of specific case.

Alternatively, some scholars locate the rise of actuarialism as the problematic continuation of a path *toward* individualization rather than away from it. In his foundational book, *Against Prediction: Profiling, Policing, and Punishing in an Actuarial Age,* Bernard Harcourt examines the rise of actuarial techniques in criminal justice since the 1930s. Contrary to the aggregation critique, Harcourt attributes the rise of risk assessments to the problematic but long-time dream of prediction, individualization, and a "will to know" the criminal at sentencing.[68] As Harcourt suggests, introducing these techniques into punishment are problematic not only because of how they operate – by targeting populations and perhaps, paradoxically, increasing crime – but also because of what they do to social notions of justice.[69]

This Article draws on both these literatures to construct a counternarrative focused on *society* rather than *technology* to explain actuarial tools' proliferation. It converges with Harcourt's insight that the pursuit of technical knowledge has shaped our notions of just punishment. But while he anticipated that the pursuit of technical knowledge would change us, this Article looks backward to illuminate how it already has changed us. At the same time, it critiques the formalism of aggregative policies in line with those critiquing the problematic turn toward the bureaucratic episteme.[70] This Article suggests that we changed not only through the orientation around prediction, but also through a technical formalism that emerged in the 1960s and has propelled forward to shape sentencing policy ever since. Illuminating those changes offers a new foundation to debate risk tools now.

II. DESTABILIZING THE STANDARD NARRATIVE: FROM PAROLE GUIDELINES TO ACTUARIAL RISK TOOLS

For the majority of the twentieth century, sentencing worked like this: judges sentenced defendants based on the facts of the case and presentence reports detailing the background of the offender and the nature of the crime. Judges were constrained by legislatures who issued statutory limits on sentences for different offenses, within which judges had to adhere. Parole boards, however, determined the actual length of time a defendant

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[68] AGAINST PREDICTION, at 193; *see also* Bernard E. Harcourt, *From the Ne'er Do Well to the Criminal History Category: The Refinement of the Actuarial Model in Criminal Law*, 66 LAW & CONTEMP. PROBLEMS 99, 101(2003).

[69] AGAINST PREDICTION, at 32-34, 186-92.

[70] *See, e.g.*, Albert Alschuler, *The Changing Purposes of Criminal Punishment: A Retrospective on the Past Century and Some Thoughts on the Next*, 70 U. CHI. L. REV. 1 (2003); KATE STITH & JOSE A. CABRANES, FEAR OF JUDGING: SENTENCING GUIDELINES IN THE FEDERAL COURTS 177 (1998).

sentenced to prison would serve based on indicators of his or her rehabilitation. This structure is often referred to as "indeterminate" because the defendant would not know their actual sentence at the time of sentencing.

Indeterminate sentencing came under attack in the 1970s. States turned away from rehabilitation as a guiding theory of punishment simultaneous with notable critiques of its value.[71] Law and policymakers revised sentencing laws to shift toward a "determinate" sentencing structure. Under this structure, the judge sentences a defendant to a finite term of incarceration. A defendant serves that entire term save a limited amount of possible good credit time offered for early release. Though not all states adopted this structure completely, many shifted in this direction and continue to do so.

Along with the rise of determinate sentencing – but not inherently connected to it – states and the federal government started developing and implementing reforms derived of technical projects meant to limit and shape the exercise of criminal justice actors' discretion at the systemic level. First came the parole guidelines designed to rationalize the release of prisoners under the indeterminate sentencing structure.[72] Shortly thereafter states and the federal government began developing and implementing sentencing guidelines designed to rationalize the exercise of judicial discretion through technical means, often in the context of a determinate sentencing structure.[73]

These technical projects translated into sentencing reforms. Following intellectual historian Hunter Heyck, these reforms can be characterized as "technosocial" because they "involved the quite deliberative reconstruction of relationships through technological means."[74] Critical to this contribution, the tools produced by these projects were meant to alter "ideas, practices, and behaviors" through the new technological

[71] While notable critiques existed in the 1960s, see, e.g., FRANCIS ALLEN, THE BORDERLAND OF CRIMINAL JUSTICE (1964), it wasn't until the 1974 that empirical studies would put the proverbial "final nail in rehabilitation's the coffin." *See* Francis T. Cullen, *Rehabilitation: Beyond Nothing Works*, 42 CRIME & JUSTICE 299, 300 (2013) (discussing Robert Martinson's 1974 piece, *What Works*?).

[72] Law Enforcement Assistance Agency, Parole Decisionmaking Grant, 72-017-G. Many states curtailed or eliminated parole all together shortly after the introduction of parole guidelines. *See infra* Part II.A. For historical context on the role of the Law Enforcement Assistance Agency in creating technological infrastructure in criminal justice, see generally HINTON, *supra* __.

[73] *See* Jack M. Kress et al., *Is the End of Judicial Sentencing in Sight?*, 60 JUDICATURE 216 (1976) (noting funding for study of sentencing guidelines through Law Enforcement Assistance Agency).

[74] As Heyck explains, such projects blended social science research with military research techniques drawn from World War II and the Cold War.

infrastructure that the projects produced.[75] There are three waves of technosocial reforms implemented to rationalize sentencing outcomes prior to the rise of risk tools: clinical rehabilitation risk tools, parole guidelines, and sentencing guidelines.

This Part offers a genealogy of sentencing's technosocial reforms. Part A begins by setting forth a novel account for the origin of actuarial tools in the 1960s. Part B examines the technical history underlying the construction of parole and sentencing guidelines respectively to highlight the origin and expansion of actuarial techniques as part of the broader turn toward sentencing technologies. Part C briefly returns to the proliferating use of risk tools to highlight that a transformation has occurred regarding how society engages with the tools.

A. The Decline of Human-Driven Punishment

To gain a fuller appreciation of how and why actuarial risk technologies entered sentencing guidelines, a deeper understanding of the collapse of rehabilitation and its relationship with technology is necessary. Prior to the 1970s, both the parole agent and the parole board worked in tandem to release and supervise offenders in the name of rehabilitation. For the centralized administrative parole board, rehabilitation offered an important tool for relieving prison overcrowding pressures, inducing participation in prison programming while incarcerated, and a rhetorical justification for offender release.[76] For the parole agent, rehabilitation offered an animating ethos and a rhetorical justification for its function. Prior to the 1950s, that ethos was simply to reintegrate offenders into the labor market. As Jonathan Simon indicates in *Poor Discipline*, the labor market offered a form of "disciplinary control" for offenders, and parole agents largely functioned to connect offenders with the job market before release and after.[77] Boards would hold hearings to observe offenders and search for "intuitive signs of rehabilitation" like "repentance, willingness to accept responsibility, and self-understanding."[78] In most states, the decision to release an offender relied as much on the parole agent's

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[75] HEYCK, at 196.

[76] A. Keith Bottomley, *Parole in Transition: A Comparative Study of Origins, Developments and Prospects for the 1990s*, 12 CRIME & JUSTICE 319, 324 (1990).

[77] *See* JONATHAN SIMON, POOR DISCIPLINE: PAROLE AND THE SOCIAL CONTROL OF THE UNDERCLASS, 1890-1990 (2003).

[78] Project, *Parole Release Decisionmaking and the Sentencing Process*, 84 YALE L.J. 810, 820 (1975). As a notable exception, Illinois had developed an actuarial tool to predict recidivism risk among inmates and inform parole board decisions. Implemented in 1932 and finessed in the decades leading up to the 1960s, the studies used to develop this tool informed later studies to develop systemic parole guidelines across the states. *See* Bernard E. Harcourt, *From the Ne'er Do Well to the Criminal History Category: The Refinement of the Actuarial Model in Criminal Law*, 66 LAW & CONTEMP. PROBLEMS 99, 120-22 (2003).

guarantee that the offender's community would reintegrate the individual with a job or other assurances.

Though parole was the first area of sentencing to experiment with system-wide technosocial reform, the first wave of systemic criminal justice reform was *not* the creation of guidelines; it was the expansion of the clinical model of rehabilitation in the 1950s-1960s. Under the clinical model, parole boards increasingly focused on assessing an offender's likelihood of recidivism when releasing the defendant while placing less emphasis on the agent's ability to secure community assurances of reintegration.[79] Though family and employment remained components of reintegration, the clinical model's focus on the relationship between the offender and the agent reduced the centrality of the community in the punitive process.

There are three explanations for this shift from "disciplinary" reintegration to "clinical" rehabilitation. First, as post-World War II researchers shifted their attention towards the War on Poverty, they chose to systematically focus on individual behavior rather than structural reforms.[80] As researchers shifted their attention towards criminal justice, these same ideologies would influence prison policy reforms while encouraging technical reforms.[81] Second, disappearing jobs made the disciplinary model less feasible. Though the post-World War II era is often characterized as an era of industrial expansion, it was marked by "slow economic growth, frequent recessions, and the displacement of untrained and unskilled labor through automation."[82] This trend produced a "decoupling of the labor market for low-skilled labor from the economy as a whole," leaving those at the bottom of the skill ladder, among whom many were prisoners, at a disadvantage.[83] With no place to put workers at the bottom of the hierarchy, administrators needed a new explanation for release that did not depend on society. Clinical rehabilitation offered that explanation, and risk assessments bolstered the claim.

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[79] There were, no doubt, plenty of problems with this model of reintegration. *See* SIMON, *supra* note __. But the decision to change the structure altogether appears to be a response to structural changes in society rather than simply the shortcomings of that disciplinary model.

[80] HINTON, at 49.

[81] *See* Sara Mayeux, *The Idea of the Criminal Justice System*, 45 AM. J. CRIM. L. 55, 66 (2018) (noting that the post WWII and Cold War focus on "system" would shift toward criminal justice between 1955-1975, bringing with it "the old Enlightenment idea that human societies could be mastered and steered toward progress through methods of science.").

[82] HINTON, at 28.

[83] JONATHAN SIMON, POOR DISCIPLINE: PAROLE AND THE SOCIAL CONTROL OF THE UNDERCLASS, 1880-1990 64 (2003).

Third, the prison populations in this postwar period become increasingly concentrated with African Americans.[84] While explaining the cause of this development is beyond the scope of this Article, the increasingly racialized prison population had an effect on the policies that were implemented. The reintegration model no longer "worked," in part because racialized perceptions of blackness and criminality would make it more difficult to secure jobs for the increasingly black prisoners upon release.[85] As surveillance technologies proliferated outside the prison to focus on behavior modifications for young people, particularly young African Americans,[86] they also expanded in the prison to formalize treatment and release decisions.

So rather than simply an advance in technologies, risk tools proliferated in prisons to "fill the rhetorical gap" as states transitioned to the "clinical" model.[87] Rehabilitation no longer meant connecting parolees with jobs in the face of a shifting economic market. Instead, criminal justice administrators shifted focus to preparing incarcerated individuals for the possibility of jobs as part of a larger effort to improve and standardize rehabilitative services. While laudable in the sense that the clinical model of rehabilitation used risk tools to offer services to those who needed it, this shift was problematic. It grew from a larger initiative to address the sociohistorical conditions that produce crime through a one-sided approach focused on controlling the individual behavior rather than simultaneously addressing social conditions in society.[88] Under the auspice of clinical accuracy, states became more interested in adopting predictive assessment tools to inform parole release decisions. Though Illinois had used an actuarial risk instrument since the 1930s, by 1961 Ohio, California and Minnesota were developing such instruments to improve the distribution of rehabilitative services as well.[89] Other states would soon follow.

Ironically, the perils of automation in the private sector would prove catalysts for the onset of automation in the administration of criminal justice. Efforts to introduce a technical language to justify sentence outcomes would be rehabilitation's own demise as the shoe dropped from

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[84] *Id*. at 65.

[85] *See* HINTON, at 28-29 (describing the impact of declining job prospects for African Americans during the second half of the twentieth century).

[86] *Id*. at 32-33.

[87] *See* JONATHAN SIMON, POOR DISCIPLINE: PAROLE AND THE SOCIAL CONTROL OF THE UNDERCLASS, 1880-1990 61 (2003).

[88] HINTON, at __.

[89] As Victor Evjen noted in 1961, "Parole prediction methods determine the chances a person has of making a successful or unsuccessful adjustment after release from a penal institution. They are not designed to give the optimum time for release or to portend responsiveness to supervision." Victor H. Evjen, *Current Thinking on Parole Prediction Tables* (1961); *see also* AGAINST PREDICTION, at 70-71.

how to rationalize release to evaluating whether rehabilitation worked. Cultural forces would converge with empirical studies on *offender behavior* (as part of the larger effort to rationalize decisionmaking) to render rehabilitation unstable.[90] From academics, critiques attacking the rehabilitative model of sentencing were ongoing since the mid-1960s.[91] By the 1970s, when empirical studies concluding that rehabilitative measures seldom change offenders' behavior in the future bolstered these critiques, states had already started to shift away from rehabilitation.[92] When the rehabilitative ideal declined, so too did the indeterminate sentencing structure built around it.

