THE INNOCENCE CHECKLIST

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ABSTRACT

Because true innocence is unknowable, scholars who study wrongful convictions and advocates who seek to vindicate the innocent must use proxies for innocence. Court processes or official recognition of innocence are the primary proxy for innocence in research databases of exonerees. This Article offers an innovative alternative to this process-based proxy: a substantive checklist of factors that indicates a likely wrongful conviction, derived from empirical and jurisprudential sources. Notably, this checklist does not rely on official recognition of innocence for its objectivity or validity. Instead the checklist aggregates myriad indicators of innocence: factors known to contribute to wrongful convictions; rules of professional conduct; innocence-project intake criteria; prosecutorial conviction-integrity standards; and jurisprudence governing when convictions must be overturned because of fresh evidence or constitutional violations. A checklist based on articulated, uniformly applicable criteria is preferable to the more subjective and less regulated decisionmaking of judges and prosecutors who determine innocence using an official exoneration methodology. Only a conception of innocence independent of official exoneration can provide the necessary support for reform of barriers to more fruitful postconviction review mechanisms.

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Introduction

This Article addresses a central conceptual foundation for the social-scientific and legal study of wrongful convictions: how to define innocence. The base rate of innocence in the criminal justice system is not knowable. As a result, scholars who study wrongful convictions and advocates who seek to vindicate the innocent must use definitional proxies for innocence. Currently, databases of wrongful convictions, which form the basis of study and advocacy for scholars and reform organizations, rely on court processes or official recognition of innocence as their primary proxy for determining when a wrongful conviction has occurred. This Article is not the first to tackle these difficult definitional conundrums. But it is the first to propose a substantive rather than legal or procedural conception of likely innocence that can be used in the context of scholarly databases, judicial review, and innocence commissions.¹

This Article argues for a new conception of wrongful conviction: a substantive—rather than procedural—conception that does not rely on official processes for its objectivity. Part I traces the background of the innocence movement. It describes the known causes of wrongful convictions that have emerged from that movement. It documents its historical reliance on DNA exonerations in generating that canon of causes. It discusses the development of innocence commissions and the role that they play in exonerating the innocent.

Part II sets forth two typologies. The first is a typology of the meaning of "innocent" when it is employed by legal scholars, courts, and practitioners. The second is a typology of the current methodologies used by databases created by scholars and reform organizations to determine when a particular definition of innocence has been fulfilled. Part II argues that the current definitions of innocence and, in particular, the methodologies employed for compiling wrongful convictions in databases, are invalid because they are under- and over-inclusive. The invalid definitional proxies obscure an accurate accounting of wrongful convictions and mask, perhaps, the single greatest cause of wrongful convictions in the United States: formidable procedural barriers to postconviction relief.

^{1.} This Article uses "factual innocence," "actual innocence," "likely innocence," "wrongful conviction," and "false conviction" interchangeably. The significance of these terms, unless context indicates otherwise, is that the factual circumstances surrounding a defendant's conviction give rise to an unacceptable likelihood of wrongful conviction, as defined in this Article, not caselaw.

Part III describes several case studies that exemplify the pitfalls of the definitional disagreements over the meaning of innocence. It notes the competing narratives that can emerge from these disagreements and the way that these competing narratives can deepen the cognitive biases that drive prosecutorial resistance to exoneration and interfere with societal "buy-in" for criminal justice reforms.

Part IV offers an alternative conception of wrongful conviction based on objective, extrinsically-derived criteria. Part V reduces those criteria to what is essentially a checklist of factors relevant to likely innocence. This comprehensive checklist does not rely on court processes or official recognition of innocence, rather it looks to preexisting sources to determine the relevant criteria: known factors that contribute to wrongful convictions; rules of professional conduct governing prosecutorial charging decisions; innocence-project intake criteria; prosecutorial conviction-integrity unit standards; and jurisprudence governing when a conviction must be overturned on the basis of fresh evidence or a constitutional violation.

The Article concludes that a conception of innocence that is based on articulated, uniformly applicable criteria—even where the weighting and application of those criteria remain subjective—is preferable to the less regulated and less consistent decisionmaking of judges and prosecutors, who determine innocence using an official-exoneration methodology. It also concludes that only a comprehensive, substantive innocence checklist, independent of official exoneration processes, can provide the necessary conceptual framework to reform barriers and increase more fruitful postconviction review.

I. BACKGROUND: THE INNOCENCE MOVEMENT

A. Known Causes of Wrongful Convictions

There is a great deal of scholarly and advocacy literature exploring wrongful convictions, as well as government inquiries into high-profile exonerations.² There is consensus among scholars, advocates, and inquiry commissions about the primary causes of wrongful convictions,³ including official misconduct by police and prosecutors,⁴ ineffective assistance of counsel ("IAC") who have heavy caseloads

^{2.} See, e.g., Brandon L. Garrett, Convicting the Innocent 260 (2011) (noting that while some prosecutors' offices have conducted postconviction inquiries "to identify what went wrong," those offices remain "exceptional").

^{3.} Many of these causes have been documented for almost a century, going back to Edwin Borchard's seminal work, *Convicting the Innocent. See generally* EDWIN M. BORCHARD, CONVICTING THE INNOCENT (1932) (highlighting misidentifications, circumstantial evidence, perjury, or a combination of all three as causes).

^{4.} See Barry Scheck, Peter Neufeld, & Jim Dwyer, Actual Innocence 246 (2000); Peter A. Joy, The Relationship Between Prosecutorial Misconduct and Wrongful Convictions: Shaping Remedies for a Broken System, 2006 Wis. L. Rev. 399 (2006); Manitoba Justice, The Inquiry Regarding Thomas Sophonow 83, 85, 116 (2010), https://digitalcollection.gov.mb.ca/awweb/pdfopener?smd=1&did=12713&md=1 [hereinafter Sophonow Inquiry].

and inadequate preparatory resources,⁵ junk science,⁶ faulty eyewitness identifications and suggestive identification procedures,⁷ coercive interrogations and false confessions,⁸ and incentivized informants ("snitches").⁹ The literature has debunked whole classes of forensic "science" evidence.¹⁰ Even so, many were (and in some cases still are) routinely admitted in courts in the United States, Canada, the United Kingdom ("UK"), Australia, and New Zealand, including analysis of the composition of bullet lead ("CBLA"),¹¹ analysis of fire patterns to establish the use of accelerants (and, therefore, arson),¹² microscopic hair comparison and identification,¹³ bitemark pattern matching,¹⁴ bloodstain pattern analysis,¹⁵ handwriting comparison,¹⁶ and "shaken-baby syndrome."¹⁷ The literature has also

^{5.} See Brandon L. Garrett & Peter J. Neufeld, Invalid Forensic Science Testimony and Wrongful Convictions, 95 Va. L. Rev. 1, 33, 89–90 (2009).

^{6.} See Stephanie Roberts Hartung, Post-Conviction Procedure: The Next Frontier in Innocence Reform, in Wrongful Convictions and the DNA Revolution: Twenty-Five Years of Freeing the Innocent 247, 250–51 (Daniel S. Medwed, ed., 2017).

^{7.} See Sir Thomas Thorp, Miscarriages of Justice 79–80 (N.Z. Legal Rsch. Found. ed., 2005); Gary L. Wells, Mark Smalls, Steven Penrod, Roy S. Malpass, Solomon M. Fulero, & C. A. E. Brimacombe, Eyewitness Identification Procedures: Recommendations for Lineups and Photospreads, 22 L. & Hum. Behav. 603, 603 (1998); Gary L. Wells & Eric P. Seelau, Eyewitness Identification: Psychological Research and Legal Policy on Lineups, 1 Psychol. Pub. Pol.'y & L. 765, 785 (1995); Sophonow Inquiry, supra note 4 at 57, 69.

^{8.} See Hartung, supra note 6, at 249–50; Richard A. Leo, Why Interrogation Contamination Occurs, 11 OHIO St. J. Crim. L. 193, 205 (2013).

^{9.} See Scheck, Neufeld & Dwyer, supra note 4, at 246; Thorp, supra note 7, at 80–81; Brandon L. Garrett, Innocence, Harmless Error, and Federal Wrongful Conviction Law, 2005 Wis. L. Rev. 35, 97 (2005); Sophonow Inquiry, supra note 4, at 101.

^{10.} See Garrett & Neufeld, supra note 5, at 1–2.

^{11.} See NAT'L RESEARCH COUNCIL, NAT'L ACADEMY OF SCIENCES, FORENSIC ANALYSIS: WEIGHING BULLET LEAD EVIDENCE 1–2 (2004) [hereinafter BULLET LEAD REPORT]; William C. Thompson, Analyzing the Relevance and Admissibility of Bullet-Lead Evidence: Did the NRC Report Miss the Target?, 46 JURIMETRICS 65, 65 (2005) (noting that bullet lead evidence was used by the FBI in criminal investigations for more than 25 years).

^{12.} See Keith A. Findley, Flawed Science and the New Wave of Innocents, in Wrongful Convictions and the DNA Revolution: Twenty-Five Years of Freeing the Innocent 199–201 (Daniel S. Medwed ed., 2017).

^{13.} See SCHECK, NEUFELD & DWYER, supra note 4, at 166; THORP, supra note 7, at 81–82; NAT'L RESEARCH COUNCIL, NAT'L ACADEMY OF SCIENCES, STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD 160–61 (2009); Findley, supra note 12, at 187; David H. Kaye, Ultracrepidarianism in Forensic Science: The Hair Evidence Debacle, 72 WASH. & LEE L. REV. ONLINE 227, 230–31 (2015); Letter from James B. Comey, Director, FBI, to Kate Brown, Governor, State of Or. (Feb. 26, 2016) (on file with author) ("In many cases, [the FBI has] discovered that [FBI] examiners made statements that went beyond the limits of science in ways that put more weight on a hair comparison than scientifically appropriate. Hair is not like fingerprints, because there aren't studies that show how many people have identical-looking hair fibers. . . . Unfortunately, in a large number of cases, our examiners made statements that went too far in explaining the significance of a hair comparison and could have misled a jury or judge. In fact, in several cases in which microscopic hair comparison evidence was introduced, defendants were later exonerated by DNA after being convicted.").

^{14.} See Michael J. Saks et al., Forensic Bitemark Identification: Weak Foundation, Exaggerated Claims, 3 J. L. & BIOSCIENCES 538, 540–41 (2016).

^{15.} See Leora Smith, How a Dubious Forensic Science Spread Like a Virus, PROPUBLICA (Dec. 13, 2018), https://perma.cc/TP5A-B2YA.

^{16.} See D. Michael Risinger, Mark P. Denbeaux & Michael J. Saks, Exorcism of Ignorance as a Proxy for Rational Knowledge: The Lesson of Handwriting "Expertise," 137 U. PA. L. REV. 731, 733 (1989); Reinoud

called into question standard investigative and prosecution techniques like the Reid Method of interrogation¹⁸ and appellate courts have criticized the misuse of statistics at trial.¹⁹ Wrongful convictions often fit patterns where many of these issues combine. For example, the prosecution introduced questionable scientific testimony (official misconduct + junk science) that the defense attorney failed adequately to challenge (IAC). Or perhaps the prosecution relied on the testimony of a stranger eyewitness (unreliable identification), and the defendant offered an alibi that defense counsel failed to corroborate (IAC).

B. Reliance on DNA Evidence

The literature also documents the role that DNA-based exonerations played in the birth of the innocence movement in the United States.²⁰ This type of exoneration, however, is not contestable.²¹ If the semen collected in a rape kit contains a DNA profile that excludes the defendant as its source, he has been undeniably exonerated.

Forensic DNA analysis has been widely used in criminal investigations for three decades, and DNA-retesting statutes have given inmates an opportunity for post-conviction relief in many contested cases. ²² So those whom DNA could exonerate have, for the most part, been exonerated. ²³ For cases in which biological evidence was not collected, stored, or preserved, however, there is no DNA to exonerate. Thus, despite DNA-based exonerations, many more inmates who have been wrongfully convicted may remain incarcerated.

As a procedural matter, DNA exonerations are fundamentally different than other types of exonerations because of the universal existence of DNA exoneration statutes in the United States. Ordinarily, the barriers to postconviction relief for

Stoel, Itiel E. Dror & Larry S. Miller, Bias Among Forensic Document Examiners: Still a Need for Procedural Changes, 46 Austl. J. Forensic Sci. 91, 93 (2014).

^{17.} See Findley, supra note 12, at 197; Keith A. Findley, Patrick D. Barnes, David A. Moran & Waney Squier, Shaken Baby Syndrome, Abusive Head Trauma, and Actual Innocence: Getting It Right, 12 Hous. J. Health L. & Pol'y 209 (2012).

^{18.} See, e.g., Brandon L. Garrett, The Substance of False Confessions, 62 STAN. L. REV. 1051, 1051 (2010); Leo, supra note 8, at 201–02.

^{19.} See, e.g., R v. Clark [2003] EWCA Crim. 1020, [177]–[180] (appeal taken from Eng.) (reversing Clark's conviction for murdering her children because of the unreliability of statistical evidence given by the Crown expert regarding the likelihood of two children in one family dying by natural causes).

^{20.} See GARRETT, supra note 2, at 5; THORP, supra note 7, at 11; Garrett & Neufeld, supra note 5, at 4–5; Samuel R. Gross, Kristen Jacoby, Daniel J. Matheson, Nicholas Montgomery & Sujata Patil, Exonerations in the United States 1989 Through 2003, 95 J. CRIM. L. & CRIMINOLOGY 523 (2005); Carissa Byrne Hessick, DNA Exonerations and the Elusive Promise of Criminal Justice Reform, 15 Ohio St. J. CRIM. L. 271, 271 (2017).

^{21.} See Findley, supra note 12, at 184; Richard Leo, Has the Innocence Movement Become an Exoneration Movement?, in WRONGFUL CONVICTIONS AND THE DNA REVOLUTION: TWENTY-FIVE YEARS OF FREEING THE INNOCENT 57, 61 (Daniel S. Medwed ed., 2017); Fred C. Zacharias, The Role of Prosecutors in Serving Justice After Convictions, 58 VAND. L. Rev. 171, 192 (2005).

^{22.} See Daniel S. Medwed, Talking About a Revolution, in Wrongful Convictions and the DNA Revolution: Twenty-Five Years of Freeing the Innocent 2, 13, 85 (Daniel S. Medwed ed., 2017).

^{23.} See Scheck, Neufeld & Dwyer, supra note 4, at 250; Hartung, supra note 6, at 252.

most American defendants, even those who claim innocence, range from high to insurmountable.²⁴ Appeals are organized around claims of procedural injustice rather than substantive innocence, which often does not exist as a freestanding claim.²⁵ DNA-based claims of innocence are a singular exception to this general rule because the federal government and all of the states have statutes exempting prisoners seeking exculpatory DNA testing from ordinary procedural bars to post-conviction relief.²⁶ As Stephanie Hartung succinctly puts it: "Even with DNA evidence, undoing a wrongful conviction is no easy task; without it, the task is Herculean."

These procedural barriers are relevant because there are whole categories of crimes for which DNA cannot exonerate—crimes like robbery, where the perpetrator is not likely to leave a damning biological sample behind, or conspiracy, where intent rather than identity is the disputed issue.²⁸ These DNA exonerations are concerning given the limited and serendipitous nature of their discovery. DNA-

24. See 28 U.S.C § 2254(d). It states:

An application for a writ of habeas corpus on behalf of a person in custody pursuant to the judgment of a State court shall not be granted with respect to any claim that was adjudicated on the merits in State court proceedings unless the adjudication of the claim -(1) resulted in a decision that was contrary to, or involved an unreasonable application of, clearly established Federal law, as determined by the Supreme Court of the United States; or (2) resulted in a decision that was based on an unreasonable determination of the facts in light of the evidence presented in the State court proceeding.

Id. See also Harrington v. Richter, 562 U.S. 86, 102 (2011) ("If [§ 2254(d)'s] standard is difficult to meet, that is because it was meant to be."); Yarborough v. Alvarado, 541 U.S. 652, 665–66 (2004) (granting relief under § 2254(d) only if state court denial was "objectively unreasonable"); Williams v. Taylor, 529 U.S. 362, 409 (2000) (same); Schlup v. Delo, 513 U.S. 298, 314–15 (1995) (granting review of constitutional claim only when based on "fundamental miscarriage of justice"); Coleman v. Thompson, 501 U.S. 722, 729 (1991) (denying review of federal law questions if state court decision rested on state law that was adequate to support the judgement and was independent of the federal question); McCleskey v. Zant, 499 U.S. 467, 494 (1991) (requiring a "fundamental miscarriage of justice" to support a non-procedural habeas petition); Teague v. Lane, 489 U.S. 288, 308 (1989) (granting review of claim not raised at trial or on direct appeal only if defendant can show cause and actual prejudice); Murray v. Carrier, 477 U.S. 478, 495–96 (1986) (same); Wainwright v. Sykes, 433 U.S. 72, 90–91 (1977) (same).

25. See Daniel S. Medwed, Prosecution Complex: America's Race to Convict and Its Impact on the Innocent 125–26 (N.Y.U. Press ed., 2012); Lissa Griffin, The Correction of Wrongful Convictions: A Comparative Perspective, 16 Am. U. Int'l L. Rev. 1241, 1297 (2001); David Hamer, Wrongful Convictions, Appeals, and the Finality Principle: The Need for a Criminal Cases Review Commission, 37 U. New S. Wales L.J. 270, 270–71 (2014).

26. See, e.g., 34 U.S.C. § 40727. Arizona's representative statute states:

Notwithstanding any other provision of law that would bar a hearing as untimely, if the results of the postconviction deoxyribonucleic acid testing are favorable to the petitioner, the court shall order a hearing and make any further orders that are required pursuant to this article or the Arizona rules of criminal procedure.

ARIZ. REV. STAT. ANN. § 13-4240(K) (2000). See also CAL. PENAL CODE § 1405(n) (West 2015); FLA. STAT. Ann. § 925.11 (West 2006); 725 ILL. COMP. STAT. 5/116-3 (West 2014); N.Y. CRIM. PROC. LAW § 440.30 (McKinney 2020); Tex. Code Crim. Proc. Ann. art. 64.01 (West 2017).

^{27.} Hartung, supra note 6, at 252.

^{28.} See Garrett, supra note 9, at 51; Hamer, supra note 25, at 293.

exoneration cases tend to involve convictions for sexual assault or other violent crimes in which crucial biological evidence that could conclusively determine the identity of the perpetrator was preserved and available for testing. The fortuitous nature of this combination of events—crimes for which DNA could conclusively exclude a suspect and the availability of biological evidence for testing—suggests that other cases involving wrongful convictions, but without exculpatory biological evidence for testing, remain undetected. Often, patterns of questionable evidence that occur in DNA-exoneration cases are equally present in cases where DNA evidence cannot exonerate.²⁹

Statistics from the National Registry of Exonerations ("the Registry") illustrate these similar patterns. The Registry tracks the contributing factors to wrongful convictions by crime.³⁰ Mistaken eyewitness identifications contributed to twentyeight percent of the total exonerations in the Registry.31 When broken down by crime, however, they contributed to sixty-seven percent of wrongful convictions for sexual assault, but only twenty-two percent of "other crimes," defined as all crimes other than sexual assault, child sex abuse, and homicide. 32 This disparity gives rise to two obvious possible explanations. The first is that victims of sexual assault are more than three times more likely to misidentify their perpetrators than victims of other crimes like robbery or fraud. The second, more likely, explanation is that eyewitnesses to crimes like robbery and fraud are just as unreliable as witnesses to sexual assaults, but their misidentifications are discovered one third as often because there is no DNA evidence to disprove them. This second explanation seems particularly likely given that victims of sexual assaults tend to be exposed to the perpetrator for a longer duration of time than victims of robberies and have a better opportunity to view the perpetrator. Both exposure time and viewing opportunity are factors known to enhance the accuracy of identifications.³³ The second explanation also seems more likely given that studies of the first 321 DNA exonerations in the United States showed that seventy-two percent involved at least one misidentification, a number that is consistent with the statistics in the Registry for sexual assault but is much higher than the statistics for the "other" nonviolent crimes.34

One downside to the American innocence movement's historical reliance on DNA exonerations is that no cohesive definition of wrongful convictions has been developed for non-DNA cases. There is often disagreement among the parties to

^{29.} Cf. GARRETT, supra note 2, at 7 (noting that the cases of the DNA exonerees that he studied "were not idiosyncratic. The same problems occurred again and again.").

^{30. %} Exonerations by Contributing Factor, NAT'L REGISTRY OF EXONERATIONS, http://www.law.umich.edu/special/exoneration/Pages/ExonerationsContribFactorsByCrime.aspx (last visited Oct. 13, 2020).

^{31.} Id.

^{32.} *Id*.

^{33.} State v. Lawson, 291 P.3d 673, 701-02 (Or. 2012).

^{34.} See Carrie Leonetti, Showing Up: Eyewitness-Identification Requirements in Bosnia and Herzegovina: A Comparative Case Study, 119 PENN St. L. Rev. 439, 451 (2014).

criminal cases (police, prosecutors, defense attorneys, judges, victims) about whether subsequent discoveries have truly exonerated a defendant, usually because the putatively exonerating evidence is not as conclusive as DNA.³⁵

C. Innocence Commissions

This lack of a cohesive conception of false convictions is particularly salient in the context of innocence commissions, which are slowly becoming more prevalent internationally. Innocence commissions exist currently in England and Wales, Scotland, and Norway, and one has just been created in New Zealand. One of the first steps in establishing an innocence commission is determining the scope of cases for review and the standard of proof necessary to demonstrate an unsafe verdict. Because a substantive definition of what a probable wrongful conviction looks like does not exist, excessive subjectivity and discretion by commission members will plague the implementation of innocence commissions where they exist.

II. DEFINING WRONGFUL CONVICTIONS

In order to facilitate the work of innocence commissions and to capture wrongful convictions that are not conducive to DNA exoneration, it is necessary to define
"innocence" for the purpose of identifying the wrongfully convicted. Section A of
this Part discusses the meaning of "innocence" in light of the relationship between
actual innocence, legal innocence, failures of procedural justice and the meaning
of "innocence." Section B critiques the two current methodologies for defining
innocence: official exoneration and conclusive proof of factual innocence. It
describes the high price of these poor proxies for innocence, which are simultaneously over- and under-inclusive in identifying the wrongfully convicted, most
notably the failure of wrongful-conviction databases to include individuals wrongfully incarcerated primarily due to barriers for postconviction review. It also critiques a purely legal conception of innocence. It concludes by proposing an
alternate definition of likely innocence. Section C discusses the specific context of
changing scientific evidence to demonstrate the shortcomings of existing definitions of innocence and methodologies for identifying the wrongfully convicted.