B. *Partially Automated Sentencing Technologies*

In response to these developments, the Nixon administration set out to modernize the American correctional institutions as part of a "long range master plan" to improve the penal system.[93] Alongside efforts to build prisons, the administration would finance technical projects that set the foundation for system-wide parole guidelines. As the following subsections explain, the construction and implementation of parole guidelines would fuel the creation of the second technology introduced at sentencing – sentencing guidelines. The actuarial risk tools proliferating at sentencing now build from these technologies, but differ in important respects that will be addressed as well.

1. Parole Guidelines

The U.S. Board of Parole implemented the first set of guidelines to standardize prison release around risk and crime severity while eliminating the role of rehabilitation. Drs. Peter Hoffman and Don Gottfredson, two criminologists deeply invested in bringing social science to criminal justice, developed the guidelines. Their initial research for the pilot reorganization program started in 1972.[94] Funded by the Law Enforcement Assistance Administration, a federal agency developed to create and expand system control in criminal justice reforms, the U.S.

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[90] Cf. Michael Tonry, *Obsolescence and Immanence in Penal Theory and Policy*, 105 COLUM. L. REV. 1233 (2005) (noting the instability of rehabilitation started in the late 1950s).

[91] *See, e.g.*, FRANCIS ALLEN, THE BORDERLAND OF CRIMINAL JUSTICE (1964).

[92] *See* Robert Martinson, *What Works? Questions and Answers about Prison Reform*, 35 PUB. INT. 22 (1974); D. LIPTON, R. MARTINSON & J. WILKS, THE EFFECTIVENESS OF CORRECTIONAL TREATMENT: A SURVEY OF TREATMENT EVALUATION STUDIES (1975).

[93] HINTON, at 163-164.

[94] For description of the project, see DON M. GOTTFREDSON ET AL., THE UTILIZATION OF EXPERIENCE IN PAROLE DECISIONMAKING: SUMMARY REPORT (1974).

Parole Board implemented the guidelines across the country in 1974.[95] In 1976, Congress legislatively mandated consideration of those guidelines in the parole release process.[96]

The parole guidelines represented a quintessential technosocial innovation. It was a tool designed to standardize sentencing outcomes by partially mechanizing parole release based on studies that would largely quantify components of the decisionmaking process.[97] Through the tool, infrastructure and parole board control were enhanced. The guidelines blended technical expertise and policy rationales in order to both facilitate the production of parole policy and enforce that policy among individual board actors.

The Parole Guidelines relied on a two-dimensional decision matrix based on offense seriousness and a "Salient Factor Score" indicating the prisoner's statistical likelihood of reoffending.[98] The Salient Factor Score was an eleven-point actuarial measurement based on nine factors to estimate a prisoner's likelihood of reoffending.[99] At the intersection of the axes of crime severity and the Salient Factor Score, the guidelines offered a range of months within which the offender could expect release. Any divergence from the standard required written explanation.[100]

Notably, the guidelines excluded reference to rehabilitation while amplifying the role of recidivism risk. There are three explanations for this absence, each blending the critique of rehabilitation with the promise of technology. First, Dr. Peter Hoffman, a key technical advisor on the parole guideline project, developed substantial research independent of this project searching for a proper "feedback policy." His research converged on "recidivism risk" and asserted that recidivism risk was, for all

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[95] C.F.R. §§ 2.1 – 2.58 (1976); *see also* Peter B. Hoffman & Barbara Stone-Meierhoefer, *Application of Guidelines to Sentencing*, 3 LAW & PSCYHOL. REV. 53, 63 (1977)

[96] Parole Commission and Reorganization Act (1976) (establishing the Parole Commission, mandating parole guidelines, written explanations of parole denial, and an administrative appeal process).

[97] *See* HEYCK, at 196 (technosocial projects were "intended to produce systems, infrastructures, and institutions" while reconstructing social relationships between people); *see also* Sara Mayeux, *The Idea of 'The Criminal Justice System*,' AM. J. CRIM. L. __ 17-19 (forthcoming 2018), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3050263 (describing features of systems thinking that would merge into criminal justice after 1967).

[98] A. Keith Bottomley, *Parole in Transition: A Comparative Study of Origins, Developments and Prospects for the 1990s*, 12 CRIME & JUSTICE 319, 344 (1990).

[99] Don M. Gottfredson et al., *Making Paroling Policy Explicit*, 21 CRIME & DELINQ. 34, 38 (1975). Revised several times after initial implementation, the tool increasingly reduced the factors included as a means to ensure fairness. So while the tool initially included factors on criminal history, drug dependence, education, employment and family status, see Michael Tonry, *Legal and Ethical Issues in the Prediction of Recidivism*, 26 FED. SENT'G REP. 167, 168 (2014), it eliminated some variables over time.

[100] 18 U.S.C. § 4206 (1976); see also 28 C.F.R. § 2.20(c) (1976).

measurable purposes, the same as rehabilitation.[101] Drawing from his own previous criminological research, he determined that rehabilitation and recidivism risk were coterminous – three decisions about what matters at parole reduced to one: institutional program participation, correctional discipline, and risk of parole violation.[102]

As a second rationale, the move toward risk was driven by the political critiques *against* rehabilitation. As the Parole Project explained in 1975, "The [U.S. Parole Board] has quite properly abandoned the search for the 'magical moment' for release based on rehabilitation that characterized parole release decisionmaking for the last 20 years."[103] Relying on the language of empirical research, the Parole Project affirmed a political trend that had already taken form.[104] It solidified the turn away from rehabilitation by noting that "[e]xtensive social scientific research strongly suggests that rehabilitation – defined as an increasing likelihood of successful adjustment upon release – cannot be observed, detected, or measured."[105] In response, the commission literally recast rehabilitation as risk when it translated "parole prognosis" into the assessment of recidivism risk.[106]

Third, the turn away from rehabilitation was animated by racialized assumptions in two ways. There were unfounded assumptions about which prisoners could be rehabilitated as the prison population became majority minority.[107] There were assumptions about the source of racial disparities as well. Policymakers in the 1970s converged on the threat of arbitrary exercise of an individual judge's discretion as the locus of concern in

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[101] Peter B. Hoffman, *Paroling Policy Feedback*, 9 CRIME & DELINQ. 118 (1972).

[102] Hoffman also studied a fourth factor – the severity of the present offense. Because that factor remains an independent component at sentencing, it is not referenced in the above text. *See id*. at 121.

[103] Project, *Parole Release Decisionmaking and the Sentencing Process*, 84 YALE L.J. 810, 826-27 (1975).

[104] *See* Michael Tonry, 105 COLUM. L. REV. 1233, 1252 (2005) (noting that faith in the rehabilitative ideal declined far earlier than 1974); *see also* Cullen, *supra* note xx, at 326-28.

[105] Project, *Parole Release Decisionmaking and the Sentencing Process*, 84 YALE L.J. 810, 826-27 (1975).

[106] *See* Don M. Gottfredson et al., *Making Paroling Policy Explicit*, 21 CRIME & DELINQ. 34, 37 (1975). Notably, the technical advisors constructing the Salient Factor Score drew on methodologies to predict risk present since the 1930s in Illinois. *See* AGAINST PREDICTION, at 70-71.

[107] HINTON, at 169 (attributing the modernization of prisons and prison release programs to the increasingly majority minority prison populations and "the view of national officials and policymakers" who believed that "this new class of inmates were incapable of responding to rehabilitative attempts"); FRANCIS A. ALLEN, THE DECLINE OF THE REHABILITATIVE IDEAL: PENAL POLICY AND SOCIAL PURPOSE 30-31 (1981) (noting that rehabilitation declined with the rising non-white prison population).

sentencing reform.[108] They largely turned a blind eye to the structural changes in policing practices and sentencing policies as the source of increasing disparities.[109] Because parole guidelines were developed in part to ameliorate disparities between prisoners at sentencing,[110] advocates put forth recidivism risk as a promising method to standardize sentencing outcomes without addressing front-end policies.[111]

Once again, the rise of risk technologies was not the product of its empirical value, but sentencing did change to accommodate technology. In response to characterizations about society and a desire to find an abstract solution to social problems, risk tools proliferated. In the wake of parole guidelines implementation, the structure of parole remained, but the guiding theory justifying its existence did not. In its place, parole boards implemented what had been a largely "off-purpose" use of the tools. Whereas actuarial risk tools were "not designed to give the optimum time for release" in the 1960s, by the 1970s that is exactly how the tools were used.[112]

Parole guidelines would quickly expand across the states following notable prison uprisings in the early 1970s. Many states would adopt actuarial risk tools as part of their release process as well.[113] Others would curtail or eliminate parole all together. At the same time, federal agencies would fund technical projects that shifted focus from parole to sentencing. In the wake of the parole guidelines' "success," sentencing guidelines to limit and control judicial sentencing discretion would emerge.

2. Sentencing Guidelines

Sentencing guidelines, like parole guidelines before them, were explicit technosocial reforms meant to standardize sentencing outcomes.[114]

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[108] *See, e.g.*, AM. FRIENDS SERV. COMM., STRUGGLE FOR JUSTICE: A REPORT ON CRIME AND PUNISHMENT IN AMERICA 107-112 (1971); KENNETH CULP DAVIS, DISCRETIONARY JUSTICE (1969).

[109] *See, e.g.*, Charles Ogletree, *The Death of Discretion? Reflections on the Sentencing Guidelines*, 101 HARV. L. REV. 1938 (1988).

[110] A. Keith Bottomley, *Parole in Transition: A Comparative Study of Origins, Developments and Prospects for the 1990s*, 12 CRIME & JUSTICE 319 (1990).

[111] *See, e.g.*, John C. Coffee, Jr., *The Repressed Issues of Sentencing: Accountability, Predictability, and Equality in the Era of the Sentencing Commission*, 66 GEO. L.J. 975, 1005 (1978).

[112] *See* Victor H. Evjen, *Current Thinking about Parole Prediction Tables*, 8 CRIME & DELINQ. 216 (1962).

[113] *See* JONATHAN SIMON, POOR DISCIPLINE: PAROLE AND THE SOCIAL CONTROL OF THE UNDERCLASS, 1890-1990 169 (2003) (detailing orientation around risk); AGAINST PREDICTION, at 9 tbl.1.1 (documenting the rise of actuarial prediction instruments in parole).

[114] Current guideline states include Alabama, Arkansas, Delaware, District of Columbia, Florida, Kansas, Maryland, Michigan, Minnesota, Missouri, North Carolina, Ohio, Oregon, Pennsylvania, Tennessee, Utah, Virginia, Washington, and the Federal system.

Driven by the political desire to make sentencing more accountable, rational and transparent[115] and acting in the name of uniformity, almost half the states and the federal government created sentencing commissions or legislative committees at one time or another to develop mandatory or voluntary guidelines with technical assistance.[116] While parole guidelines applied to parole boards, sentencing guidelines were developed to constrain judicial discretion directly.[117] Those guidelines would adopt mirror technical form to the parole guidelines, including a role for recidivism risk.

Sentencing guidelines sought to structure judicial decisionmaking around two factors: crime severity and offender characteristics.[118] In fact, the same technicians who developed the parole guidelines influenced or constructed leading sentencing guidelines.[119] The underlying studies that produced their frameworks also originated from projects funded by the

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Rachel E. Barkow, *Sentencing Guidelines at the Crossroads of Politics and Expertise*, 160 U. PA. L. REV. 1599, 1600 (2012). In addition, there are states that have developed guidelines but the legislature did not ratify them. In states like Massachusetts and Wisconsin, courts commonly use them anyway. *See Massachusetts Guidelines*, ROBINA INST., https://sentencing.umn.edu/profiles/massachusetts; Lynn Adelman, *The Adverse Impact of Drug Offenders on Sentencing in Wisconsin*, VALPO. L. REV. (2013).

[115] For the paradigmatic advance of these concepts in sentencing, see generally MARVIN E. FRANKEL, CRIMINAL SENTENCES: LAW WITHOUT ORDER (1973).

[116] Of course, efforts to reduce disparities in sentencing existed before Judge Frankel's call to arms in 1973. See, e.g., Shari Seidman Diamond & Hans Zeisel, *Sentencing Councils: A Study of Sentencing Disparity and its Reduction*, 43 U. CHI. L. REV. 109, 116-18 (1975) and Peter Hoffman & Lucille DeGostin, *An Argument for Self-Imposed Explicit Judicial Sentencing Standards*, 3 J. CRIM. JUST. 195 (1975). Moreover, the call for systemic regulation of discretion in the criminal justice system also existed before Judge Frankel's call for reform. *See, e.g.*, KENNETH CULP DAVIS, DISCRETIONARY JUSTICE: A PRELIMINARY INQUIRY (1969). Yet Judge Frankel's precise critiques of "lawless sentencing" are largely considered the "brainchild" of what we now understand as the sentencing guidelines, particularly in the federal system.

[117] Virginia was, to start, an outlier in its advisory rather than mandatory nature. Only after the Supreme Court's decisions in Blakely v. Washington (2004) and Booker v. United States (2005) were guidelines across the states recharacterized as advisory rather than mandatory. *See* John F. Pfaff, *The Continued Vitality of Structured Sentencing following Blakely: The Effectiveness of Voluntary Guidelines*, 54 UCLA L. Rev. 235, 237 (2006). Adherence to the guidelines (and notably the federal guidelines) remained largely the same before and after the guidelines were rendered advisory. For example, judicial adherence to the federal guidelines hovers somewhere around 80% if you include prosecutorial motions to divert from the guidelines in the metric of departure. The Supreme Court continues to struggle with the meaning of advisory versus mandatory sentencing guidelines. *See, e.g.*, Beckles v. United States, 137 S. Ct. 886 (2017).

[118] *See* MICHAEL TONRY, SENTENCING MATTERS 10 (1996).

[119] Jack M. Kress, Leslie T. Wilkins, & Don M. Gottfredson, *Is the End of Judicial Sentencing Discretion in Sight?*, 60 JUDICATURE 216 (1976) (describing their sentencing guideline research project, which "grew out of the successful completion of a decision-making study which developed guidelines for the United States Board of Parole.");

Law Enforcement Assistance Administration.[120] Dr. Peter Hoffman served as a technical advisor on several of the leading sentencing commissions creating guidelines, including Minnesota and Washington State during his time as a Director of Research at the U.S. Parole Commission. [121] In particular, he advocated for and replicated the two-dimensional structure now prevalent in most guideline systems. Hoffman, a primary developer of the Salient Risk Factor tool in the parole guidelines, would bring the biaxial framework to the state guideline systems. To the federal guidelines, he brought the actuarial risk assessment technique as well when he served as the Principal Technical Advisor and primary drafter in constructing the federal sentencing guidelines.[122]

Yet sentencing guidelines and parole guidelines differed in an important respect pertaining to recidivism risk.[123] Located on the axis in the exact same location as the Salient Risk Factor Score in the parole guidelines, there was a clear connection between the criminal history categories and recidivism risk for *technical guideline developers* from the start. Criminal justice actors, however, converged on *criminal history* as the primary mechanism to calculate offender characteristics in sentencing guidelines.

For example, Pennsylvania's Sentencing Commission converged on the offender's criminal history as the measure of criminality.[124] Minnesota would similarly converge on criminal history factors in place of the Salient Factor Score.[125] By the time the U.S. Sentencing Commission sought comments for its sentencing guidelines in 1986, commentators

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[120] *Id*.

[121] *See* John C. Coffee, Jr., *The Repressed Issues of Sentencing: Accountability, Predictability, and Equality in the Era of the Sentencing Commission*, 66 GEO. L.J. 975, 1005 (1978); *see also* Brent E. Newton & Dawinder Sidhu, *The History of the Original United States Sentencing Commission, 1985-1987*, 45 HOFSTRA L. REV. 1167, 1195 1288 (2017) (emphasizing Hoffman's role in federal sentencing guidelines construction as pinch hitter in late stage construction, along with involvement in Minnesota).

[122] *See* Brent E. Newton & Dawinder Sidhu, *The History of the Original United States Sentencing Commission, 1985-1987*, 45 HOFSTRA L. REV. 1167, 1195 1288 (2017) (following the advice of Hoffman, the U.S. Sentencing Commission modeled criminal history categories "more on the federal parole guidelines – in particular, its Salient Factor Score – than on criminal history provisions in the state guidelines.").

[123] Most guidelines offer a criminal history score based on points accumulated from prior engagement with the criminal justice system. In this sense, state guidelines are deeply influenced by the Salient Risk Score used in the U.S. parole guidelines described above. For discussion of variety, *see* Richard Frase et al., Univ. Minn. Robina Inst., CRIMINAL HISTORY ENHANCEMENTS SOURCEBOOK (2016).

[124] *See* Mona Lynch & Alyse Bertenthal, *The Calculus of the Record: Criminal History in the Making of US Federal Sentencing Guidelines*, 20 THEORETICAL CRIMINOLOGY 145, 151 (2016) (referencing letters from PA Commissioner to Commissioner Block).

[125] ANDREW VON HIRSCH, PAST AND FUTURE CRIMES: DESERVEDNESS AND DANGEROUSNESS IN THE SENTENCING OF CRIMINALS 134-37 (1985).

treated criminal history as the obvious and key factor to account for defendants' differences.[126] Even states that did not adopt sentencing guidelines but changed their sentencing statutes used the language of risk but only identified factors related to criminal history.[127] State and federal actors explicitly rejected traditional risk factors as a means to consider criminality at sentencing.

There are two reasons for this convergence on criminal history rather than broader predictive risk factors. First, law and policymakers sought to avoid philosophical conflict. With the turn away from rehabilitation, lawmakers sought to avoid a contentious divide between those adhering to a retributive orientation and those adhering to consequentialist concerns.[128] Converging on criminal history as the offender characteristic offered an ambiguous method to do both.[129] Criminal history was accorded a natural legitimacy at sentencing even if for undefined reasons.[130] Second, social justice concerns justified reliance on criminal history. While some were concerned that criminal history itself would institutionalize race and class into the guidelines, there was clear awareness that including any other risk factors was destined to do so.[131] Thus criminal history emerged as the objective factor in line with human values.

In short, policymakers developing sentencing guidelines were confronted with a choice about whether and how to consider actuarial risk assessments. Though some commissions took empirical literature into account in developing their criminal history categories,[132] the decision to

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[126] *See* Mona Lynch & Alyse Bertenthal, *The Calculus of the Record: Criminal History in the Making of US Federal Sentencing Guidelines*, 20 THEORETICAL CRIMINOLOGY 145, 151 (2016) (referencing letters from PA Commissioner to Commissioner Block).

[127] *See, e.g.*, OHIO REV. CODE § 2929.12 (D)-(E) (1973) (urging courts to consider "risk that the offender will commit another offense and the need for public protection").

[128] Retributivists as a turn from risk. *See, e.g.*, JON KLEINIG, PUNISHMENT AND DESERT (1973); ANDREW VON HIRSCH, DOING JUSTICE: THE CHOICE OF PUNISHMENTS: REPORT OF THE COMMITTEE FOR THE STUDY OF INCARCERATION (1976); ANDREW VON HIRSCH, PAST AND FUTURE CRIMES: DESERVEDNESS AND DANGEROUSNESS IN THE SENTENCING OF CRIMINALS 22-23, 131 (1985) (focusing on the "in-out" line on sentencing guidelines to demonstrate desert versus incapacitation theories of construction). Consequentialists converging on risk. *See, e.g.*, RICHARD POSNER, ECONOMIC ANALYSIS OF LAW (1975); JAMES Q. WILSON, THINKING ABOUT CRIME (rev. ed. 1983).

[129] *See, e.g.*, U.S. SENTENCING GUIDELINES MANUAL § 1A1.1 (U.S. Sentencing Comm'n 2004).

[130] *See, e.g.*, Benjamin Ewing, *Prior Convictions as Moral Opportunities* (forthcoming 2018).

[131] *See, e.g.*, Mona Lynch & Alyse Bertenthal, *The Calculus of the Record: Criminal History in the Making of US Federal Sentencing Guidelines*, 20 THEORETICAL CRIMINOLOGY 145, 150-51 (2016).

[132] *See* AGAINST PREDICTION (detailing the empirical literature converging on criminal history as the primary predictor in risk tools' leading up to the 1970s).

converge on criminal history rather than simply recidivism risk was to greater extent an attempt to make technology heel to human values reflected at sentencing.[133] To be sure, the *orientation* around risk was driven at least in part by technical path dependence from predecessor technologies influenced by WWII and Cold War experts.[134] As noted above, these technologies were all heavily influenced by WWII and Cold War experts. But realism and human values combined to serve as a limit on the expansion of that technology at sentencing. Accordingly, states used factors related to criminal history as the basis to individualize standardized sentencing ranges in the technical guidelines.

C. Actuarial Tools Revisited

As noted above, states are again building technological infrastructure at sentencing. Today's risk tools are at once the continuation of a path and a divergence from it. Instead of making the tools fit into sentencing, sentencing is now adjusting to fit the tools.

In part, this may have occurred because law and policymakers made risk central to sentencing policy in the 1980s and 1990s. As technical reforms proliferated across the states, law and policymakers reshaped sentencing law and policies around actuarial techniques. While three strikes laws are the most notable example, states and the federal government expanded a variety of recidivist enhancements in statute and in the guidelines to increase a defendant's sentence as a crude predictor of recidivism.[135] In essence, the more states cared about criminal risk, the

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[133] As further example, over time states adopted "decay" provisions that limit the time within which a prior crime can count towards the current sentence range. *See, e.g.,* Julian Roberts, *Revisiting Prior Record Enhancement Provisions in State Sentencing Guidelines*, 26 FED. SENT'G REP. 177 (2014); Dawinder Sidhu, *Moneyball Sentencing*, 56 B.C. L. REV. 671, 723 (2015) (limits introduced to federal sentencing guidelines)

[134] As Alfred Blumstein put it, "Even though the issue of recidivism has always been of central interest to both criminologists and practitioners, . . . key features provoked by the feedback model [constructed in the development of technosocial reforms] – in particular, the distinction between recidivists and first-timers *and the time lags involved in recidivism* – had not been previously explored." Blumstein, *OR Missionary's Visits to the Criminal Justice System*, 55 OPERATIONS RESEARCH 14, 15 (2007). For more discussion, see Brent Newton & Dawinder Sidhu, *The History of the Original United States Sentencing Commission*, 45 HOFSTRA L. REV. 1167, 1290 (2017) (crediting federal criminal history construction to Peter Hoffman almost exclusively); *see also* Peter B. Hoffman & Barbara Stone-Meierhoefer, *Application of Guidelines to Sentencing*, 3 LAW & PSCYHOL. REV. 53, 63 (1977) (advocating for application of the biaxial parole guidelines to sentencing guidelines).

[135] *See, e.g.*, U.S. SENTENCING GUIDELINES MANUAL, Ch. 4, pt. A; Wash. Rev. Code 9.94A.010; NAT'L CONF. OF STATE LEGISLATORS, "THREE STRIKES" SENTENCING LAWS (1999).

more susceptible to consideration of actuarial risk technologies we would become.

This Article suggests a richer account is necessary to explain this transition. The standard narrative sustains an exclusive focus on the technical changes achieved over time. It obscures the social changes. Yet this brief history of predecessor sentencing technologies offers two important insights that undermine this narrative. First, technical reforms were meant to shape the social. That is the nature of the "technosocial." In the beginning, the social did shape the technical. Part I demonstrates that today, there has been a pivotal switch obscured by the standard narrative. Second, this history begs an open question: what are those social transformations spurred by the introduction of technology itself? Furthermore, how do those transformations sustain risk tools' advance now?

Here is where a counternarrative is necessary. Right now, there is no language to describe this shift in focus. Through the standard narrative it appears logical and consistent with human values. But the pursuit of technological advancement in sentencing is not a foregone conclusion. More to the point, it is not costless. Technological reforms induce long-lasting effects on society that shape our sensibilities over time. It reduces our ability to articulate objection to tool advance that evade quantification because technology literally claims our words. The following Part shows how. In so doing, it gives substance to sentencing's technological counternarrative. Specifically, it illuminates the reality that technology changes the social concepts that shape our human interactions, and not because our human values evolve.

Before identifying and analyzing shifting social concepts, it is important to explain what does *not* generate this transformation. It is not technological advancement for its own sake. As this novel history illuminates, the technology may be advancing but it can only expand where the social conditions are right. Indeed, advocates suggest as much when they draw upon the history of the tools. More importantly, the catalyst of social transformation is not mass incarceration. This sociohistorical phenomenon provides context for improving carceral processes. It is not a reason to change social ideas that shape punishment. Those ideas have already changed, and our responses to mass incarceration illuminate how. Said differently, the social and economic pressures of mass incarceration may provoke us to implement change, but the crisis itself does not show us how to do it. Human values drive that transformation. And it is in those human values – what we think we are doing – that we can see how technology altered our social concepts. At the intersection of rhetoric and reform, our choices glean insight to technologically-induced mutations that have already occurred.

III. ILLUMINATING THE COUNTERNARRATIVE: MUTATING SOCIAL CONCEPTS AROUND TECHNOLOGIES

This Part builds from the technical history in Part II to lay out a counternarrative to the advancement of risk tools now. It locates the rise of risk tools in three social transformations that have occurred through or alongside the proliferation of sentencing technologies that make statistically robust actuarial risk tools acceptable as sentencing reform. Part A considers how rehabilitation, one of the theoretical justifications of punishment, has altered to more closely reflect incapacitation through the pursuit of technical knowledge. Part B considers how "racial justice" distributed through a focus on technical guideline uniformity reified structural racism while deifying technical formalism. Part C traces the convergence of dangerousness and risk in social meaning. Each of these social transformations facilitates the proliferation of actuarial risk tools not because the technology advances, but because technology changed society.

A. "Rehabilitation" and the Theoretical Obfuscation of Incapacitation

The first transformation concerns the meaning of "rehabilitation." As noted above, risk tools are central to the demise of rehabilitation. As this Part highlights, the tools' are critical to its recent resurgence as well. Obscured in this "pendulum swing" is the fundamental transformation of rehabilitation's meaning, the central role that technology played in altering that social concept, and its connection to the proliferation of risk tools today without resistance. In other words, technology changed rehabilitation, and not because our human or political values altered.