A. The Meaning of "Innocence"

One of the most challenging issues for any database or systematic study of wrongful convictions is developing criteria to screen and evaluate cases. Debates

^{35.} See infra Section III.B.

^{36.} See infra Section II.B.3.

^{37.} Criminal Cases Review Commission Bill 2018 (106-1) (explanatory note) (N.Z.).

^{38.} For example, the Criminal Cases Review Commission for England, Wales, and Northern Ireland ("UK CCRC") refers cases for judicial review if they exhibit "a real possibility" of innocence. Criminal Appeal Act 1995, c. 35, § 13(1)(a) (UK).

in academic literature about the meaning of "innocence" are often framed across one of two axes: (1) factual innocence (the defendant did not commit the crime) *versus* failures of procedural justice (there was significant legal error)³⁹ or (2) actual innocence (the defendant did not commit the crime) *versus* what innocence scholar Michael Naughton characterizes as "legal" innocence (there was insufficient evidence to prove guilt beyond a reasonable doubt).⁴⁰

Based on these definitional disagreements, something of a continuum emerges to define profiles of potentially wrongfully convicted persons: (1) the individual who conclusively did not commit the crime; (2) the individual about whose guilt a reasonable doubt exists, often because of evidence discovered after trial; and (3) the individual whose trial was fundamentally unfair in some way, but about whose guilt there is no specific, fact-based concern other than an implicit assumption about the correlation between unfair process and inaccurate results. Typically, both of these pairings (factual innocence versus procedural failures and actual versus legal innocence) pit an ex ante and ex post definition against one another. A defendant is factually and actually innocent if all evidence currently known suggests innocence. Conversely, a defendant has suffered a failure of procedural justice when the trial, which has already occurred, was unfair or legally innocent when the proof adduced at the trial, which has already occurred, was insufficient. This forward versus backward looking quality of the competing conceptions, however, is not inherent. 41 This Section will explore each of these two debates in turn. First, it explores the relationship between legal and actual innocence. Second, it discusses the relationship between procedural failures and the meaning of "innocence."

1. The Relationship Between Legally Insufficient Proof & Actual Innocence

The first disagreement that scholars, judges, and practitioners have is about the significance of the difference between being "innocent" and merely not guilty in the technical sense—i.e., a reasonable but not conclusive doubt about guilt.⁴² Factual innocence is the innocence on which innocence projects focus. It is ostensibly why Barry Scheck and his colleagues chose to name their landmark book *Actual Innocence*: to distinguish factual from mere technical innocence.⁴³

^{39.} See infra Section II.A.2.

^{40.} MICHAEL NAUGHTON, THE INNOCENT AND THE CRIMINAL JUSTICE SYSTEM 20, 23 (2013); see also CRIM JUSTICE STDS. DEFENSE FUNCTION § 4-9.4(a) (Am. BAR ASS'N 2017) (describing "wrongful[] convict[ion]" and "actual[] innocen[ce]" distjunctively); Alessandro Corda, Sentencing and Penal Policies in Italy, 1985-2015: The Tale of a Troubled Country, 45 CRIME & JUST. 107, 119 (2016) (contrasting "substantive" and "merely evidentiary" innocence).

^{41.} See infra Section II.B.4.

^{42.} See ROSEMARY PATTENDEN, ENGLISH CRIMINAL APPEALS, 1844-1994: APPEALS AGAINST CONVICTION AND SENTENCE IN ENGLAND AND WALES 57 (1996) (distinguishing between insufficient evidence of guilt and innocence); Daniel Givelber & Amy Farrell, Not Guilty: Are the Acquitted Innocent? 1–2 (2012) (same).

^{43.} *See* Leo, *supra* note 21, at 71 ("To most people, wrong person errors are far more morally troubling than legal exonerations and therefore merit greater concern and more significant consequences.").

In contrast, the classical understanding of legal innocence was explicated by Baroness Hale for the UK Supreme Court:

Innocence as such is not a concept known to our criminal justice system. We distinguish between the guilty and the not guilty. A person is only guilty if the state can prove his guilt beyond reasonable doubt. . . . Otherwise he is not guilty, irrespective of whether he is in fact innocent.⁴⁴

Even within a legal conception of innocence, there are variations about how large a doubt has to be to be deemed "reasonable" and arguments about how much doubt is enough to call into question the validity of an otherwise final conviction. For example, in the UK, appellate courts review convictions in which there is a claim that the conviction is "unsafe," and the UK Criminal Cases Review Commission ("UK CCRC") can refer potentially meritorious miscarriage-of-justice claims directly for such review. British courts and the UK CCRC, however, disagree as to the standard of proof necessary to demonstrate an unsafe verdict. In *Regina v. Cooper*, the Court of Criminal Appeal held that it could quash a conviction as unsafe whenever there was a "lurking doubt" about innocence. In *Cooper*, the UK CCRC employs a higher "serious doubt" threshold before declaring a conviction unsafe.

2. Failures of Procedural Justice and "Innocence"

Scholars and courts also argue about whether one ought to parse factual innocence from failures of procedural justice, particularly given the difficulty of determining factual innocence.⁵⁰ Naughton divides wrongful convictions into two broad categories. The first, which he terms the "lay perspective," comprises "factually innocent victims of wrongful convictions."⁵¹ The second comprises procedural injustices, which occur in two categories: "breaches in prevailing rules and

^{44.} R v. Secretary of State for Justice [2011] UKSC 18, [116] (appeal taken from EWCA).

^{45.} See Medwed, supra note 22, at 3.

^{46.} Criminal Appeal Act 1995, c. 35, § 2(1)(1)(a) (UK).

^{47. [1969]} AC 53 (HL)82 86.

^{48.} Id.

^{49.} THORP, supra note 7, at 15, 40.

^{50.} Compare Leo, supra note 21, at 61 (contrasting "actual innocence" with "procedural unfairness, legal erasures of existing convictions, or other types of mistakes and injustices of the system") with BIBI SANGHA, KENT ROACH & ROBERT MOLES., FORENSIC INVESTIGATIONS AND MISCARRIAGES OF JUSTICE 67 (2010) (defining "miscarriages of justice" as including both "unfair trials" and "wrongful convictions of the innocent") and Marvin Zalman, Wrongful Convictions: Comparative Perspectives, in THE CAMBRIDGE HANDBOOK OF SOCIAL PROBLEMS, Vol. 2 449 (A. Javier Trevino, ed., 2018) (defining "wrongful conviction" to include both "procedurally flawed court convictions and the convictions of factually innocent defendants") and Sarah A. Crowley & Peter J. Neufeld, Increasing the Accuracy of Criminal Justice Decision Making, in COMPARATIVE DECISION MAKING 357 (Thomas R. Zentall & Philip H. Crowley, eds., 2013) ("An unjust conviction may be a conviction obtained in violation of a defendant's procedural rights or one that is factually inaccurate, whether or not these two phenomena occur together.").

^{51.} NAUGHTON, supra note 40, at 8.

procedures" and violations of due process and human rights.⁵² In Australia, David Hamer has argued that courts and innocence commissions should focus on remedying cases of factual innocence rather than procedural injustice, reasoning: "The conviction of a factually innocent defendant is a searing injustice. It is also an injustice for a factually guilty defendant to be convicted in flawed proceedings, but this is an injustice of a different kind and degree."⁵³

Courts also draw these distinctions. For example, the Kansas Supreme Court noted: "Exoneration requires the lifting of criminal liability by vacation or reversal of a conviction, regardless of whether the vacation or reversal is compelled by a successful assertion of actual innocence." 54 Similarly, the Florida District Court of Appeal noted:

[T]he reversal of a conviction on direct appeal or the entry of an order for postconviction relief does not necessarily result in the exoneration of a criminal defendant. To "exonerate" means "[t]o free from blame; to exculpate; also, to relieve from the blame or burden of; to relieve or set free *from* (blame, reproach)." The reversal of a conviction on direct appeal or the entry of an order for postconviction relief may occasionally — but will not generally — exculpate or free a defendant in a criminal case from blame.⁵⁵

In the United States, these categories (failure of procedural justice *versus* factual innocence) are not entirely distinct. The jurisprudential tests used for reviewing most claims of procedural errors entail an assessment not only of error but also of "prejudice." So an individual whose procedural rights have been found to be violated has, at least implicitly, also been found to have a significant likelihood of being legally innocent. For example, in order to establish ineffectiveness of counsel a prisoner has to show not only that counsel's performance was deficient but also that but for the deficiency, the verdict would have been different. In order to establish prosecutorial misconduct, a prisoner has to establish not only that the prosecution failed to disclose favorable evidence, but also that the evidence was so favorable that, had it been available at trial, the jury would have acquitted. Because of the stringency of these tests, therefore, an individual found to have suffered a denial of the right to effective counsel or due process has also implicitly been found to have been convicted on legally insufficient evidence (but for the procedural error).

Outside of the United States, courts tend not to be so pigeonholed into discrete doctrinal silos. Instead, they focus more broadly on "miscarriages of justice," a

^{52.} Id.

^{53.} Hamer, *supra* note 25, at 306.

^{54.} Mashaney v. Bd. of Indigents' Def. Servs., 355 P.3d 667, 673-74 (Kan. 2015).

^{55.} Cira v. Dillinger, 903 So. 2d 367, 371 (Fla. Dist. Ct. App. 2005) (internal citation omitted) (emphasis in original).

^{56.} See Strickland v. Washington, 466 U.S. 668, 691-92 (1984).

^{57.} See infra Section IV.G.

phrase that encompasses wrongful convictions, as well as breakdowns in the system of adjudication that render trials fundamentally unfair, regardless of actual innocence—i.e., both of Naughton's categories. These courts tend not to distinguish clearly factual failures from procedural ones because both generally constitute "unsafe" convictions requiring reversal.⁵⁸ For example, the UK Criminal Procedure Act authorizes the Court of Appeals to set aside a conviction if the verdict is unreasonable or unsupported, there was a mistake of law, or there was any other miscarriage of justice.⁵⁹ The Canadian courts define miscarriages of justice as "virtually any kind of error that renders a trial unfair in a procedural or substantive way."⁶⁰ In Scotland, "miscarriage of justice" is a unitary ground of appeal, which includes, but is not limited to, legal innocence.⁶¹

Nonetheless, at both a conceptual and jurisprudential level, a salient distinction between procedural and substantive failures still exists even outside of the United States. The New Zealand case of *Regina v. Griffin*⁶² is evidence that even in a jurisdiction that conditions appellate relief on miscarriages of justice, definitional arguments still persist. Griffin was convicted of sex offenses stemming from his sexual relationship with a woman who suffered from intellectual disabilities.⁶³ To find Griffin guilty, the jury had to find that the victim was so "severely subnormal" in intelligence that she was "incapable of living an independent life or of guarding herself against serious exploitation. . . ."⁶⁴ The evidence at trial turned on whether she was intellectually disabled enough to meet the statutory definition. ⁶⁵ To prove the severity of her disability, the Crown called two experts: a psychiatrist and a psychologist. Both experts opined that the victim's intellectual disability was severe enough to meet the statutory test, based in part on their interviews with her and, in the case of the psychologist, standardized intelligence and functioning

^{58.} See Graham Zellick, Facing up to Miscarriages of Justice, 31 MANCHESTER L.J. 555, 566 (2005–06); see, e.g., R. v. Davis & Ors [2000] EWCA (Crim) 109 ("The Court is concerned with the safety of the conviction. A conviction can never be safe if there is a doubt about guilt. However, the converse is not true. A conviction may be unsafe even where there is no doubt about guilt but the trial process has been 'vitiated by serious unfairness or significant legal misdirection' " (internal citation omitted)).