With the demise of rehabilitation, no single theory emerged to animate sentencing reforms. Scholars would largely converge on variations of retribution. In practice, however, the driving theory appeared to be some version of incapacitation, meaning the removal of an offender's ability to commit future crime.[136] While incapacitation has long been a theory of punishment, it would ascend with the introduction of risk technologies and the expansion of the carceral state. By 1982, the controversial theory of "selective incapacitation" would emerge in public policy and scholarly circles. [137] The brainchild of military-research outpost RAND Corporations, this version of incapacitation seeks to identify high-risk defendants through an actuarial risk tool for long prison sentences in order to save

[136] *See, e.g.*, Kevin Bennardo, *Incarcerations' Incapacitative Shortcomings*, 54 SANTA CLARA L. REV. 1, 2 (2014).

[137] *See, e.g.*, Note, *Selective Incapacitation: Reducing Crime Through Predictions of Recidivism*, 96 HARV. L. REV. 511 (1982); MARK MOORE, ET AL., DANGEROUS OFFENDERS: THE ELUSIVE TARGET OF JUSTICE (1984).

costs and reduce crime.[138] But rather than selectively incapacitating the few offenders that posed a threat of dangerousness, states converged on "total incapacitation" by incarcerating large swaths of the population.[139] Though a highly criticized theory due to its limitless bounds, the expansive theory of incapacitation through incarceration proved a popular approach to addressing both crime and social ills.

Risk becomes a critical component of incapacitation because the threat of future criminal behavior legitimates the state's punitive intervention. In recent years, however, the expansion of statistically robust actuarial tools at sentencing has been legitimated on an alternative ground – rehabilitation. Rehabilitation justifies punishment as a means to reform wrongdoers so that they will not choose to engage in crime in the future.[140] As Judge Roger Warren explained in 2007, using risk tools at sentencing promotes "public safety through recidivism reduction," which is akin to rehabilitation efforts, but focuses primarily on its crime reduction possibility.[141] Judge William Ray Price, Jr., in 2010, emphasized that consideration of risk tools allows the judge to "assess each offender's risk and then fits that offender with the cheapest and most effective rehabilitation that he or she needs." Similarly, the National Center for State Courts endorsed the use of risk tools for sentencing decisions that are in essence correctional because the tools can encourages judicial focus on "rehabilitative efforts."[142] To be sure, many recognize that the tools ensure treatment or surveillance that can also hold defendants accountable, yet the association with rehabilitation is there.[143] Indeed, policymakers encourage courts to consider correctional risk and needs tools not made for sentencing due to its emphasis on *rehabilitation*.[144]

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[138] RAND Corporation proposed selective incapacitation as a "coherent scheme" at sentencing in 1982. *See* PETER W. GREENWOOD AND ALLAN ABRAHAMSE, SELECTIVE INCAPACITATION (Rand 1982). Researchers surmised that strategically identifying and incapacitating the select individuals believed to be responsible for a disproportionate share of crime could reduce crime without significantly increasing correctional costs. The study offered an actuarially derived seven-factor predictive scale that would identify these select individuals for long-term confinement.

[139] *See* Jonathan Simon, *The Second Coming of Dignity*, in THE NEW CRIMINAL JUSTICE THINKING 275, 299 (2017); see also JONATHAN SIMON, MASS INCARCERATION ON TRIAL 17-44 (2014).

[140] *See* MPC 6.02(A).

[141] Roger K. Warren, *Evidence-Based Sentencing in the State Courts*, 27 FED. SENT'G REP. 250 (2015).

[142] NAT'L CTR. FOR STATE CTS, USE OF RISK AND NEEDS ASSESSMENT INFORMATION IN STATE SENTENCING PROCEEDINGS, Sept. 2017, https://www.ncsc.org/~/media/Microsites/Files/CSI/EBS%20RNA%20brief%20Sep%202017.ashx.

[143] *Id*., *see also* Warren, *supra* note __.

[144] *See id*., *see also* Erin Collins, *Punishing Risk*, GEO. L.J. (2018).

This shift in association is understandable, but only because the introduction of risk technologies had the effect of changing rehabilitation. When the parole board simplified rehabilitation into a "risk," the conceptual change stuck.[145] When Robert Martinson and others critiqued rehabilitation on the basis of its empirical efficacy,[146] it had a lasting effect on the idea of rehabilitation as well. As Francis Cullen explains, "[i]t transformed the debate on rehabilitation from a broad and complex critique of the welfare state into the narrower and simpler issue of effectiveness."[147] Most rehabilitation scholars responded to the "nothing works" critiques by focusing on program effectiveness.[148] If rehabilitation declined in part because it could not be standardized and proven effective as a technical matter, these scholars committed themselves to rehabilitating rehabilitation by proving its effect on risk. In other words, they saved rehabilitation by making the technical assessment of risk central to the theory.

This transformation is wrapped up in the narrative of technological advancement. Pervasive genealogies of actuarial risk tools emphasize the promise of this evolution in risk technologies toward risk and needs responsivity.[149] The "new" tools are not like the "old" tools designed to further selective incapacitation because they identify risk levels and specific interventions.[150] As rehabilitation scholar Don Andrews notes, "past (type 2) assessments of risk fail to prescribe interventions, and ignore the fact that, once in the correctional system, offenders are subject to events and experiences that may produce shifts in their chances of recidivism." [151] Accordingly, these scholars pushed beyond criminal history as a predictor of risk to include changeable factors or "needs."[152]

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[145] *See supra* notes __.

[146] Robert Martinson, *What Works? – Questions and Answers about Prison Reform*, 35 PUB. INT. 22, 25 (1974) (concluding that "with few and isolated exceptions, rehabilitative efforts have no appreciable effect on recidivism.").

[147] Cullen, *supra* note xx, at 329.

[148] *Id*. at 335-45 (referencing the seminal research of Paul Gendreau, Donald Andrews, James Bonta and others). Cullen, on the other hand, argued to maintain rehabilitation for its system benefits. *See id*.

[149] *See supra* note 1.

[150] There are about four "generations" of risk tools. The first generation refers to clinical assessments, meaning those done by persons based on experience. The second refer to those standardized assessments meant to predict likelihood of recidivism based on static factors. The third predicts risk based on static and dynamic factors, including those behavior factors that can be changed. The line between the third and fourth generation is a bit murky, but fourth generation tools are meant to identify specific needs to respond to the mutable characteristics that render some defendants at higher risk of recidivism.

[151] Andrews et al., 1989, 5-6; see also Andrews et al., 1990.

[152] Hannah-Moffat, *supra* note 1.

In short, rehabilitation transformed to accommodate the pursuit of technical knowledge.[153] The history of actuarial risk tools' evolution *is* the social history of risk being disassociated with incapacitation and written within the narrative of technological advancement. Indeed, most developers reference the seminal work of rehabilitation scholars when constructing actuarial risk tools.[154] In this sense, the risk technologies proliferating today are aligned with various correctional intervention technologies.[155] But that is not because the tools inherently reflect rehabilitation; rather, it is because rehabilitation came to reflect risk technologies.

Contrary to the standard narrative of technological advancement, the benefit of this transformation is debatable, particularly as this mutation expands from corrections to sentencing. Advocates suggest expanding the consideration of risk is a pragmatic reform central to being "smart on crime."[156] They applaud states for being "selective and cautious" rather than "starry eyed and egalitarian" in the pursuit of criminal justice reform.[157]

In the context of sentencing rather than corrections, however, the expansion of actuarial risk tools strikes of selective incapacitation.[158] As I have explained elsewhere, selective incapacitation and neorehabilitation exist along the same theoretical spectrum only with a different rhetoric bolstering its advance. Neorehabilitation uses the idea of selective incapacitation to reframe incapacitative interventions for low-risk defendants as rehabilitative programming justified on the basis of its ability to reduce crime and reduce correctional costs.[159] While these management techniques may seem to have some basis in rehabilitating some offenders, the animating ethos of the reform is not the egalitarian aim of traditional rehabilitative interventions of yore – which sought to improve the lives of the defendants processed through the criminal justice

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[153] *See* Cullen, *supra* note xx (noting that critiques of rehabilitation's ineffectiveness offered the path to its rehabilitation for ardent rehabilitation advocates to pursue).

[154] *See* Klingele, *supra* note __; see also Jessica M. Eaglin, *Constructing Recidivism Risk*, 67 EMORY L.J. 59 (2017).

[155] *Cf.* Erin Collins, *Punishing Risk*, GEO. L.J. (2018) (critiquing the use of risk tools designed for correctional purposes in the sentencing context).

[156] Mary D. Fan, *Beyond Budget-Cut Criminal Justice: The Future of Penal Law*, 90 N.C. L. REV. 581, 635 (2012).

[157] Mary D. Fan, *Beyond Budget-Cut Criminal Justice: The Future of Penal Law*, 90 N.C. L. REV. 581 (2012).

[158] Jessica M. Eaglin, *Against Neorehabilitation*, 66 SMU L. Rev. 189 (2013).

[159] *See id.* (defining neorehabilitation as the dominant framework for sentencing reforms adopted in response to mass incarceration); *see also* Eric J. Miller, *Drugs, Courts, and the New Penology*, 20 STAN. L. & POL'Y REV. 417, 441 (2009) (critiquing neorehabilitation in context of drug courts); *see also* Erin Collins, *Status Courts*, 105 GEO. L.J. 1481, 1499-1500 (2017) (same).

apparatus for their sake alone – but instead in the efficient management of groups of people and effectiveness of the carceral state itself.[160]

In practice, blurring this line between rehabilitation and incapacitation may legitimate expanding criminal justice surveillance while also expanding the reach of the criminal justice system. For example, introducing actuarial risk assessments may encourage judges to impose some form of supervision for defendants that would otherwise have been diverted with little or none. At the same time, risk tools may encourage judges to impose longer sentences or more onerous surveillance mechanisms over high-risk defendants that prove disintegrative along a number of dimensions, including socially and economically.[161] The introduction of electronic monitoring devices has operated in just this manner.[162] Yet because the courts or policymakers perceive the interventions as benevolent responses to *recidivism risk* – which in itself demands some form of response – their incapacitative nature will go unnoticed or worse, be considered beneficial.

At a theoretical level, this social transformation is deeply problematic. As Michael Tonry and Cecelia Klingele have recently warned, the rise of actuarial risk tools introduces the threat of *forgetting* our past.[163] The counternarrative offers new insight to this tension. Actuarial risk tools "work" as a neorehabilitative reform because the standard narrative obscures history, or at least reframes it in a positive light. Not only does it obscure the problematic history of science run amouk in correction facilities,[164] it also redefines why we turned away from rehabilitation at all. Part of that turn, as Michael Tonry notes, was driven by demands for individual rights.[165] Statistically robust risk tools certainly undermine that value.[166]

Yet revisiting the role of technology in the demise of rehabilitation highlights another, more structural change in how we chose to allocate

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[160] Jessica M. Eaglin, *Against Neorehabilitation*, 66 SMU L. REV. 189 (2013).
[161] Sonja Starr insists that risk tools will increase sentences. *See supra* __.
[162] *See* Erin Murphy, *Paradigms of Restraint*, 57 DUKE L.J. 1321, 1333-34 (2009) (noting the expansion of GPS monitoring for sex offenders beyond formal supervision periods and to expanding types of offenders); Avlana K. Eisenberg, *Mass Monitoring*, 90 S. Cal. L. Rev. 123 (2015) (noting critiques of GPS monitoring devices as a supplement rather than a substitute for other forms of punishment and suggesting constitutional limits to prevent this occurrence); *see also* Eisenberg, *Mass Monitoring*, 90 S.CAL. L. REV. at 152 n. 167 (collecting citations that highlight the challenges associated with seeking or maintaining a job while on electronic monitoring).
[163] *See* Tonry, *supra* note 11; Klingele, *supra* note __ (noting the threat to memory that risk tools present in corrections).
[164] *See, e.g.*, Meghan Ryan, *Science and the New Rehabilitation*, 3 VA. J. CRIM. L. 261 (2015); Klingele, *supra* note __, at 575-77.
[165] Tonry, *supra* note 11.
[166] *See id*.

government resources.[167] The narrative of technological advancement mutes the politically driven question of how to cope with conditions deemed undesirable, offensive, or threatening. Actuarial risk tools, particularly with their loose affiliation with rehabilitation, legitimates "intensified intrusion and castigatory oversight" rather than, for example, investing in communities and general welfare as if the two were equivalent political options.[168] Just because we can predict risk does not mean that we should or always have dealt with it through criminal justice. Indeed, historian Elizabeth Hinton's recent book on the transition from the War on Poverty to the War on Crime hinges on the political shift in focusing on risk in criminal justice rather than outside it.[169] The rise of actuarial risk tools at sentencing highlights this transformation as well. Actuarial risk tools proliferated in the parole and prison context as a means to isolate localized communities from criminal justice. At the same time, the state underwent a fundamental restructuring whereby it placed resources in criminal enforcement while defunding the welfare state. The orientation around technology assisted in the obfuscation of this political transformation.[170]

The standard narrative obscures these changes while removing actuarial risk tools' negative association. Entwining rehabilitation's resurgence and incapacitation through the technical advancement narrative operates to restructure debates about risk tools advance. In the process, it centers the focus on risk management and why it could work through various programs, rather than what we are doing and its effects on society. Furthermore, to extent that scholars and policymakers perceive the rise of risk tools as a turn away from retribution rather than just the expansion of incapacitation, they are even less likely to accord skepticism in the face of tools.[171] By combining the rehabilitative framing and technological advancement narrative, these features undermine the impetus to limit risk

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[167] *See supra* Part II.A.

[168] Wacquant, *supra* note __; Bernard Harcourt, *Punitive Preventive Justice: A Critique, in* PREVENTION AND THE LIMITS OF THE CRIMINAL LAW 252, 270-71 (2013, eds. Ashworth et al.).

[169] *See generally*, HINTON.

[170] *Id.; see also* Bernard Harcourt, *Punitive Preventive Justice: A Critique, in* PREVENTION AND THE LIMITS OF THE CRIMINAL LAW 252, 270-71 (2013, eds. Ashworth et al.).

[171] This "pendulum swing" may be more rhetorical than practical. As Paul Butler noted in 1999, it is difficult to describe much of the sentencing policies of the last thirty years as adhering to retribution rather than incapacitation. *See* Paul Butler, *Retribution, for Liberal*s, 46 UCLA L. Rev. 1873 (1999). *See also* Kyron Huigen, *Solving the* Apprendi *Puzzle*, 90 GEO. L.J. 387, 415-16 (2002) (noting the "uninterrupted dominance of consequentialist conceptions of punishment through most of the last century" despite claims of retribution-oriented reform).

technologies on the basis of philosophies.[172] This would include, for example, requiring consideration of risk tools in instances where assessments can be regularly administered or limiting the factors upon which risk tools are constructed.

B. Uniformity, Structural Racism, and Technical Formalism

If the first transformation pertains to the conception of a theoretical justification of punishment, the second concerns the relationship between racial justice and technology. Racial justice here means confronting the causes and consequences of enduring racial stratification, most visibly enforced through criminal law. To the extent that parole and sentencing guidelines were adopted in the name of reducing racial disparities neither would not resolve that structural dilemma. But instead of recognizing these technologies as an institutionalization of sociohistorical inequalities, studies and policymakers proclaimed it a solution to those inequalities. In the process, the guidelines would fuel an orientation around technical formalism in sentencing that is critical to the advance of actuarial risk tools now.

This critique draws, by analogy, on the racial realism literature advanced in response to formal equality as a civil rights strategy. While demanding formal equality led to some transformations in society, critics like Derrick Bell have noted that "abstract principles lead to legal results that harm black people and perpetuate their inferior status."[173] Critically, formal equality facilitated abstraction from historical realities, contemporary statistics, and flexible reasoning while "mask[ing] policy choices and value judgments."[174] These equality-focused reforms are more harmful, some suggest, *because* they permit relief from guilt or fear of disparate treatment without meaningful engagement in the realities of race and society.[175]

The same can be said of the guidelines and the pursuit of excessive uniformity. Like the focus on formal equality in constitutional jurisprudence, states and federal government shifted toward a focus on

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[172] *See* Klingele, *supra* note __, at 141 ("In many ways, the very term rehabilitation, with its connotations of concern for the welfare of the marginalized, provides a dangerous veneer that makes observers less keen to possible abuses of "rehabilitative tools.").
[173] Derrick Bell, *Racial Realism*, 24 CONN. L. REV. 363, 369 (1992).
[174] *Id.*
[175] *See, e.g.*, Reva B. Siegel, *Discrimination in the Eyes of the Law: How Color Blindness Discourse Disrupts and Rationalizes Social Stratification*, 88 CALIF. L. REV. 77, 90-91 (2000) (developing framework of "preservation-through-transformation" in equal protection law); Reva Siegel, *Why Equal Protection No Longer Protects: The Evolving Forms of Status-Enforcing State Action*, 49 STAN. L. REV. 1111 (1997) (same).

excessive uniformity in sentencing, this time driven by the notion that a partially automating tool, constructed in the abstract, could reduce the threat of "arbitrary" sentencing.[176] And much like the claims that formal equality succeeded in reducing racial discrimination in society, researchers and studies proclaimed that sentencing guidelines eliminated racial disparities.[177] Together, these notions supported the conclusion that technical projects could fix problems of race and punishment by standardizing sentencing inputs and outcomes.

But the guidelines did not "fix" sentencing; rather, they mechanized it. Beyond the concerns of redistributing sentencing discretion – which are significant[178] – the guidelines made the distribution of punishment more standardized. In large part, this disadvantaged minority defendants because various mitigating factors were excluded or given limited application.[179] To the extent that these guidelines were implemented to address or reduce racial disparities, their "success" is highly debatable. Racial disparities increased in states with or without guidelines during the tough-on-crime decades of the 1980s-1990s. While supporters of the guidelines advance studies demonstrating reductions in disparity in guideline states, these studies often consider legal factors – like criminal history – as nonracial factors. But this assumption takes for granted the social construction of criminal records. It takes for granted that "the larger context of penal expectations – what constitutes disorder, which behaviors are considered dangerous, and how government should respond – is race-

[176] *Compare* Charles Ogletree, *The Death of Discretion? Reflections on the Sentencing Guidelines*, 101 HARV. L. REV. 1938, 1958 (1988) (calling for race-conscious provisions to ameliorate the U.S. Sentencing Commission's failure to address racial disparities in federal sentencing guidelines) *with* Samuel L. Myers, *Racial Disparities in Sentencing: Can Sentencing Reforms Reduce Discrimination in Punishment*, 64 U. COLO. L. REV. 781, 792 (1993) (respectfully critiquing Ogletree's intervention as "falling into the same trap" as other race-conscious affirmative action initiatives while demonstrating the shortcomings of parole guidelines in reducing racial disparities for parole release). For insight to the vagueness of "arbitrary" sentencing, see NAOMI MURAKAWA, THE FIRST CIVIL RIGHT: HOW LIBERALS BUILT PRISON AMERICA 106-111 (2014).

[177] For a list of studies proclaiming guidelines' success in reducing disparities at sentencing, *see* Albert W. Alschuler, *A Plea for Less Aggregation*, 58 U. CHI. L. REV. 901, 915-16 (1991); Naomi Murakawa & Katherine Beckett, *The Penology of Racial Innocence: The Erasure of Racism in the Study and Practice of Punishment*, 44 LAW & SOC'Y REV. 695, 713 (2010); *see generally* SAMUEL WALKER, TAMING THE SYSTEM: THE CONTROL OF DISCRETION IN CRIMINAL JUSTICE 1950-1990 (1993).

[178] For an overview of the prosecutorial discretion dilemma, see, e.g., Rachel E. Barkow, *The Ascent of the Administrative State and the Demise of Mercy*, 121 HARV. L. REV. 1332 (2008).

[179] *See* Ogletree, *supra* note __; *see also* Roth, *supra* note __ (mechanization only goes one way).

neutral."[180] Indeed, Albert Alschuler surmised that such studies often "reveal only that the new regime has more consistently applied its own standards" without interrogating those "standards."[181] Nevertheless, the tinkering with technical sentencing guidelines is considered an appealing intervention when faced with issues of persistent racial disparities.[182]

One could ascribe resistance to recognizing the persistence of structural racism permeating in the carceral system as a feature of the standard technological advancement narrative as well. As Naomi Murakawa demonstrates in the context of the federal sentencing guidelines, conservatives and progressives alike converged on modernizing the carceral machine as a means to address structural issues of race in society. For progressives, eliminating the threat of arbitrary discretion would do the work of vindicating racial justice. For conservatives, it would eliminate the possibility of soft judging. On both sides, however, there was a belief that technology could make sentencing better, even if (or because) it required disengaging from reality.[183] And so the guidelines would proliferate and technologies would suffice as a filler for racial justice concerns even as racial disparities would continue and expand.

Putting aside the empirical debate about whether the tools reduced racial disparities or not, they certainly transformed sentencing outcomes. Sentences increased. Racial disparities increased. Often, sentencing guidelines created a problematic anchor from which to consider racial disparities. As Jelani Jefferson Exum recently noted, the federal sentencing guidelines' anchor crack sentences to powder sentences while overlooking the substantive question of what makes *drug* sentences just for any defendant.[184] Even as the guidelines have been revised to encourage flexibility, they manipulate what judges and society consider the base from which any sentence should be distributed.

Yet sentencing's technological counter-narrative suggests that the institutionalization of *technical* guidelines had other effects on society beyond just the transformation of sentencing outcomes. The proliferation of actuarial risk tools in response to sociohistorical phenomenon of mass incarceration indicates that technical guidelines may have triggered two transformations pertaining to race and technology at sentencing: they

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[180] Naomi Murakawa & Katherine Beckett, *The Penology of Racial Innocence: The Erasure of Racism in the Study and Practice of Punishment*, 44 LAW & SOC'Y REV. 695, 713 (2010).

[181] *See, e.g.*, Albert Alschuler, *The Failure of Sentencing Guidelines: A Plea for Less Aggregation*, 58 U. CHI. L. REV. 901 (1991); Albert Alschuler, *Monarch, Lackey, or Judge?*, 64 U. COLO. L. REV. 723 (1993).

[182] Jelani Jefferson Exum, *Forget Sentencing Equality: Moving from the Cracked Cocaine Debate toward Particular Purpose Sentencing*, 18 LEWIS & CLARK L. REV. 95 (2014).

[183] *See* MURAKAWA, *supra*,__ at 109.

[184] Exum, *supra* note __, at 119-22; 137-43.

reified structural inequality while deifying technical formalism.[185] In other words, the guidelines as predecessor technical tools borne of formal equality undermine the role that racial and other social justice claims have on the proliferation of actuarial risk tools now.

Take reification first. The proclamation that guidelines "worked" may have naturalized persistent racial inequities in society and in sentencing outcomes. After creating guidelines with little reference to the political realities of the times – for example, the racialized enforcement of drugs[186] – sentencing guidelines often expanded racial disparities rather than reducing them. Nowhere is this more prevalent than in the implementation of criminal history enhancements as recidivism predictors, a point that Bernard Harcourt emphasizes in his assault on the effect of the actuarial.[187] Yet this critique applies more broadly. When juxtaposed against the objective and standardized technical guidelines, a "natural" conclusion is that black defendants receive disparate sentences because they engage in more crime. Refusal to engage with the broader structural conditions that lead defendants of color to have longer criminal records is in itself a kind of structural racism.[188]

Actuarial risk tools build from this insight in more overt ways. The presumption that social conditions are natural is a necessary precondition to the advance of actuarial risk tools to distribute punishment. It suggests, that all defendants are formally equal, but some are more likely to commit crime in future. This is contrary to reality,[189] and can function to "launder in" structural racism.[190] As I have repeatedly asserted, the "objective" factors that culminate to produce "risk" reflect the realities of social

[185] *See* DERRICK BELL, FACES AT THE BOTTOM OF THE WELL: THE PERMANENCE OF RACISM 101 (1993) ("the legal rules regarding racial discrimination have become not only reified (that is, ascribing material existence and power to what are really just ideas) – as the modern inheritor of realism, critical legal studies, would say—but deified.").

[186] *See, e.g.*, Exum, *supra* note __ at 136 (noting that "irrational sentencing policies are largely facilitated by unequal law enforcement and prosecution tactics").

[187] *See* Bernard E. Harcourt, *Risk as a Proxy for Race: The Dangers of Risk Assessment*, 27 FED. SENT'G REP. 237 (2015); *see also* AGAINST PREDICTION.

[188] *See* Murakawa & Beckett, *supra* note __.

[189] Bernard Harcourt spends a great deal of time explaining why orienting criminal justice policies around risk is not likely to reduce crime, focusing on the elasticities of various subpopulations. *See* AGAINST PREDICTION. I have summarized this empirical argument in the context of "rehabilitative" tools as well. *See* Eaglin, *Against Neorehabilitation*.

[190] *See* GEOFFREY WARD, THE BLACK CHILD SAVERS: RACIAL DEMOCRACY AND JUVENILE JUSTICE (2012) (laundering in racial bias in structured decisionmaking generally); Tim Goddard & Randolph Myers, *Against Evidence-Based Oppression: Marginalized Youth and the Politics of Risk-Based Assessment and Intervention*, 21 THEORETICAL CRIMINOLOGY 151, 157 (2017) (laundering in racial bias in risk tools specifically).

neglect and susceptibility to police surveillance.[191] While tools do not consider race directly, they consider factors that correlate with historical disadvantage. As two criminologist recently put it:

> Why are you at risk? Well, perhaps you have been involved in law breaking in the past – or, perhaps you have spent time as a young Black man in a community where you will be watched very closely and likely detained for behaviors that would not draw the attention of police in white suburban neighborhoods.[192]

One could expand this out, as Naomi Murakawa and Katherine Beckett have, to question why interpersonal violence disproportionately occurs amongst marginalized populations, particularly young black men. Structural disadvantage – meaning lack of access to resources – gives important context to both criminal history and interpersonal violence which actuarial risk tools (and their proponents) deflect.[193] In other words, the produced disorder of criminal administration becomes the natural order of things when translated into technical assessments of "risk."[194]

Actuarial risk tools reify race in the sense that they breathe life into the pervasive stereotype of black criminality, framed in the rhetoric of objective and empirical data. Actuarial risk tools treat socially constructed factors as objective and translate them into an assessment of criminal propensity. While justified as a technical means to reduce incarceration, institutionalizing this reform threatens to reinforce the heart of the criminal-black-man myth. That is, it may affirm the notion that black people (young black men in particular) are more dangerous.[195] This is a place we have been before.[196] Only now the data being used is inaccessible and the narrative surrounding it – that of technology – is more durable because we are further enmeshed in the pursuit of technical knowledge.