^{59.} See Criminal Appeal Act 1995, c. 35, § 4 (UK) (allowing the court to consider whether new evidence may afford "any ground for allowing the appeal").

^{60.} Kent Roach, More Procedure and Concern About Innocence but Less Justice? Remedies for Wrongful Convictions in the United States and Canada, in Wrongful Convictions and Miscarriages of Justice: Causes and Remedies in North American and European Criminal Justice Systems 288 (C. Ronald Huff & Martin Killias, eds., 2013) (quoting R v. Truscott (2009) O.A.C. 575, para 110).

^{61.} See REPORT BY THE COMMITTEE APPOINTED BY THE SECRETARY OF STATE FOR SCOTLAND AND THE LORD ADVOCATE, CRIMINAL APPEALS AND MISCARRIAGES OF JUSTICE PROCEDURES ¶ 2.66 (1996) [hereinafter SUTHERLAND COMMITTEE REPORT] (explaining that conviction upon legally insufficient evidence is a miscarriage of justice); see also Crime and Punishment (Scotland) Act 1997, (ASP 46) § 194C (authorizing the SCCRC to refer cases to the Scottish Appeals Court for reconsideration whenever "a miscarriages of justice may have occurred").

^{62.} Rv. Griffin [2001] 3 NZLR 577 (CA).

^{63.} See id. at [1].

^{64.} Crimes Act 1961, ss 138(2), 142(2) (N.Z.) (repealed 2005).

^{65.} See Griffin, 3 NZLR at [35].

tests. ⁶⁶ In response, Griffin sought to have the victim interviewed by a defense psychologist who wanted to administer different tests. The victim refused, and the court declined to order her to do so. ⁶⁷ The defense expert, who disagreed with the prosecution experts regarding the severity of the victim's intellectual disability, was only able to testify based on her review of the Crown witnesses' testimony and her concerns about their methodology. ⁶⁸ Thus, the defense expert could not offer an opinion based on her personal interaction with the victim or based on alternative testing of the victim. ⁶⁹

The New Zealand Court of Appeal reversed Griffin's conviction, finding that his right to a fair trial and, specifically, his right to adequate facilities to prepare his defense had been violated.⁷⁰ The court recognized Griffin's "compelling need" to access crucial prosecution evidence (a psychological examination of the victim) and noted his inability to challenge the Crown psychologist's methodology and conclusions.⁷¹ Notably, the defendant lacked equal access to the woman whose legal competency was the central issue at trial.⁷² The majority characterized this inequality of arms as a "miscarriage of justice."⁷³

In dissent, Judge Thomas took issue with the majority's characterization of "miscarriage of justice," arguing instead for a narrower definition. According to Judge Thomas, the error in admitting the one-sided expert testimony was an error in "procedural fairness" only and did not affect the "substance" of Griffin's right to a fair trial. ⁷⁴ In Judge Thomas's view, Griffin's inability to examine the complaining witness did not mean that a "miscarriage of justice" had "*actually* occurred" because there was no reason to believe that Griffin's conviction was "unsafe." ⁷⁵ These precedents demonstrate how definitional disagreements are the result, in part, of the lack of a shared concept of innocence.

B. Methodologies for Defining Innocence

In addition to defining innocence (did not do it *versus* was unfairly convicted), there is a second methodological choice that must be made by innocence scholars and courts: how to determine whether, and when, any given definition of innocence has been met. Even when sharing a definition of innocence, scholars, advocates, and courts must have a way to determine when actual innocence, legal innocence, or procedural miscarriage of justice has happened.

^{66.} See id. at [18]-[21].

^{67.} See id. at [10], [12], [15]-[16].

^{68.} See id. at [10].

^{69.} See id. at [23]-[27].

^{70.} See id. at [29], [39].

^{71.} See id. at [33]-[38].

^{72.} *Id.* at [36].

^{73.} *Id.* at [36].

^{74.} Id. at [60]–[62] (Thomas, J., dissenting).

^{75.} Id. at [65]–[67] (Thomas, J., dissenting) (emphasis added).

Like with the difference between actual innocence and other definitions of wrongful convictions, there is a temporal mismatch between legal and factual exoneration. Legal exoneration occurs *ex post*: an individual has been legally exonerated when an official process dictates that result (e.g., an appellate reversal without a retrial or a prosecutorial dismissal for insufficient evidence). Conversely, factual exoneration tends to occur in real time: an individual is factually exonerated when conclusive evidence emerges that proves the impossibility of agency (e.g., exculpatory DNA results or a credible confession by the real perpetrator). This Section describes the two prevalent methodologies for defining innocence for the purpose of databases, scholarly study, and legal reform work—official exoneration and conclusive factual exoneration—and critiques both. It also critiques a purely legal conception of innocence and identifies a more desirable alternative.

1. Official Exoneration

The Registry purports to be a registry of "every [case] in the United States since 1989 . . . in which a person was wrongly convicted of a crime and later cleared of all the charges based on new evidence of innocence." The important word in this description is "cleared." This is why Brendon Dassey is not in the Registry. Neither is Troy Davis. Neither is Cameron Willingham. Neither are the Groveland Four. More to the point, none of them ever can be. That is because the Registry defines "exoneration" procedurally: an individual has been exonerated if and only if they have been granted relief through official processes, usually either postconviction relief or official prosecutorial recognition of innocence. In other

^{76.} About the Registry, NAT'L REGISTRY OF EXONERATIONS, https://www.law.umich.edu/special/exoneration/Pages/about.aspx (last visited Nov. 19, 2020).

^{77.} See infra Section III.A.2.

^{78.} See infra notes 129-32 & accompanying text.

^{79.} See Rachel Dioso-Villa, Scientific and Legal Developments in Fire and Arson Investigation Expertise in Texas v. Willingham, 14 MINN. J.L. SCI. & TECH. 817, 829 (2013) (noting that Willingham was executed although his conviction was undermined by new evidence); Findley, supra note 12, at 200 (same); Paul Giannelli, Junk Science and the Execution of an Innocent Man, 7 N.Y.U. J. L. & LIBERTY 221, 221–22 (2013) (same).

^{80.} See generally Kyle Swenson, Florida's 'Groveland Four' Case Was a Horrific Injustice. Gov. Rick Scott Still Hasn't Pardoned the Falsely Accused, WASH. POST (Dec. 4, 2018), https://www.washingtonpost.com/nation/2018/12/04/floridas-groveland-four-case-was-horrific-injustice-gov-rick-scott-still-hasnt-pardoned-falsely-accused/?noredirect=on&utm_term=.984e343e4577 (discussing Governor Rick Scott's failure to pardon the falsely accused "Groveland Four").

^{81.} Our Mission, NAT'L REGISTRY OF EXONERATIONS, https://www.law.umich.edu/special/exoneration/ Pages/mission.aspx (last visited Nov. 19, 2020) ("We do not make our own judgments about the guilt or innocence of convicted defendants. Our criteria for classifying cases as exonerations are based on official actions by courts and other government agencies."); Exoneration, Glossary, NAT'L REGISTRY OF EXONERATIONS, https://www.law.umich.edu/special/exoneration/Pages/glossary.aspx (last visited Nov. 19, 2020). Other countries' registries do the same. For example, Errorigiudiziari.com, the Italian archive of wrongful convictions and unjust pretrial detention, includes in its databases only defendants for whom courts have issued a declaration of entitlement to compensation for wrongful imprisonment. See L'archivio degli Innocenti [Archive of the Innocent], Errori Giudiziari, http://www.errorigiudiziari.com/?post_type=innocenti (last visited Nov. 19,

words, a defendant has been exonerated if a court vacates their conviction or a prosecutor agrees to dismiss.

Prior to the inception of the Registry in 2012, most scholars appeared to define innocence consistent with the Innocence Project's conception of actual innocence. Since the inception of the Registry, however, most scholars have, without critical reflection, shifted their conception of innocence to align with the Registry's poorly conceptualized, external, procedural definition of exoneration. Brandon Garrett's definition of legal innocence evidences this shift: "One knows that a trial did not result in a 'verdict worthy of confidence' despite the suppression of evidence, once the conviction is vacated." The Death Penalty Information Center and many scholars of wrongful convictions employ similar definitions.

Courts also link actual innocence with official exoneration. For example, in the context of malpractice claims against defense attorneys, courts require defendants suing their attorneys to establish actual innocence by way of exoneration as an element of their malpractice claims.⁸⁵

The problem with a legal-decision definition of exoneration is that it generates an intolerable level of both Type I and Type II errors—i.e., it is both under- and over-inclusive. It is under-inclusive because it does not include individuals who are likely innocent but lack a legal mechanism for demonstrating it. There are a host of procedural postconviction barriers to establishing innocence, including bars on successive petitions, ⁸⁶

2020) (noting that many other men are likely wrongfully imprisoned but not listing them); *see also* Interview with Valentino Maimone & Benedetto Latanzi, co-founders of Errorigiudiziari.com (June 10, 2018) (on file with author).

^{82.} See Leo, supra note 21, at 74.

^{83.} Garrett, *supra* note 9, at 72 n.182.

^{84.} See Gross et al., supra note 20, at 524 (defining "exoneration" as "an official act declaring a defendant not guilty of a crime for which he or she had previously been convicted," including clemency, prosecutorial dismissal of charges, and acquittal on retrial); NAUGHTON, supra note 40, at 7 (noting innocence within the criminal justice system deals with lack of guilt at trial); Criteria for Inclusion on DPIC's Innocence List, DEATH PENALTY INFORMATION CENTER, https://deathpenaltyinfo.org/stories/criteria-for-inclusion-on-dpics-innocence-list (last visited Sep. 11, 2020) (defining "innocent" death-row inmates as those who had been subsequently acquitted, had their charges dismissed, or had been pardoned on factual-innocence grounds).

^{85.} Coscia v. McKenna & Cuneo, 25 P.3d 670, 671 (Cal. 2001); Stevens v. Bispham, 851 P.2d 556, 566 (Or. 1993) (en banc); Peeler v. Hughes & Luce, 909 S.W.2d 494, 497–98 (Tex. 1995); *see also* Britt v. Legal Aid Soc'y, Inc., 741 N.E.2d 109, 110 (N.Y. 2000) (requiring that criminal defendant is "free" of the conviction); Glaze v. Larsen, 83 P.3d 26, 33 (Ariz. 2004) (requiring "any lawful means" of post-conviction relief); *cf.* Shaw v. Pub. Def. Agency, 816 P.2d 1358, 1360–61 (Alaska 1991) (holding that the grant of post-conviction relief due to IAC constituted exoneration for the purpose of the statute of limitations for a malpractice claim); Griffin v. Goldenhersh, 752 N.E.2d 1232, 1240 (Ill. App. Ct. 2001) (holding that legal malpractice claims accrued upon issuance of the mandate reversing a conviction for IAC); Noske v. Friedberg, 656 N.W.2d 409, 414 (Minn. Ct. App. 2003) (holding that a malpractice action accrued on the date on which post-conviction relief was granted); Clark v. Robison, 944 P.2d 788, 790 (Nev. 1997) (same); Humphries v. Detch, 712 S.E.2d 795, 801 (W. Va. 2011) (holding that a defendant had to prove actual innocence of both the crime charged and any lesser included offenses as an element of malpractice). *But see* Mashaney v. Bd. of Indigents' Def. Servs., 355 P.3d 667, 677 (Kan. 2015) (rejecting actual innocence requirement for legal malpractice suit).