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[191] Eaglin, *Against Neorehabilitation*; Eaglin, *May the Odds Never Be in Your Favor*, Huff Post (2015); Eaglin, *Constructing Recidivism Risk*. For a powerful summary of the ways black people are disproportionately vulnerable to racialized policing techniques, see Devon Carbado, *Predatory Policing*, 85 UMKC LAW REV. 548, 549 (2017).

[192] Tim Goddard & Randolph Myers, *Against Evidence-Based Oppression: Marginalized Youth and the Politics of Risk-Based Assessment and Intervention*, 21 THEORETICAL CRIMINOLOGY 151, 157 (2017).

[193] *See* Murakawa & Beckett, *supra* note __.

[194] *See* AGAINST PREDICTION.

[195] *See, e.g.*, Dorothy E. Roberts, *Foreword: Race, Vagueness, and the Social Meaning of Order Maintenance Policing*, 89 J. CRIM. L. & CRIMINOLOGY775 (1999); KATHERYN RUSSELL-BROWN, THE COLOR OF CRIME (2d Ed. 2009).

[196] *See* KHALIL GIBRAN MUHAMMED, THE CONDEMNATION OF BLACKNESS (2010).

To the second point, the introduction of technical guidelines may have deified technical reforms both as *the* way to fix sentencing and as *the* means to address racial disparities. Here, following the insights of both political scientist Naomi Murakawa and historian Elizabeth Hinton, efforts to modernize the carceral apparatus since the 1960s have been the way to address critiques of criminal justice and society more broadly.[197] To the extent that advocates encourage risk tools as a means to address the crisis of mass incarceration, it appears in line with these previous efforts. Certainly, some states and the federal government are investing a significant amount of time, energy and resources in developing and defending risk tools in recent years.[198] The critique that judges have the "wrong information" and technology can improve upon it similarly bolsters the analogy.

The larger point here, however, is that the technical guidelines may have encouraged the technical formalism with which many approach actuarial risk tools today. By technical formalism, I refer to two things. First, the broader notion that "recidivism risk" is objective rather than socially constructed, and that factors used to construct it are objective and neutral as well. Second, the notion that by achieving empirical accuracy regardless of tool construction, tools are legitimate at sentencing just as much as they are in other contexts. Both encourage allowing technology to dictate sentencing policy rather than our human values.

Two caveats are important here. This argument does not suggest that relying on inaccurate risk tools is a better alternative. No, the point is that we are choosing to double down on technology in the face of a social crisis. We have, following Harcourt, "chosen this [technical] conception of just punishment . . . or rather, it chose us."[199] When we cede the foundation of sentencing to technical knowledge because of racial justice critiques, we are rendering ourselves slaves to the pursuit of technical knowledge. It won't fix discrimination, but it may exacerbate structural racism in ways we cannot yet fathom.

To the second caveat, this critique is not meant to excoriate the notion of sentencing guidelines – guidance to the court is valuable. But the way we chose to write guidelines – as technical projects derived of World War II and Cold War technologies – had an impact that cannot be quantified, but is being replicated. To the extent that scholars and advocates insist upon a "compared to what" argument, that too is the technological advancement narrative at work in sentencing. There are other ways to address racial inequality in the distribution of punishment. As Jelani

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[197] ELIZABETH HINTON, FROM THE WAR ON POVERTY TO THE WAR ON CRIME: THE MAKING OF MASS INCARCERATION IN AMERICA (2016); NAOMI MURAKAWA, THE FIRST CIVIL RIGHT: HOW LIBERALS BUILT PRISON AMERICA (2014).

[198] *See* Eaglin, *supra* note __ (for example Virginia, Pennsylvania and the federal system).

[199] AGAINST PREDICTION, at 31-32.

Jefferson Exum recently suggested, one approach would be to focus on the purposes of punishment that guide judges.[200] Another is to write the guidelines substantively rather than technically – a point Albert Alschuler has made for years.[201] In other words, state actors could try to parse out what makes a defendant more or less culpable *descriptively.* We chose not to do that, and that decision had a substantive effect on society that actuarial risk tools bring to light. It eroded our normative values about how to limit or regulate technologies at sentencing.

C. From Dangerousness to Recidivism Risk

As a final transformation, the extent to which we care about technical assessments of recidivism risk as a social norm is the effect of previous punishment practices and policies. The pursuit of technical knowledge interwoven with the transformation of punishment practices would legitimate and obscure the conflation of "recidivism risk" and "future dangerousness" upon which actuarial risk tools now build. In this context, three things happened at once to facilitate this seemingly pervasive overlap in terms: the "system" expanded while opportunities for exit disappeared, particularly for poor and marginalized communities, in invisible ways; ongoing technosocial projects committed to shoring up expertise would legitimate the transition from dangerousness to risk; and the politics of crime would drive a generalizing fear that spans from fear of danger to fear of any crime, no matter the type, under the assumption that people who commit low level crimes could actually be much more threatening and require incapacitation. These transformations converge to sustain a nondiscriminating acceptance of actuarial risk tools at sentencing.

The idea of a criminal justice "system" creates a problematic closed loop effect on criminal justice actors. As criminal justice actors embraced abstraction and system-wide visualization through the guidelines, the tools would simultaneously obscure various problematic realities in criminal justice. In particular, the guidelines would obscure the significant impact of prosecutorial discretion in charging different crimes for similar behavior.[202] It centered sentence outcomes on the basis of quantifiable

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[200] Exum, *supra* note __.

[201] *See, e.g.*, Albert Alschuler, *The Failure of Sentencing Guidelines: A Plea for Less Aggregation*, 58 U. CHI. L. REV. 901 (1991); Albert Alschuler, *Monarch, Lackey, or Judge?*, 64 U. COLO. L. REV. 723 (1993).

[202] *See, e.g.*, Sonja B. Starr & M. Marit Rehavi, *Mandatory Sentencing and Racial Disparity: Assessing the Role of Prosecutors and the Effects of Booker*, 123 YALE L.J. 2, 6 (2013) (noting the "surprisingly wide gap" between theoretical and qualitative literature on prosecutorial discretion shaping sentencing outcomes and empirical research that "effectively ignores that role"). As Starr and Rehavi specifically note: "the guidelines

metrics like drug weight or amount stolen, even when these metrics could easily distort the significance of the crime and led to objectively irrational sentence outcomes.[203] It also erased important distinctions between defendants and crimes in the effort to standardize outcomes.[204] Following another scholar's recent critique of system in criminal justice, "'[c]rime' was where the [technosocial reform] began, a category of inputs from somewhere out there in society that, for the system's purposes, could be taken as a given."[205] The abstract technosocial tools would obscure the how and the why of the processing.

This "closed loop" phenomenon would prove critical to the advance of actuarial risk tools. The very idea that a risk assessment tool could facilitate justice presumes that there is justice in the data that the system produces. Said differently, technosocial reforms like the guidelines can inadvertently erase "the different actors with different interests, incentives, and [prior assumptions.]"[206] With the guidelines, it erased the presumptions of prosecutors, technical developers, commissioners and more. Risk assessment tools function similarly, erasing the assumptions and flaws that produce the data being manipulated as much as the meanings ascribed to the manipulated data.[207]

At the same time, social science researchers were hard at work reaffirming the legitimacy of social scientific expertise after critiques placed doubts on the assessment of future dangerousness.[208] In particular,

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recommendation is itself the end product of charging, plea-bargaining, and sentencing fact finding." *Id*.

[203] *See* Albert W. Alschuler, *A Plea for Less Aggregation*, 58 U. CHI. L. REV. 901, 918 (1991) (discussing "troubling inequalities produced in the name of equality by sentencing guidelines" and discussing Chapman v. United States, 500 U.S. 453 (1991)).

[204] *Id*. at 918-924.

[205] Mayeux, *supra* note __, at 17.

[206] Benjamin Levin, *Values and Assumptions in Criminal Adjudication*, 129 HARV. L. REV. F. 379, 384 (2016).

[207] Benjamin Levin, *Values and Assumptions in Criminal Adjudication*, 129 HARV. L. REV. F. 379 (2016) (actors in the system); Jessica Eaglin, *Constructing Recidivism Risk*, 67 EMORY L.J. 59 (2017) (technologists manipulating data); see also generally HINTON (manipulation of data).

[208] Criticism stemmed from reforms concerning the mentally ill led to legal, political, and empirical critiques of "psy-experts" assessing future dangerousness to influence the confinement of criminal defendants. Jonathan Simon, *Reversal of Fortune: The Resurgence of Individual Risk Assessment in Criminal Justice*, ANN. REV. LAW & SOC'Y 397 (2005). From the social scientific perspective, research demonstrated that the results of clinical predictions of future dangerousness were often wrong. JOHN MONAHAN, THE CLINICAL PREDICTION OF VIOLENT BEHAVIOR (1981). From the legal perspective, a series of cases concerning the due process rights of mentally ill ex-prisoners cast doubt on the prevailing idea that judges and psy-experts should predict dangerousness in criminal justice decisionmaking. These critiques converged with political resistance grounded in notions of equality – demands not to treat people differently based on race, ethnicity, gender, age, and social class. Michael Tonry, *Legal and Ethical Issues in the Prediction*

a series of studies were launched that would culminate in the emphatic transition from future dangerousness to risk.[209] Risk is much broader in scope and administrative in origin.[210] Any defendant presents some risk of future criminal behavior, just as any law-abiding individual presents the same possibility. [211] Starting with the deinstitutionalization of mental health facilities and expanding with the rise of preventive detention laws, actuarial risk tools were a point of ongoing research whilst punitive policies increasingly endorsed reliance on incarceration. As the line between sexually violent predators and criminal justice blended, resistance to actuarial risk tools in sentencing would diminish. So while all or nothing clinical assessments of dangerousness were debunked, broader notions of risk were given social scientific legitimacy that spread from mental health to the criminal justice context. [212]

Finally, fear of crime would stoke anxieties and fuel the politicization of any criminal risk, including the risk of returning for any reason. Two diverging perceptions of criminals as either evil or indecipherable gave legitimacy to fears of any kind of lawbreaking, regardless of the crime committed or the context in which it occurred.[213] Politicized, racialized, and media-fueled instances of individuals committing crimes after release from criminal justice custody only confirmed these fears.[214] In addition, messaging that crime existed exclusively within the individual made the

of Recidivism, 26 FED. SENT'G REP. 167 (2014). When added to the larger penological shift away from rehabilitation, a general skepticism emerged regarding criminal justice decisionmakers using or making predictions of future dangerousness. Michael Tonry, *Legal and Ethical Issues in the Prediction of Recidivism*, 26 FED. SENT'G REP. 167 (2014); see also Jonathan Simon, *A Reversal of Fortune: The Resurgence of Individual Risk Assessment in Criminal Justice*, ANN. REV. L. & SOC. SCI. 397 (2005).

[209] Nikolas Rose, *At Risk of Madness*, in EMBRACING RISK: THE CHANGING CULTURE OF INSURANCE AND RESPONSIBILITY 211-12 (eds. Baker & Simon 2014) (providing an overview of the research conducted by Herbert Steadman and John Monahan in conjunction with the MacArthur Foundation).

[210] *Id*. at 210-13.

[211] *See id*. Cf. Sandra G. Mayson, *Dangerous Defendants*, 127 YALE L. J. 490 (2018).

[212] For a more in depth consideration of the rise of risk as compared to dangerousness in the mental health context, see Nikolas Rose, *At Risk of Madness*, in EMBRACING RISK 209 (eds. Tom Baker & Jonathan Simon 2002); Herbert Steadman et al., *From Dangerousness to Risk Assessment: Implications for Appropriate Research Strategies*, in MENTAL DISORDERS AND CRIME (1993); Robert Castel, *From Dangerousness to Risk*, in THE FOUCAULT EFFECT: STUDIES IN GOVERNMENTALITY 281 (eds. Graham Burchell et al., 1991).

[213] For discussion of these dual images, see DAVID GARLAND, THE CULTURE OF CONTROL: CRIME & SOCIAL ORDER IN CONTEMPORARY SOCIETY 134 (2001); see also JONATHAN SIMON, MASS INCARCERATION ON TRIAL 36 (2014).

[214] As a notable example, consider the extensive literature on Willie Horton and sentencing policy. For discussion, see MURAKAWA, at 108.

prospect of incapacitative punishment deeply appealing.[215] States started implementing severe recidivist enhancements.[216] Simultaneously, the risk of recidivism of any type would take hold in the public psyche. What emerged was a concern for recidivism of any kind.