^{86.} See 28 U.S.C. § 2254.

procedural-default rules,⁸⁷ exhaustion requirements,⁸⁸ statutes of limitations,⁸⁹ or unrelenting prejudice and harmless-error requirements.⁹⁰ In addition, the U.S. Supreme Court has refused to recognize wrongful conviction as a categorical constitutional violation.⁹¹ The role that judicial discretion and prosecutorial cooperation play in the legal processes of exoneration also pose barriers to establishing actual innocence.

At the same time, a process-based definition of exoneration is over-inclusive because registries do not distinguish appellate reversals or acquittals from actual, factual innocence. Some scholars may welcome a broader definition of wrongful conviction, and these phenomena (reversal, acquittal, actual innocence) would almost certainly overlap in a Venn diagram. Nonetheless, there is a meaningful difference between factual innocence and unreliable process. ⁹² Blurring the two concepts results in individuals being declared "exonerated" solely because, for example, they have had an appellate victory followed by a procedural windfall (e.g., if resource constraints or witness availability frustrate retrial). ⁹³

2. Conclusive Proof of Factual Innocence

In contrast to the legal-decision definition, the Innocence Project and a few scholars tend to define wrongful convictions more narrowly as having occurred when a convicted individual is conclusively proven to be factually innocent. ⁹⁴ They do so using a valid methodology of research design: a conservative sampling methodology intended to eliminate confounding variables and enhance the generalizability of their results. ⁹⁵ For this reason, the definition of "wrongful conviction" that these studies employ is, at least to some extent, an artificial one, contrived to

By relying on an innocence-based definition of exoneration, researchers are able to empirically study patterns and variation in the wrongful conviction of the innocent more quantitatively and thus more systematically, moving away from the qualitatively based explanations that have dominated much of the research literature on wrongful convictions to date and inevitably present problems of generalizability.

^{87.} *See*, *e.g.*, Bradshaw v. Richey, 546 U.S. 74, 79 (2005) (noting procedural defaults must be excused by "a showing of cause and prejudice or by the need to avoid a miscarriage of justice"); Estelle v. Williams, 425 U.S. 501, 512–13 (1976) (noting that failure to raise issue at trial requires "sufficient reason to excuse" that failure).

^{88.} See Bennett L. Gershman, Litigating Brady v. Maryland: Games Prosecutors Play, 57 CASE W. RSRV. L. REV. 531, 562–63 (2007).

^{89.} See infra Section IV.F.

^{90.} See infra Section IV.G.

^{91.} See Herrera v. Collins, 506 U.S. 390, 417 (1993) (recognizing the theoretical possibility of federal *habeas* relief in a capital case involving actual innocence if there were no other avenue for relief, but holding that Herrera had failed to meet that "extraordinarily high" burden).

^{92.} See NAUGHTON, supra note 40, at 22 (citation omitted).

^{93.} See infra Section III.A.1.

^{94.} See Leo, supra note 21, at 61–62 (synonomizing wrongful conviction with "actual innocence"); Medwed, supra note 22, at 3 (same).

^{95.} Richard Leo notes that:

create a database for research question(s). In constructing this definition, however, these databases fail to engage the crucial predicate questions necessary for a systematic study of wrongful convictions. Other than DNA exoneration, how does one *know* when a likely factually innocent defendant has been convicted?

3. The High Price of Poor Proxies for Innocence

These definitional inconsistencies have three significant costs. The first, which stems from over-inclusiveness, is societal "buy-in." When postconviction reversals that the public, judges, or prosecutors perceive as technicalities get labeled "exonerations," the credibility of the claims of the innocence movement about the scope and magnitude of wrongful convictions can suffer. This over-inclusiveness detracts from what Marvin Zalman has termed "innocence consciousness" and feeds into the cognitive dissonance among judges and prosecutors who argue against wrongful conviction as a widespread, systemic problem. Without the cooperation of prosecutors, judges, and ultimately the public, innocence reforms will not be implemented.

The second and third sets of costs of definitional uncertainty stem from underinclusiveness. The second is the failure accurately to identify and catalogue wrongful convictions. ¹⁰¹ The number of wrongful convictions in the United States likely greatly exceeds the number of exonerations in the Registry. The Salem witches can never be exonerated of witchcraft if the operative definition of exoneration is a legal-process one. This under-inclusiveness will only become dearer as the availability of DNA to exonerate (and provide access to postconviction relief) dissipates.

The third, and perhaps greatest, cost of defining exonerations only as those cases in which a court has granted postconviction relief is that such a definition

^{96.} See infra Section III.C.2.

^{97.} See Daniel S. Medwed, Innocentrism, 2008 U. ILL. L. REV. 1549, 1552 (2008) ("[A] handful of well-known scholars, judges, and lawyers have accused the innocence movement of inflating the actual number of wrongful convictions by including factually ambiguous cases in the innocence ledger.").

^{98.} Marvin Zalman, An Integrated Justice Model of Wrongful Convictions, 74 ALB. L. REV. 1465, 1468 (2010)

^{99.} See Leo, supra note 21, at 58 (citing judges, prosecutors, and scholars who deny the prevalence of wrongful convictions). Scholars have also denied that wrongful convictions are a problem. See Morris Hoffman, The Myth of Actual Innocence, 82 CHI.-KENT L. REV. 663, 664 (2007) (arguing that wrongful conviction is not even a "very common exception"); Stephen J. Markman & Paul G. Cassell, Protecting the Innocent: A Response to the Bedau-Radelet Study, 41 STAN. L. REV. 121, 121 (1988) (arguing that the risk of wrongful conviction is "too small" to consider in the context of the death penalty debate); Adam Vangrack, Serious Error with 'Serious Error': Repairing a Broken System of Capital Punishment, 79 WASH. U. L.Q. 973, 1005 (2001) (arguing that the current judicial system catches any "serious error," such as a wrongful conviction).

^{100.} See, e.g., Jon B. GOULD, THE INNOCENCE COMMISSION: PREVENTING WRONGFUL CONVICTIONS AND RESTORING THE CRIMINAL JUSTICE SYSTEM 71–72 (N.Y.U. Press. 2008) (noting public attention and support is often necessary for innocence reform).

^{101.} See Keith Findley, Defining Innocence, 74 ALB. L. REV. 1157, 1162–63 (2010) (discussing inability to perfectly define innocence).

obliterates an important role that exonerations play in root-cause analyses of the criminal-justice system.¹⁰² In many countries, especially the United States, the leading cause of wrongful conviction may very well be the high procedural barriers to exoneration of likely innocent defendants.

In the UK, the first wave of DNA exonerations, in cases like those of the Birmingham Six and the Guildford Four, caused public outrage and a systemic examination of postconviction remedies (or lack thereof). In discussing the exonerations that led to sweeping criminal justice reforms in the UK, Naughton notes that they led to an awareness that "the . . . notorious miscarriages of justice and momentous reforms that have shaped the [British] criminal justice system were not overturned by the normal machinations of the criminal justice system."

Canadian criminal justice reforms were similarly driven by a recognition of the role that postconviction barriers and finality concerns played in wrongful convictions. After DNA testing exonerated Guy Paul Morin of the murder of a nine-year-old girl for which he was convicted in 1995, the Province of Ontario formed a Commission of Inquiry into his wrongful conviction. The Inquiry affirmed many of the common causes of wrongful conviction known to scholars and advocates in other cases and countries, including misleading scientific evidence, the use of jailhouse informants, and prosecutorial discovery failures. The Inquiry also drew attention to a cause of Morin's wrongful conviction not often discussed in the American context: the need for more liberal acceptance of new evidence by appellate courts and for less reluctance to disturb jury verdicts by way of a lower threshold showing required to establish a miscarriage of justice. The inquiry also disturb is the province of the p

The same pattern also played out in South Australia, where the South Australian Parliament enacted the State Amendment (Appeals) Act 2013 in response to concerns that the limited nature of the right to appeal in Australia violated international human rights law. The Act created a new appeals process specifically to address the inadequacy of the prior processes for individuals who had been wrongfully convicted to challenge their convictions. The new process authorizes successive appeals in any case in which there is "fresh and compelling" evidence of a "substantial miscarriage of justice."

^{102.} See generally NAT'L COMM'N ON FORENSIC SCI., RECOMMENDATION TO THE ATTORNEY GENERAL: ROOT CAUSE ANALYSIS IN FORENSIC SCIENCE (2015), https://www.justice.gov/archives/ncfs/file/786581/download (recommending the adoption of root cause analysis protocols that address "when a mistake or non-conforming event" occurs).

^{103.} THORP, supra note 7, at 9.

^{104.} NAUGHTON, supra note 40, at 2.

^{105.} THORP, supra note 7, at 22.

^{106.} Id.

^{107.} Id. at 22-23, 26.

^{108.} Biba Sangha & Robert Moles, MacCormick's Theory of Law, Miscarriages of Justice, and the Statutory Basis for Appeals in Australian Criminal Cases, 37 U.N.S.W. L.J. 243, 248 (2014).

^{109.} Id.

^{110.} Id.

Scholars often refer to exonerees—those whose convictions have been proven false through legal processes—as failures of the criminal justice system, 111 but this is incorrect. If wrongful convictions are the system failures that highlight broader areas in need of reform, individuals who are exonerated by court processes are actually the "near misses." As Lara Bazelon explains, most exonerees "fall into the category of the 'lucky' ones — lucky because cheating, lying, laziness, or negligence made their legal proceedings grossly unfair." The real system failures are the undetected, and undetectable, innocent defendants who are never officially exonerated, often because they have no legal mechanism for vindication. 113 Studying those who are wrongfully convicted and then eventually exonerated through legal processes to divine the systemic failures of the criminal justice system is the equivalent of testing the efficacy of a cancer drug in a study in which everyone in the experimental group is in remission. Individuals who are "exonerated" through postconviction processes—DNA testing statutes, rules authorizing courts to grant new trials based on fresh evidence, habeas relief—have successfully overcome, at least eventually, the serious procedural hurdles in the system. Their cases cannot shed light on the wrongfully convicted who are stymied by those hurdles. Nor can those who are "exonerated" serve as an effective critique of the hurdles themselves.

A wave of exonerations in the 1990s inspired the creation of the UK CCRC. The UK CCRC was the first independent public body in the world responsible for reviewing alleged miscarriages of justice in England, Wales, and Northern Ireland and sending meritorious claims back to the Court of Appeal for further review. ¹¹⁴ As Naughton notes: "[A] salient feature of [the high-profile wrongful convictions in the UK] is that they were able to generate national and even international campaigns which were able to induce widespread public crises of confidence in the workings of the criminal justice systems at the time." ¹¹⁵ The statute creating the UK CCRC has no statute of limitations for claims of wrongful conviction, and only allows review and referral of cases to the Court of Appeal if fresh evidence or a new argument comes to light *after* the defendant has already exhausted all appeals. ¹¹⁶

^{111.} See, e.g., Barry C. Scheck & Peter J. Neufeld, *Toward the Formation of "Innocence Commissions" in America*, 86 JUDICATURE 98, 100 (2002) (characterizing exonerations as "cases where the system fails"); GOULD, *supra* note 100, at 75 (characterizing exonerations as "unfortunate errors").

^{112.} Lara Bazelon, *Scalia's Embarrassing Question*, SLATE (Mar. 11, 2015, 9:37 AM), https://slate.com/news-and-politics/2015/03/innocence-is-not-cause-for-exoneration-scalias-embarrassing-question-is-a-scandal-of-injustice.html.

^{113.} See Sangha, Roach & Moles, supra note 50, at 55 (defining "miscarriages of justice" as those cases in which a putatively innocent defendant has exhausted all available appeals and is afforded no relief).

^{114.} See id. at 3 (describing the role of the UK CCRC); THORP, supra note 40, at 11 (same); Lissa Griffin, International Perspective on Correcting Wrongful Convictions: The Scottish Criminal Cases Review Commission, 21 WM. & MARY BILL RTS. J. 1153, 1154 (2013).

^{115.} NAUGHTON, supra note 40, at 2.

^{116.} See Criminal Appeal Act 1995, c. 35, § 13 (UK).

Similarly, in Canada, the Government inquiries into the wrongful convictions of Donald Marshall and Guy Paul Morin led to the creation of an independent review mechanism for postconviction claims of wrongful conviction (although not an independent commission), which enlarged the scope of review power of the Minister of Justice.¹¹⁷ The Canadian Government also sanctioned broader fresh-evidence rules and a lower threshold for calling a conviction into question: "a reasonable basis to conclude that a miscarriage of justice likely occurred."¹¹⁸

New South Wales and South Australia, Australia's two most populous States, also adopted reforms to their postconviction-review mechanisms in response to rising awareness of the inadequacy of traditional appellate processes for challenging wrongful convictions. These reforms included mechanisms for Supreme Court inquiries into potential wrongful convictions (New South Wales)¹¹⁹ and mechanisms for successive appeals in cases involving claims of substantial miscarriage of justice (South Australia).¹²⁰ Nonetheless, scholarly criticism of the adequacy of these reforms continues.¹²¹

American scholars have called for innocence commissions in the United States, ¹²² but they cannot make a compelling case for additional layers of review without wrongful-conviction databases that include innocent defendants who do not have a formal mechanism for relief—i.e., those still in prison. ¹²³ That is because procedural barriers to postconviction relief, ¹²⁴ which are routinely decried in other areas of legal scholarship as unnecessarily cumbersome and unjust, ¹²⁵ are

^{117.} *See* THORP, *supra* note 7, at 10 (describing the creation of the Marshall and Morin inquiries); Criminal Code, R.S.C. 1985, c C-46, § 696.1(1) (Can.) (allowing for applications of ministerial review to the Minister of Justice).

^{118.} Criminal Code, R.S.C. 1985, c C-46, § 696.3(3)(a) (Can.).

^{119.} See Application of Holland under s 78 Crimes (Appeal and Review) Act 2001, [2008] NSWSC 251, ¶ 5 (Johnson, J.) (characterizing the Act as "remedial legislation designed to overcome injustices"); Crimes (Appeal and Review) Act 2001 (NSW) s 77(1)(a) (authorizing the Governor to refer cases involving possible wrongful convictions to a court of criminal appeal for a judicial inquiry on an ad-hoc basis); id. s 78 (authorizing applications for judicial inquiries or successive appeals to be made to the New South Wales Supreme Court in cases in which there are questions about the defendant's guilt). See generally Hamer, supra note 25, at 287 (describing reforms to address wrongful convictions). Prior to 2001, the New South Wales Supreme Court had the power to order these remedies on its own initiative; the 2001 reforms created a mechanism for an inmate to petition for the court to exercise its power. Id. at 288 n.117.

^{120.} Statutes Amendment (Appeals) Act 2013 (SASR) § 353A(3) (Austl.).

^{121.} See, e.g., Hamer, supra note 25, at 298 (characterizing the ability for defendants to access relief as "illusionary").

^{122.} See GOULD, supra note 100, at 5; MEDWED, supra note 25, at 141–42; Lissa Griffin, Correcting Injustice: Studying How the United Kingdom and the United States Review Claims of Innocence, 41 Toledo L. Rev. 107, 110 (2009); Kent Roach, The Role of Innocence Commissions: Error Discovery, Systemic Reform or Both?, 85 CHI.-KENT L. Rev. 89, 89–90 (2010).

^{123.} Of the fifty-two criminal-justice systems in the United States, only North Carolina and Virginia have created review commissions. *See* N.C. GEN. STAT. ANN. § 15A-1462(a) (West 2020); GOULD, *supra* note 100, at 5 (describing the North Carolina commission's establishment).

^{124.} See supra note 24 & accompanying text.

^{125.} See, e.g., Griffin, supra note 122, at 134–35, 37 (outlining the barriers and arguing that they prevent the "broad corrective function" found in the UK); Donald P. Lay, The Writ of Habeas Corpus A Complex Procedure for a Simple Process, 77 Minn. L. Rev. 1015, 1018–19 (1993) (describing habeas review as a system that

notably missing from the common catalogue of known *causes* of wrongful convictions in the United States. That, in turn, is because the scholars who study the common causes of wrongful conviction have been studying only the convictions of those who have been legally exonerated. Scholars write about the injustice of post-conviction barriers for putatively innocent prisoners. They do not generally conceive of the barriers themselves as a *cause* of wrongful convictions because of the disconnect between the catalogued exonerees and the unexonerated but wrongfully convicted. The lack of an accurate count of wrongful convictions, caused by the under-inclusiveness of a process-based definition of exoneration, masks the scope of this problem and makes postconviction access-to-justice reforms less likely.

The highly publicized case of Troy Davis in Georgia exemplifies this problem. Davis was convicted, sentenced to death, and executed for shooting and killing an off-duty police officer. The primary evidence against Davis at trial was identification testimony by eyewitnesses who later recanted their identifications and claimed that the police had coerced them. Unfortunately, the recantations

"breeds judicial inefficiency, delay, public misunderstanding, and fundamental unfairness"); Michael Naughton, *The Importance of Innocence for the Criminal Justice System, in* THE CRIMINAL CASES REVIEW COMMISSION: HOPE FOR THE INNOCENT? 21 (Michael Naughton, ed., 2010) (characterizing appeals process as containing "insurmountable barriers"); Eve Brensike Primus, *Federal Review of State Criminal Convictions: A Structural Approach to Adequacy Doctrine*, 116 MICH. L. REV. 75, 75 (2017) (describing postconviction review systems as "procedural labyrinths"); Mark Tushnet & Larry Yackle, *Symbolic Statutes and Real Laws: the Pathologies of the Antiterrorism and Effective Death Penalty Act*, 47 DUKE L.J. 1, 36 (1997) (arguing that rules and procedures are likely to "bring about the dismissal of almost all successive applications for federal review" in death penalty cases).

126. See, e.g., Sandra Guerra Thompson & Robert Wicoff, Outbreaks of Injustice: Responding to Systemic Irregularities in the Criminal Justice System, in Wrongful Convictions and the DNA Revolution: Twenty-Five Years of Freeing the Innocent 314 (Daniel S. Medwed ed., 2017) (listing "typical" causes of wrongful convictions, which do not include procedural barriers). But see Gould, supra note 100, at 78 (categorizing "unavailability of adequate postconviction remedies to address wrongful covictions" as a factor linked to erroneous convictions); Stephanie Roberts Hartung, Missing the Forest for the Trees: Federal Habeas Corpus and the Piecemeal Problem in Actual Innocence Cases, 10 Stan. J. Civ. Rts. & Civ. Liberties 55, 58 (2014) (describing review process as failing to "successfully identify and grant relief to the factually innocent"); Hartung, Supra note 6, at 247 (stating procedural relief offers "little more than a facade of protection").

127. See, e.g., Daniel Medwed, Up the River Without a Procedure: Innocent Prisoners and Newly Discovered Non-DNA Evidence in State Courts, 47 ARIZ. L. REV. 655, 660 (2005) (examining prisoners exonerated with DNA evidence).

128. One noteworthy exception to this disconnect is Hartung's work. See Stephanie Roberts Hartung, Habeas Corpus for the Innocent, 19 U. Pa. J. Law & Soc. Change 1, 39 (2016) (calling for a "revisit" of federal habeas procedures as part of the innocence movement); Hartung, supra note 126, at 75 (criticizing additional procedural barriers to "factually innocent prisoners seeking" relief). In her recent book chapter, "Post-Conviction Procedure," she notes that the innocence reforms that have been implemented to date are "primarily prospective," seeking to prevent future wrongful convictions, but offering no remedy for innocent prisoners whose trials occurred before the reforms took effect. Hartung, supra note 6, at 248. She advocates retrospective reforms in postconviction procedure to facilitate remedying past injustices. Id.

129. See Ross Douthat, Justice After Troy Davis, N.Y. TIMES (Sept. 25, 2011), https://www.nytimes.com/2011/09/25/opinion/sunday/douthat-justice-after-troy-davis.html; Kim Severson, Georgia Inmate Executed; Raised Racial Issues in Death Penalty, N.Y. TIMES, (Sept. 22, 2011), https://www.nytimes.com/2011/09/22/us/final-pleas-and-vigils-in-troy-davis-execution.html.

130. See Douthat, supra note 129; Severson, supra note 129.

surfaced only after Davis had exhausted his state appeals, state postconviction relief ("PCR"), and federal *habeas* processes. Davis filed again for state PCR, on the basis of signed affidavits from the recanting witnesses, but the Georgia state courts refused to hear the merits of his new evidence claim. ¹³¹ The federal courts declined to grant him *habeas* relief on harmlessness grounds. ¹³² He was executed because no court would grant him a new trial on the complete evidence.

Davis is viewed by many scholars, journalists, and other commentators as the first known innocent person to have been executed, but, precisely because no court exonerated him, he is not eligible for inclusion in the Registry. Because he is not in the Registry, the procedural barriers that precluded his demonstration of his likely innocence are not included in scholarly analyses of causes of wrongful conviction.

4. The Problem with a Legal Innocence Standard

In his 2011 article, "Defining Innocence," Keith Findley identified many of the same definitional problems and costs that this Article does, but he concluded something quite different: that a definition based on legal evidentiary insufficiency is the only "workable" definition of innocence. While the definition of wrongful conviction that this Article advances overlaps to some extent with the concept of reasonable doubt, albeit one that is forward-looking (is there enough evidence now?) rather than backward-looking (was there enough evidence at trial?), it is not coextensive with legal sufficiency of the evidence.

One problem with a test of legal innocence based on reasonable doubt is that it cannot account for the existence of affirmative defenses like insanity or justification. The evidence against an individual whom we now know (but whose trial jury did not) was probably not guilty due to insanity or self-defense was and still is legally sufficient because the individual unquestionably committed all elements of the offense. The law has no conception of a legally sufficient showing of an affirmative defense that is analogous to summary judgment for the defendant in civil cases. ¹³⁵ It also cannot account for extra-legal concerns that are independent of the weight of the evidence, such as the role that a defendant's intellectual disability or pretrial publicity may have played in a questionable conviction.