Yet starting in the late 1980s, significant changes to criminal justice both expanded the opportunities for capture within the criminal apparatus while erasing the opportunity for successful exit, particularly for poor and marginalized defendants. Increased funding to police and increased infrastructure produced an upsurge in arrests for comparatively minor crimes.[217] As Hinton demonstrates, these efforts were specifically directed at poor urban communities, which help explains the overrepresentation of people of color in that arrest surge.[218] Increased contact, in turn, leads to increased arrest and possible conviction, even if only for misdemeanor offenses.[219] Arrests and convictions for even misdemeanor offenses can trigger a cycle of surveillance and exclusion that makes the process of exiting the criminal justice apparatus more difficult.[220] Among other practices, the rise of criminal justice debt would also trap defendants, creating a revolving door of arrests and convictions and technical violations as well.[221] Actuarial tools assessing recidivism risk measure these occurrences just as much as it predicts "future dangerousness."[222]

Understanding this conflation is critical to contextualizing the institutionalization of actuarial risk tools at sentencing now. Repeat offending is frequently, if not ubiquitously, associated with the idea of future dangerousness and future offending. It is, as Harcourt asserts, "a

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[215] Sharon Dolovich, *Exclusion and Control in the Carceral State*, 16 BERKELEY J. CRIM. L. 259, 265 (2011).

[216] *See supra* notes __; *see also* Nancy J. King, *Sentencing and Prior Convictions: The Past, the Future, and the End of Prior Conviction Exception to Apprendi*, 97 MARQ. L. REV. 523, 532-37 (2014) (providing an overview of recidivism enhancements starting in the 1970s).

[217] *See* HINTON.

[218] *Id*.; see also Beckett

[219] "A variety of social forces (including broken windows policing, racial stereotypes, racial segregation, and Fourth Amendment law) converge to make African Americans vulnerable to ongoing police surveillance and contact." Devon Carbado, *Predatory Policing*, 85 UMKC LAW REV. 548, 549 (2017).

[220] *Id*., *see also* Eisha Jain, *Arrests as Regulation*, 67 STAN. L. REV. 809, 813 (2015) (noting how arrests, even for misdemeanor offenses, function as a "screening tool" or "a low-cost audit mechanism" to access social services, obtain jobs, and other everyday functions).

[221] *See, e.g.*, ALEXES HARRIS, A POUND OF FLESH: MONETARY SANCTIONS AS PUNISHMENT FOR THE POOR (2016); Beckett & Murakawa, *supra* note __, at 717-719 (noting protracted exit points from the system and highlighting increasing monetary penalties and alternatives to incarceration).

[222] *See* Eaglin, *supra* note __.

semiotic shaped by the new technology of prediction."[223] We believe risk tools are indispensable to sentencing now because it evokes a threat of dangerousness. We associate recidivism with dangerousness because that is what technical projects started to predict.

Of course, the preoccupation with recidivism risk cannot be attributed to the creation of guidelines alone. Many states did not adopt guidelines, and many states that did chose not to maintain some of the most draconian policies reflected in, for example, the federal sentencing guidelines. Nevertheless, the pursuit of system control through technical reforms naturalized the mutation of sentencing such that actuarial assessments of recidivism risk would appear normal if not necessary components in the felony sentencing process. This, combined with a pervasive faith in technological advancement, would prove central to the rise of risk tools as a response to demands that law and policymakers address the pressures of mass incarceration.

IV. REFRAMING THE RISE OF RISK TOOLS AT SENTENCING

So far this Article exposes a counternarrative about actuarial risk tools entering sentencing. Contrary to the standard narrative that technology advances to improve sentencing, this narrative suggests that risk tools' advance is the effect of social transformations catalyzed by previous sentencing technologies. Technology may be advancing, but society has changed in problematic ways to make statistically robust risk tools more palatable at sentencing.

This Part takes up the normative value of this counternarrative. Part A situates the counternarrative in political terms. It considers whether exposing the counternarrative is good or bad in the face of mass incarceration. Part B identifies the value of this counternarrative in practical context – for the courts in sentencing jurisprudence and for the normative debates on the future of sentencing reforms. It pushes to the fore problematic trends obscured in debates about accuracy and rhetoric of technological advancement.

A. The Politics of Narrative

The standard narrative and its counternarrative offer competing ways to frame the expansion of actuarial risk tools at sentencing. Framing narratives shape, drive, and justify reforms and debate. Right now, tool accuracy is a topic of hot debate because it fits within the standard

[223] AGAINST PREDICTION, at 190-91.

narrative of technological advancement. While this narrative has a political value because it depoliticizes mass incarceration, this Part suggests that the cost of this reform is greater than that narrative's logical end point – accuracy – can bear. As such, it asserts that the counternarrative is necessary to shape debates about the expansion of actuarial risk tools.

To the extent that law and policymakers pose risk tools as means to reduce incarceration, they are playing on the turn toward empiricism as a means to cope with political pressures of mass incarceration.[224] The standard narrative works well in this respect. To the extent that race and class are raised in this debate, they are secondary to the larger concern of technology for technology sake: empirical accuracy. For example, claims that including certain factors which undermine social justice values are often dismissed because they would undermine tool accuracy.[225] Claims that actuarial risk tools will disproportionately mischaracterize racial minorities, too, are dismissed on the basis of technical accuracy.[226] Yet the social history of risk tools indicates that technical accuracy does not account for why states are adopting the tools. This helps explain why recent studies debating whether the tools are more or less accurate than judges are not likely to temper risk tools' advance.[227] Nevertheless, accuracy operates to narrow the scope of critique about risk tools. As a natural endpoint of the technological advancement narrative, it also urges the inclusion of factors that undermine philosophical and normative limits. In other words, "accuracy" debates simply cannot bear the full implications of risk tools' ascent. That is not its purpose.

This displacement makes risk tools as a technosocial reform also a quintessential neorehabilitative reform. The language of technical accuracy disaggregates crime from social and governmental forces and instead focuses on individual character and responsibility.[228] Even as

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[224] *See, e.g.*, JOHN PFAFF, LOCKED IN: THE REAL CAUSES OF CRIME (encouraging empiricism as means to cope with political pressures of mass incarceration); *but see, e.g.*, Benjamin Levin, *Values and Assumptions in Criminal Adjudication*, 129 HARV. L. REV. F. 379, 387 (2016) (highlighting shortcomings in the "power of empiricism"); *cf.* Alice Ristroph, *Desert, Democracy, and Sentencing Reform*, 96 J. CRIM. L. & CRIMINOLOGY 1293 (2006) (noting the "age of empiricism" as early as 2005 and critiquing its influence on retributive theories of punishment).

[225] *See* Eaglin, *Constructing Recidivism Risk* (summarizing accuracy versus equality claims).

[226] *See, e.g.*, Sandra G. Mayson, *Bias In, Bias Out* (draft on file with author).

[227] *See* Julia Dressel and Hany Farid, *The Accuracy, Fairness, and Limits of Predicting Recidivism*, 4 SCIENCE ADVANCES 1 (Jan. 17, 2018).

[228] Eric J. Miller, *Drugs, Courts, and the New Penology*, STAN. L. & POL'Y REV. (2009) (noting language of therapy at center of drug courts operates in same fashion); Eaglin, *Against Neorehabiltiation*, 66 SMU L. Rev. 189 (2013) (connecting drug courts and risk tools under umbrella of neorehabilitation).

scholars and policymakers try to write politics into tools, the standard narrative operates to silence them. For progressives and conservatives alike, this limitation has appeal. For progressives, this opens the possibility of rehabilitation and diversion long considered untenable for political reasons. For conservatives, it maintains a radical individualism introduced in the 1970s that detracts from broader critiques about structural forces.[229] For both, it offers political cover for judges and other decisionmakers in the face of pressures to do "smart" reforms. These strands converge for both progressives and conservatives alike to agree upon this turn toward technosocial reform.

Some would suggest that this is a good thing. One could argue that technical accuracy offers a neutral platform to facilitate decarceration.[230] After all, *empiricism* – not selective incapacitation – is the foundation of agreement.[231] This is the line the ALI tries to draw in the Model Penal Code: Sentencing provision endorsing actuarial risk tools. They suggest ambivalence to increases in incarceration while endorsing decreases on the basis of risk. It is the faith in data-driven interventions that drives the reform. That reform exists at the end of a larger narrative about technical advancement. From this perspective, a counternarrative is detrimental. Countering the narrative means countering the depoliticized platform. Liberalism, some would suggest, discourages such course of action in the face of bipartisan recognition of the need to reduce reliance on incarceration.[232]

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[229] *See, e.g.*, WILLIAM KELLY, ET AL., FROM RETRIBUTION TO PUBLIC SAFETY: DISRUPTIVE INNOVATION OF AMERICAN CRIMINAL JUSTICE 13-15 (2017) (emphasizing that it would be too difficult to change structural problems as part of an endorsement of actuarial risk tools as "an effective method or process to sort disordered, and thus divertible defenders from those who are violent or habitual offenders and need to be separated from society, or those who are chronic offenders or just plain criminals and deserve retribution and punishment."); see also Goddard & Myers, supra note XX, at 162 (noting that evidence-based interventions ignore structural causes of crime considered not "amenable to change.").

[230] *See* Dan M. Kahan, *The Secret Ambition of Deterrence*, 113 HARV. L. REV. 413, 478-81 (1999).

[231] *See, e.g.*, Fan, *supra* note __, at 639-40 (citing to Dan M. Kahan, *The Cognitively Illiberal State*, 60 STAN. L. REV. 115, 145-48 (2007)).

[232] *See* Kahan, *supra* note __ (noting the liberal argument in support of deterrence's technical façade). For general discussion of the bipartisan nature of criminal justice reforms prevalent in the states, see, e.g., *The Criminal Justice Challenge*, RIGHT ON CRIME, http://rightoncrime.com/the-conservative-case-for-reform/ (conservative reform agenda); *Mass Incarceration*, AM. CIVIL LIBERTIES UNION, https://www.aclu.org/issues/smart-justice/mass-incarceration (progressive reform agenda); Barak Obama, *The President's Role in Advancing Criminal Justice Reform*, 130 HARV. L. REV. 811 (2017) (highlighting bipartisan agendas). *See also* Sharon Dolovich & Alexandra Natapoff, *Mapping the New Criminal Justice Thinking*, in THE NEW CRIMINAL JUSTICE THINKING 1 (Sharon Dolovich & Alexandra Natapoff, eds. 2017) ("there is an

This approach treats the institutionalization of actuarial risk tools as costless, or at least manageable at the outset. For example, John Pfaff encourages the expansion of actuarial risk tools despite the controversial inclusion of factors that correlate with race and gender in "deeply problematic ways" because they offer a "significant" political advantage that can lessen systemic accountability problems in criminal justice.[233] Similarly, Kevin Reitz encourages reforms that "domesticate" risk tools at sentencing in part because it encourages "lenity" in response to the pressures of mass incarceration.[234] Even critics of the tools suggest that risk assessments are necessary, converging instead on limiting its construction or instances of its use. Actuarial assessments of risk, these critiques suggest, are just one of many tools available to cope with mass incarceration.

The counternarrative set forth here illuminates the shortcoming of this perspective. The institutionalization of statistically robust actuarial risk tools is not thaumaturgic – it is not a solution that emerges out of nothing but technical will.[235] Rather, it is the effect of prior technologies shaping our human values while obscuring deeply political transformations in society. To concede on the basis of politics to the expansion of risk tools threatens to mask the difficult problems of historical change that create the foundation for their very expansion. It threatens to depoliticize mass incarceration, while legitimating a particular path away from its current size and scope.[236] That path includes the expansion of surveillance mechanisms and logics from the prison to society. The standard narrative, when combined with the fear of politics, legitimates these transformations even while it avoids speaking of them. Whether this reform changes sentencing outcomes – a point that advocates diverge on for various reasons[237] – it will change us. As the counternarrative illuminates, these reforms *already have* changed us. They changed the conditions on which we interrogate technical projects at sentencing and our understanding of its functions. Particular care, reflection and skepticism should be accorded to this development at the precipice of continuing further down this path.

Exposing the tension between reality and the narrative that facilitates tool expansion offers three valuable insights to current debates about

emerging willingness on all sides to question, challenge, and rethink our existing approach to preventing and punishing crime").

[233] *See* Pfaff, *supra* note __, at 198-201.

[234] Reitz, *supra* note __ (criticizing risk tool critics for ahistorical critiques).

[235] *See* Michel Foucault, *Politics and the Study of Discourse*, THE FOUCAULT EFFECT: STUDIES IN GOVERNMENTALITY 68 (Burchell et al. 1991).

[236] Notably, this "depoliticized" approach is exactly how we ended up with mass incarceration. As scholars like Murakawa, Hinton, and Wacquant have shown, it was the areas of agreement rather that disagreement within which the perilous contours of mass incarceration took form.

[237] *See* Starr, *supra* note __ (highlighting the inconsistency in supporters' arguments).

sentencing reforms. First, exposing this oppositional discourse undermines the strategically simplistic advance of actuarial risk tools. This is a good thing. A progressive politics is one that takes historical context into account. While advocates of risk tools appear to have the upper hand on the historical point, [238] this Article makes that platform far more ambivalent. Thus, it urges critical reflection and caution when wading into the waters of risk-based sentencing reforms. It is not a foregone conclusion that we should pursue the proliferation of actuarial risk tools at sentencing, nor has their expansion prevented a meaningful change in course. This counternarrative offers a new foundation for pause; one that does not invite the standard narrative's singular emphasis on technical accuracy.