A bigger problem with legal innocence is that the test for legal sufficiency of the evidence is lenient enough to uphold the convictions of individuals who are likely

^{131.} See Douthat, supra note 129.

^{132.} Colleen Curry & Michael S. James, *Troy Davis Executed After Stay Denied by Supreme Court*, ABCNEWS, (Sept. 21, 2011), https://abcnews.go.com/US/troy-davis-executed-stay-denied-supreme-court/story? id=14571862.

^{133.} Findley, *supra* note 101, at 1184.

^{134.} See Herrera v. Collins, 506 U.S. 390, 434–35 (1993) (Blackmun, J., dissenting) (requiring a prisoner to prove not that there is "a reasonable doubt about his guilt" but that he is "probably actually innocent" based on new evidence).

^{135.} E.g., Carrie Leonetti, When the Emperor Has No Clothes: A Proposal for Defensive Summary Judgment in Criminal Cases, 84 S. Cal. L. Rev. 661, 676 (2011).

actually innocent, particularly in light of what is known about the common causes of wrongful convictions. A confession or eyewitness identification, standing alone, is legally sufficient to overcome a motion for judgment of acquittal or appeal based on the sufficiency of the evidence (or even reasonable doubt for many judges and jurors). This is true even if there are serious concerns about the reliability of the confession or the eyewitness.

5. Defining Likely Actual Innocence

This Article takes issue with the claims of proponents of other innocence proxies that there is a not a workable alternative to a process-based or purely legal definition of innocence. It proposes a hybrid definition of wrongful conviction that draws on aspects of both factual and legal innocence: a defendant has been wrongfully convicted when a reasonable doubt about factual guilt should exist, based on all that is now known about the facts of the case specifically and the causes of miscarriages of justice generally. 136 This definition is substantive, not procedural. It is not based on official exoneration, but rather a real-time qualitative assessment of the weight of the evidence, as it currently exists, based on an empirically and jurisprudentially derived definition of reasonable doubt. It is not the same as legal innocence, which focuses on the sufficiency of case-specific evidence that was adduced at trial. Instead, it attempts to describe the factual circumstances under which the risk of error is intolerably high such that a conviction should be deemed false for the purpose of scholarly study of wrongful convictions (or, in the context of trial, such that a court ought to direct a verdict of not guilty, even if the evidence is technically legally sufficient).

C. Changing Science as a Specific Context for the Meaning of "Innocence"

To some extent, these arguments (legal *versus* factual innocence, actual innocence *versus* failure of procedural justice) may seem theoretical, but they have significant jurisprudential consequences. For example, the distinctions influence whether a court excuses procedural default on *habeas* review¹³⁷ or grants entitlement to compensation.¹³⁸ Another context in which these theoretical differences become concrete is that of changing scientific evidence. As discussed *supra*, there are categories of evidence that have recently been debunked, including evidence surrounding, for example, shaken-baby syndrome or fire-pattern analysis. Today, there is consensus that the existence of petechial hemorrhages or V-shaped burn patterns is simply not conclusively indicative of child abuse or arson.¹³⁹ These shifting scientific consensuses, however, have been gradual, and they are generally

^{136.} See infra Part III.

^{137.} See 28 U.S.C. §§ 2254(e)-(f).

^{138.} See, e.g., FLA. STAT. ANN. § 961.03 (West 2020).

^{139.} See, e.g., Findley, supra note 12, at 209–10 (discussing shaken-baby syndrome); id. at 199–201 (discussing fire-pattern analysis).

not conclusive with respect to a single defendant convicted on the basis of a collection of circumstantial evidence. As a result, individuals convicted, at least in part, on the basis of this evidence now known to be unreliable and oversold often remain convicted and incarcerated.

In the United States, this is true because postconviction claims of significant procedural error exist in jurisprudential silos. The most common are newly discovered evidence, prosecutorial misconduct, IAC, and evidentiary insufficiency. Actual innocence is neither necessary nor sufficient for success with any of these claims. Conversely, a claim of actual innocence in the absence of one of these (or other cognizable) procedural errors often lacks a jurisdictional vehicle for merits review. As a practical matter, convicted individuals maintaining their innocence tend to use innocence as a plea of last resort, instead using the weakness of the evidence to buttress claims of materiality or prejudice within these other, more navigable post-conviction claims.

When a defendant's claim of wrongful conviction is based on evolving scientific evidence, however, it does not fit neatly into any of these jurisprudential silos. The fact that a consensus of scientific experts in a particular field once agreed on a principle but, based on new scientific data, no longer does is not the type of newly discovered evidence that most fresh-evidence doctrines contemplate. There was no misconduct by the prosecutors in presenting the evidence prior to the change in consensus precisely because, at the time of trial, the testimony represented the consensus of the field. Similarly, there was no IAC for failing to investigate "shoddy" science because the science was not deemed shoddy at the time; any independent expert contacted by defense counsel would have agreed with the prosecution's expert. Finally, the evidence at trial was legally sufficient to convict the defendant, even though, today, under the same factual circumstances in a new case, it would not be.

The recent case of *Maryland v. Kulbicki*¹⁴⁰ illustrates this problem. In 1995, James Kulbicki was convicted of murdering the mother of his child. At the time, Kulbicki was embroiled in a child-support dispute with the victim, who had been shot in the head at point-blank range. He was convicted, in part, based on CBLA testimony from a forensic analyst at the Federal Bureau of Investigation ("FBI"). At the time of Kulbicki's trial, the theory behind CBLA, which has subsequently been abandoned by the FBI as unreliable, was that the lead composition of bullets manufactured by a particular company varied across production batches enough that a comparison could indicate whether a bullet linked to a suspect (e.g., bullets remaining in a box of bullets in a suspect's possession) was part of the same

^{140. 136} S. Ct. 2 (2015) (per curiam).

^{141.} Id. at 3.

^{142.} Id.

^{143.} Id.

small production unit of bullets as a bullet from the crime scene.¹⁴⁴ This premise, if scientifically reliable, would be statistically very unlikely unless the two bullets came from the same source. The FBI analyst testified that the lead composition of a bullet fragment found in Kulbicki's truck matched that of the bullet taken from the victim's skull, making it likely that the two bullets came from the same box.¹⁴⁵

In 2006, in a different case, the Maryland Court of Appeals held that CBLA evidence was so unreliable that it was inadmissible under the Maryland Rules of Evidence. ¹⁴⁶ Shortly thereafter, Kulbicki sought *habeas* relief in the Maryland state courts, arguing that his trial attorneys had been constitutionally ineffective for failing to challenge the unreliable CBLA pseudo-science. ¹⁴⁷ The Maryland Court of Appeals agreed with Kulbicki, finding that there was enough evidence of the unreliability of CBLA at the time of Kulbicki's trial that his attorneys should have realized its methodological flaws and challenged its reliability. ¹⁴⁸

The State appealed to the U.S. Supreme Court which reversed the grant of *habeas* relief to Kulbicki. The Court reasoned that Kulbicki's attorneys' failure to "predict the demise of CBLA" did not constitute IAC. The Court concluded: "Counsel did not perform deficiently by dedicating their time and focus to elements of the defense that did not involve poking methodological holes in a then-uncontroversial mode of ballistics analysis." In essence, Kulbicki's trial was too soon, and his *habeas* challenge was too late because he was tried before the key evidence on which he convicted was shown conclusively to be nonsense.

This is the type of jurisprudential neverland into which defendants fall when wrongful conviction is defined with reference to legal (rather than factual) innocence and in which they remain when it is catalogued by official exoneration. It is one of the reasons why the UK CCRC is authorized to receive evidence relating to scientific development: to ensure that convictions obtained on the basis of science that is no longer considered valid can be revisited. For example, in *Regina v. Friend*, 153 the CCRC provided the Court of Appeal new psychological evidence

^{144.} *See* BULLET LEAD REPORT, *supra* note 11, at 1–2 (describing bullet lead analysis process); Press Release, FBI National Press Office, FBI Laboratory Announces Discontinuation of Bullet Lead Examinations (Sept. 1, 2005), https://archives.fbi.gov/archives/news/pressrel/press-releases/fbi-laboratory-announces-discontinuation-of-bullet-lead-examinations (abandoning bullet lead examination because of lack of "relative probative value").

^{145.} Kulbicki, 136 S. Ct. at 3.

^{146.} See Clemons v. State, 896 A.2d 1059, 1078 (Md. 2006) ("[W]e determine that the trial court erred in admitting expert testimony based on CBLA because of the lack of general acceptance of the process in the scientific community.").

^{147.} Kulbicki, 136 S. Ct. at 3.

^{148.} Id. at 3-4.

^{149.} Id. at 4.

^{150.} Id.

^{151.} *Id*.

^{152.} See Griffin, supra note 25, at 1286–87 (authorizing the court to consider new evidence and determine whether, had the jury had access to this evidence, it would have arrived at the same conclusion).

^{153. [2004]} EWCA (Crim) 266 (Eng.).

relating to Attention Deficit Hyperactivity Disorder.¹⁵⁴ At the time of the trial, the scientific evidence did not exist, but, on appeal, it was fresh evidence suggesting that Friend's confession was unreliable. Upon review, the Court quashed Friend's conviction on the basis of the new evidence.¹⁵⁵

Because individuals in similar situations in the United States have no legal doctrine through which to challenge a conviction that was fair at the time that it was obtained, they never become exonerees. This under-inclusiveness of the definition of exoneree then obscures a significant cause of wrongful conviction. While databases and studies of the wrongfully convicted often categorize "invalid science" as a common cause, the invalidity that these databases contemplate is an ex post one. The "junk science" cases in the wrongful conviction canon are cases in which the scientific evidence, at the time that it was presented at trial, was some combination of: (1) insufficiently validated or communicated by the expert; (2) unethically presented by the prosecutor; or (3) inadequately challenged by defense counsel, either by the failure to engage an independent expert (who would have given a different, more reliable opinion) or the failure adequately to utilize existing legal claims under discovery rules or rules governing expert evidence. A database of exonerees cannot include those who were convicted by the best science available at the time that has now been debunked by the evolving nature of the scientific method, because they have no legal mechanism for exoneration. The shaken-baby defendants, most of whom remain unexonerated unless they are able to find an alternative jurisprudential hook for their claims of injustice, are a good example of this. 156

III. CASE STUDIES IN DEFINITIONAL DISAGREEMENTS

Sometimes prosecutors will concede that a conviction was, in retrospect, erroneous or a judge will take the extraordinary step of not only vacating a questionably obtained conviction, but affirmatively declaring the defendant's innocence. The remainder of the time, however, the parties to a putative exoneration often disagree about its nature.

Section A of this Part critiques the over- and under-inclusiveness that result from the definitional methodology deployed by the Registry. Section B offers case studies of the competing narratives that surround putative exonerations, when there is no baseline agreement on how to identify and define innocence. Section C

^{154.} Id.

^{155.} Id.