Second, this counternarrative offers new insight to the balance of various criminal justice reforms being pursued to address mass incarceration. Various reforms have emerged to address the political and social pressures of mass incarceration. How we choose to reduce reliance on incarceration will have implications for the long-term effort to dismantle the sociohistorical phenomenon of mass incarceration.[239] In a recent article, Benjamin Levin offers a particularly insightful framework to engage with these diverging reforms.[240] As he suggests, pragmatic reforms that focus on the quantitative aspects of mass incarceration can conflict with or undermine the potential for reforms that address the sociohistorical aspects this phenomenon. He notes, as many critics have, that a particular shortcoming of the pragmatic approach may be the focus on low level, nonviolent drug offenders to the exclusion of other, broader structural reforms that produce and sustain crime and inequality in the United States.

This counternarrative builds on Levin's intervention by illuminating the significance of a certain *type* of pragmatic sentencing reform that requires particular skepticism and caution: those that invoke the language of science and technology as the basis of transformation.[241] Technosocial

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[238] *See* Reitz, *supra* note __; MPC; Nancy J. King, *Sentencing and Prior Convictions: The Past, the Future, and the End of Prior Conviction Exception to Apprendi*, 97 MARQ. L. REV. 523, 532-37 (2014).

[239] *See, e.g.*, Jessica M. Eaglin, *Against Neorehabilitation*, 66 SMU L. Rev. 189 (2013); Jessica M. Eaglin, *The Drug Court Paradigm*, AM. CRIM. L. REV. (2016); Chaz Arnett, *Virtual Shackles: Electronic Surveillance and the Adultification of Juvenile Courts*, 108 J. CRIM. L. & CRIMINOLOGY 399 (2016); Chaz Arnett, *From Decarceration to E-Carceration* (forthcoming paper on file with author); Aya Gruber et al., *Penal Welfare and the New Human Trafficking Intervention Courts*, 68 FLA. L. REV. 1333 (2016).

[240] Levin, *supra* note __.

[241] Risk tools exist at the intersection of both discourses on science (rehabilitation as therapy) and technology (risk management as technical accuracy).

reforms – which always draw on the actuarial[242] – are not just one of many pragmatic criminal justice reforms being adopted in the face of mass incarceration. They are meant to change society. Yet because they operate within the narrative of technological advancement, little scrutiny is applied to how or why society accepts those changes. By tracing the origin of risk tools along with transformations in society, this contribution joins in Levin's insight that not all criminal justice reforms are the same. It also bolsters the assertion that, in the grand scheme of criminal justice reforms emerging in the face of mass incarceration, the institutionalization of statistically robust actuarial risk tools is neither necessary nor preferable despite their bipartisan appeal.[243]

Finally, this Article joins a growing literature aimed at igniting the humanities in the fight against the sociohistorical phenomenon of mass incarceration.[244] Technological sentencing reforms are remarkable because they do more than just diffuse motivation for more expansive sentencing reforms aimed to address deeper issues of punishment and society. This Article demonstrates how these reforms actually strip society of the conceptual foundations to resist both future technological reforms *and* the status quo. So while it is true that actuarial risk tools could stall reforms beyond the low-level, nonviolent drug offenders whom reformers are most keen to consider,[245] its implications go far beyond that critique. Such reforms shape and legitimate "moral, political, and intellectual sensibilities" about justice that should be interrogated but will not. The capacity to scrutinize these sensibilities is lost because the underlying social concepts – our words and their meaning – are changing to accommodate the technologies.[246] The technologies, in turn, legitimate the status quo. The implications are concerning. All the empirical studies in the world could demonstrate the negative effect of the tools, but without the words to conceptualize a problem society is helpless to resist their advance. Yet resisting their advance is necessary to resisting the status quo. This Article illuminates the need for a complementary approach to oppositional research. By writing into a space dominated by statistics, it illuminates the necessity of the humanities as a form of resistance.

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[242] This is so because the tools are developed on the basis of WW II/Cold War technologies wherein "the predictor" was *the* intervention of choice considered to have championed the war. *See* HEYCK, *supra* note __.

[243] Bernard E. Harcourt, *Risk as a Proxy for Race: The Dangers of Risk Assessment*, 27 FED. SENT'G REP. 237 (2015); see also Eaglin, *Against Neorehabilitation* (2013).

[244] *See, e.g.*, HINTON (history); Mariana Valverde, *"Miserology": A New Look at the History of Criminology*, in THE NEW CRIMINAL JUSTICE THINKING 324 (2017) (history); BERNARD E. HARCOURT, THE ILLUSION OF FREE MARKETS: PUNISHMENT AND THE MYTH OF NATURAL ORDER (2011) (history and rhetoric).

[245] *See* Eaglin, *The Drug Court Paradigm*, AM. CRIM. L. REV. (2016).

[246] *See also* AGAINST PREDICTION, at 188-92 (noting that the pull of prediction shapes notions of justice).

B. Combatting the Standard Narrative, Expanding Debates

Contrary to the standard narrative, sentencing's technological counternarrative invites a broader discourse on the meaning of actuarial risk tools entering sentencing. This section raises three interrelated concerns that have been relatively absent from policy debates about risk tools thus far, but should be amplified. It concludes by reflecting on the value of the counternarrative in practical context for judges at sentencing.

The first concern relates to incapacitation logics. As actuarial risk tools proliferate in state sentencing structures, the United States rounds its fortieth year of incapacitation-driven sentencing reforms. If risk tools represent the pendulum swing in punishment theory, we are not changing course. Rather, we are changing rhetoric and methods. The standard technological narrative obscures this deeply problematic choice of course in criminal justice, and paradoxically it is doing so just as the crisis of mass incarceration is coming into view.

What does it mean that incapacitation continues to dominate sentencing? Specifically, how does this relate to the evolution of punishment theory? As Alice Ristroph recently explained, the theories of war evolved with the introduction of more sophisticated technologies and recognition that the *justifying* theories of war were no longer *limiting* war in practice.[247] She calls on punishment theorists to do the same.[248] How does the advance of more statistically robust actuarial risk tools play into this call for transformation? Scholars should begin to consider this question.

The second concern relates to automation. The counternarrative illuminates that tools change us. Technology wears us down. This insight applies to judges just as much as it applies to society at large. The introduction of actuarial risk tools threatens to deskill judges or devalue their expertise by replacing it with that of a computer. Paradoxically, history suggests that continual efforts to make sentencing *easier* problematically make sentencing easier. Sentencing technologies offer, as Albert Alschuler noted in 1993, a way for judges to sentence without sentencing. I concur in this insight, but challenge myself and other scholars to articulate how and why this is problematic going forward.

One alternative that appears imminent to me, but remains largely outside sentencing scholars' purview, is the specter of automated judging. Indeed, technical developers saw sentencing guidelines as a response to

[247] Alice Ristroph, *Just Violence*, 56 ARIZ. L. REV. 4 (2014).
[248] *Id*.

the possible end of judicial discretion.[249] While judges and scholars alike vocally resisted the proliferation of sentencing guidelines in part on this basis, the reception to actuarial risk tools is far more ambivalent. Whether a long way off or just around the corner, the institutionalization of risk tools makes the specter of automated judging more possible. Like the introduction of actuarial risk tools, this point appears deeply intertwined with the way we interpret issues relating the technologies at sentencing, and particularly the once-mandatory sentencing guidelines. Scholars opposing risk technologies in sentencing should begin to engage with this possibility as well.

The third concern builds from the last. Tracing the origin of actuarial risk tools in criminal justice highlights its deep connection to the introduction of automation in the private sector in the 1950s-1960s.[250] Since the introduction of the scientific discourse with clinical rehabilitation, technical reforms have distracted from automation and its effects on society. At the same time, the turn toward automation transformed society by shaping our responses to political and social crises.

This dynamic goes far beyond just sentencing. Indeed, tracing the technological narrative at sentencing illuminates how, in line with the work of Loic Wacquant and Bernard Harcourt, punishment is an important arm in a shifting governmentality. [251] The narrative of technical advancements in the security state operates to distract and naturalize the transformation of government. Identifying how, over time, values change to facilitate the technical *efficiency* of the government through surveillance mechanisms in the face of disappearing wage labor is a strand worthy of further exploration both inside punishment context and outside it as well.[252]

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The counternarrative, of course, does not have implications for scholars alone. If nothing else, the counternarrative urges expansion of the resistance rhetoric pervasive among risk tool critiques from policymakers and scholars alike. It emphasizes that this language of resistance should not focus exclusively on what risk tools mean to individual defendants – meaning that it mischaracterize them and undermine notions that those

[249] *See* Jack M. Kress et al., *Is the End of Judicial Sentencing in Sight?*, 60 JUDICATURE 216 (1976).
[250] *See supra* Part II.A.
[251] *See, e.g.*, BERNARD HARCOURT, THE ILLUSION OF FREE MARKETS: PUNISHMENT AND THE MYTH OF NATURAL ORDER (2011); LOIC WACQUANT, PUNISHING THE POOR: THE NEOLIBERAL GOVERNMENT OF SOCIAL INSECURITY (2009).
[252] *See, e.g.*, VIRGINIA EUBANKS, AUTOMATING INEQUALITY: HOW HIGH-TECH TOOLS PROFILE, POLICE, AND PUNISH THE POOR (2018).

who engage in crime can change.[253] Rather, resistance rhetoric should emphasize what it will do to us – to all of us – and our notions of justice.[254] Acknowledging this broader range of objections could bolster some of the day-to-day confrontations with actuarial risk tools in the courts.

There is some precedent for this. As noted above, the advance of risk tools is at heart the advance of default incapacitative logics. While incapacitation is perhaps the most difficult theory to undermine because of its limitless nature, the Supreme Court recently did just that in *Graham v. Florida*.[255] There, the majority of the court categorically banned life without parole sentences for juvenile defendants that committed nonhomicide offenses. Notably, the majority limited default incapacitation logics. After going through a discussion of risk, dangerousness, and incorrigibility, the Court writes, "incapacitation cannot override all other considerations."[256] In his concurrence, Justice Stevens bolsters this claim in his defense of proportionality review. He writes, "Society changes. Knowledge accumulates. We learn, sometimes, from our mistakes."[257] This statement is the heart of the counternarrative – sometimes we get it wrong, and it's up to us to right the ship.

State courts and commissions can right the ship by resisting the pull of actuarial risk tools in various ways. Some already have. For example, North Carolina's Sentencing Commission considered introducing an actuarial risk tool for sentencing and determined that, based on their profiling practices based on criminal history, there was no need to introduce actuarial tools to sentencing.[258] The important point in this development is that the Commission pierced the tools' veil to consider what risk factors were consistent with state policy. In doing so, the Commission implicitly undermined the technological advancement narrative. It also subtly pushed the legislature and executive branch to find another way to reform criminal justice. Though perhaps a small victory in the grand scheme of sentencing reform, such resistance is critical in the face of inexorable sentencing technologies.

CONCLUSION

There is a standard narrative about technological advancement that often shapes the discourse on actuarial risk tools entering sentencing. This

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[253] *See, e.g.*, Sidhu, *supra* note __.
[254] *See, e.g.*, Holder, *supra* note __.
[255] Graham v. Florida, 560 U.S. 48 (2010).
[256] *Id*. at 73.
[257] Graham, 560 U.S. at 85 (Stevens, concurring).
[258] *See* N.C. SENTENCING & POL'Y ADVISORY COMM'N, RESEARCH FINDINGS AND POLICY RECOMMENDATIONS FROM THE CORRECTIONAL PROGRAM EVALUATION, 2000-2008 25 (2009).

Article develops a necessary counternarrative to that standard story. Specifically, it asserts that society is changing through and alongside technology, and not because our human values have evolved. This Article considers how three social concepts – rehabilitation, racial justice, and dangerousness – mutated through and alongside predecessor technologies. These social transformations provide the foundation for risk tools' expansion now. They also obscure problematic transformations that sustain the sociohistorical phenomenon of mass incarceration. These include the expansion of government surveillance in marginalized communities, resignation to racialized punishment practices, and the expansion of the carceral net. This Article illuminate how these transformations remove resistance to the expansion of actuarial risk tools today while stripping advocates of a language to resist the status quo. Thus, the counternarrative set forth herein offers a critical but until now missing foundation for deeper, and more skeptical, engagement with the advance of pragmatic technological sentencing reforms.

Ultimately, this Article demands a historically situated question. Instead of addressing structural problems in society in the 1960s, states and the federal government started building technological infrastructure to partially automate sentencing. Are we doing the same thing now, in the face of mass incarceration? By placing faith in technology to save us from ourselves, are we turning a blind eye to the structural problems that drive reliance on incarceration *and* the criminal apparatus more generally? Only by answering this question can we truly appreciate the fundamental tension between the rise of actuarial risk tools at sentencing and the broader effort to dismantle the sociohistorical phenomenon of mass incarceration in the United States. Zeitgeist concerns of technical accuracy cannot answer this question, but they can distract us from that more holistic perspective on criminal justice reform. In the process we may succumb to another peril: the pursuit of technical knowledge may come to define our human values going forward.