^{156.} See Findley, supra note 12, at 198 (noting that "hundreds, if not thousands of potentially innocent defendants remain convicted); Deborah Tuerkheimer, Science-Dependent Prosecution and the Problem of Epistemic Contingency: A Study of Shaken Baby Syndrome, 62 Ala. L. Rev. 513, 559–60 (2011). See generally DEBORAH TUERKHEIMER, FLAWED CONVICTIONS: "SHAKEN BABY SYNDROME" AND THE INERTIA OF INJUSTICE 173–93 (2014) (discussing options for appealing "shaken baby syndrome" convictions); Jennifer E. Laurin, Criminal Law's Science Lag: How Criminal Justice Meets Changed Scientific Understanding, 93 Tex. L. Rev. 1751 (2015) (describing how lag in scientific understanding is systemic and contributes to inability to undo final judgments).

discusses the social psychology of cognitive biases and explains how competing narratives around exoneration feed into prosecutorial resistance to claims of innocence and frustrate widespread innocence consciousness.

A. The Registry

Beyond ensuring that a referred case meets the definition of exoneration, the administrators of the Registry do not qualitatively vet the exonerations that they catalogue. This results in both over- and under-inclusion of likely innocent individuals in the Registry.

1. Over-Inclusion: Questionable "Exonerations"

Some cases in the Registry are still contested by police, prosecutors, and victims, as a result of the over-inclusiveness problem with the Registry's processbased definition of exoneration. The case of Sandra Adams is one example of this over-inclusiveness. Adams, an off-duty police officer, was convicted of menacing after allegedly pointing her pistol at another driver, William Cross, with whom she had a traffic altercation. 157 Her defense was that she had made an obscene gesture rather than pointing a gun, and that the windows of her vehicle were so darkly tinted that Cross could not have seen a pistol through them.¹⁵⁸ The trial court granted Adams a new trial after she discovered that the prosecution had withheld information relating to Cross's extensive history of traffic violations and license suspensions. 159 The prosecution retried Adams, and the court acquitted her primarily on the basis of doubt about Cross's credibility. 160 Regardless of whether Adams pointed her pistol at Cross, a not-guilty verdict in a he-said/she-said trial is evidence, at best, of legal innocence (the second judge harbored a reasonable doubt about her guilt), not of factual innocence. The Registry characterizes the cause of Adams's (wrongful) conviction as "perjury," but, of course, a not-guilty verdict does not mean that the factfinder decided that the prosecution witness was lying. The case is also an example of the system working rather than failing. Adams's retrial was granted before she was even sentenced, and her attorney was able to secure a not-guilty verdict despite the legally sufficient evidence of Cross's testimony on retrial.

The case of Don Adams, Jr. is another example. Adams was a barber/drug dealer. ¹⁶² In 1991, Donna Benjamin identified Adams as the man she witnessed

^{157.} Sandra Adams, NAT. REGISTRY OF EXONERATIONS, http://www.law.umich.edu/special/exoneration/Pages/casedetail.aspx?caseid=4130 (last visited Nov. 19, 2020).

^{158.} Id.

^{159.} Id.

^{160.} Id.

^{161.} Id.

^{162.} Claudia Vargas, *Accuser: I Was Pressured to Blame Wrong Man*, PHILA. INQUIRER (Aug. 31, 2015), http://www.philly.com/philly/news/20150830_Ex-inmate_and_accuser_reconcile.html?arc404=true.

killing two other drug dealers six months earlier.¹⁶³ Adams did not match the description given by several eyewitnesses.¹⁶⁴ He was nonetheless convicted primarily based on his visual identification by Benjamin and two others, in addition to his lack of alibi witnesses.¹⁶⁵ Twenty years later, Benjamin recanted her identification, claimed that the police had pressured her to pick Adams, and identified a different man as the shooter.¹⁶⁶ The court granted Adams a new trial.¹⁶⁷ The Commonwealth of Pennsylvania retried Adams, and his second jury acquitted him.¹⁶⁸

Adams's case now appears in the Registry,¹⁶⁹ but police and prosecutors still maintain that he was the shooter, and they have not charged the alternate suspect that Benjamin accused.¹⁷⁰ Benjamin claims that she changed her identification out of conscience.¹⁷¹ Prosecutors claim that she changed it as a result of remorse or neighborhood pressure.¹⁷² On the one hand, proof beyond a reasonable doubt is a high standard, and the failure of the Commonwealth to meet it to the second jury's satisfaction does not necessarily mean that Adams is innocent. In fact, jurors who believe that a defendant *probably* committed a crime must acquit because they are not absolutely certain of guilt. On the other hand, the police and prosecutors in Adams' case were subject to a multimillion-dollar lawsuit for malicious prosecution, a powerful incentive to pronounce a disingenuous persisting belief in his guilt. The City of Philadelphia ultimately settled Adams's lawsuit for one million dollars.¹⁷³

Was Adams the victim of a corrupt police investigation and subsequent dishonest refusal to acknowledge wrongdoing? Or was he the beneficiary of a lucky but untrue recantation, in conjunction with the stringency of the reasonable-doubt standard? Perhaps more to the point, is Adams an "exoneree" because he was acquitted on retrial or because the City's insurance company settled his case, likely over the objection of the accused wrongdoers? Or is he an exoneree because the curators of the Registry *sub silentio* determined subjectively that Benjamin's recantation was more credible than her original testimony, particularly in light of the discrepancies between descriptions of the perpetrator and Adams's appearance? If it is the former (acquittal or lawsuit settlement without admission of guilt), then there are a lot of "exonerees" who have been left out of the Registry. If it is the

^{163.} Id.

^{164.} *Id*.

^{165.} Id.

^{166.} Id.

^{167.} *Id*.

^{168.} Id.

^{169.} Don Ray Adams, NAT. REGISTRY OF EXONERATIONS, http://www.law.umich.edu/special/exoneration/Pages/casedetail.aspx?caseid=3880 (last visited Nov. 19, 2020).

^{170.} Vargas, supra note 162.

^{171.} See id. (citing her desire to "right her wrongs").

^{172.} Id.

^{173.} Id.

latter (qualitative judgment about the reliability of the eyewitness identifications), then it is disingenuous to include Adams in a registry that purports to catalogue only those who have "objectively" prevailed in official court processes of exoneration. Designating Adams an exoneree because he got a not-guilty verdict the second time obscures rather than helps to elucidate the total number of convicted individuals—most of whom never get a retrial—imprisoned because they were identified by shaky eyewitnesses whose identifications, after pressure from overworked police detectives looking to close a case, mismatched the description of the suspect.

2. Under-Inclusion: Missing Innocents

More concerning is the fact that the under-inclusiveness of a process-based definition of exoneration means that innocent defendants who remain falsely convicted are not included in the Registry. At the same time that the Registry includes defendants whose "exonerations" are debatable, it also excludes individuals who are generally regarded as wrongfully convicted. ¹⁷⁴ The now infamous *Dassey* case, from the Netflix series Making a Murderer, 175 demonstrates the cost of an underinclusive process-based definition of exoneration. Dassey was convicted for his role in the rape and murder of Teresa Halbach in rural Wisconsin. He became a suspect when Halbach's car and remains were discovered on the farm of his uncle, Steven Avery. 176 The State's theory was that Avery had raped and killed Halbach and sixteen-year-old Dassey had been his accomplice. After initially maintaining his innocence, Dassey confessed to participating in the rape and murder after several rounds of lengthy police interrogation.¹⁷⁷ Dassey's interrogation involved techniques that social scientists deem unacceptably suggestive, even for adult suspects. ¹⁷⁸ After the police extracted his confession, Dassey nonetheless maintained his innocence and claimed that he had confessed because of police pressure and suggestion. He was convicted on the basis of his confession in the absence of extrinsic corroborating evidence. ¹⁷⁹ In 2016, the U.S. District Court for the Eastern District of Wisconsin granted Dassey habeas relief on the ground that police had involuntary extracted his confession in violation of the Due Process Clause of the Fourteenth Amendment. 180 The U.S. Court of Appeals for

^{174.} See supra Section II.B.1.

^{175.} Making a Murderer (Netflix television series Dec. 18, 2015), https://www.netflix.com/title/80000770.

^{176.} See Dassey v. Dittmann, 201 F. Supp. 3d 963, 967–69 (E.D. Wis. 2016), rev'd, 877 F.3d 297 (7th Cir. 2017).

^{177.} See id. at 970 (stating four rounds of interrogations within 48 hours).

^{178.} See Ashley Louszko, Ignacio Torres, Lauren Effron & Ben Newman, "Making a Murderer": The Complicated Argument over Brendan Dassey's Confession, ABC NEWS (Mar. 8, 2016), http://abcnews.go.com/US/making-murderer-complicated-argument-brendan-dasseys-confession/story?id=37353929.

^{179.} Dassey, 201 F. Supp. 3d at 984-85.

^{180.} Id. at 1006.

the Seventh Circuit disagreed, reinstating Dassey's conviction.¹⁸¹ *Dassey* demonstrates one of the tragic, circular consequences of the under-inclusiveness of "exoneration." Americans believe that Dassey is innocent.¹⁸² Dassey remains in prison because he cannot overcome the draconian procedural hurdles required for federal *habeas* relief.¹⁸³ The profound unfairness of those hurdles is not included on official lists of causes of wrongful conviction because, since Dassey has not been procedurally exonerated, his case is not in the Registry.

Another, lower-profile example of under-inclusion is the case of Edward Elmore in South Carolina. Elmore, a Black man, was convicted in 1982 of the sexual assault and murder of an elderly white woman. ¹⁸⁴ Elmore's case had many hall-marks of a wrongful conviction: racism, poverty, developmental disability, a rushed police investigation and trial, ¹⁸⁵ junk science, ¹⁸⁶ flagrant prosecutorial ¹⁸⁷ and police misconduct, ¹⁸⁸ a jailhouse informant, and IAC. ¹⁸⁹ His conviction was affirmed on appeal and state PCR review. ¹⁹⁰ A federal appellate court finally granted him *habeas* relief and ordered a new trial. ¹⁹¹ On remand, after thirty years in prison, Edward entered an *Alford* plea, ¹⁹² pleading guilty without admitting factual guilt, in exchange for a sentence of time served which allowed him to be released from prison immediately. ¹⁹³ Implicitly, the State's decision to allow Edward to plead *nolo contendere* on remand and be sentenced to time served for a rape-murder, in conjunction with the facts of the case, strongly suggests not only

^{181.} Dassey v. Dittmann, 877 F.3d 297, 318 (7th Cir. 2017).

^{182.} See Brandon Garrett, Brendan Dassey's False Confession Shows We Need to Be More Careful When Interrogating Juveniles, USA TODAY (June 9, 2018), https://www.usatoday.com/story/opinion/policing/2018/06/09/brendan-dasseys-false-confession-supreme-court-column/652915002/; Tom Nicholson, How the US Midterms Could Help 'Making a Murderer' Convicts Steven Avery and Brendan Dassey, ESQUIRE (Dec. 11, 2018), https://www.esquire.com/uk/latest-news/a25001162/how-the-us-midterms-could-help-making-a-murderer-convicts-steven-avery-and-brendan-dassey/; Kelly Wynne, Who Is Bobby Dassey? "Making a Murderer" Fans Think He's Guilty of Teresa Halbach's Murder, NEWSWEEK (Oct. 25, 2018), https://www.newsweek.com/who-bobby-dassey-making-murderer-fans-think-hes-guilty-teresa-halbachs-murder-1188325.

^{183.} See Thompson & Wicoff, supra note 126, at 315 (noting that procedural barrier waiver is often necessary for judicial review).

^{184.} Raymond Bonner, When Innocence Isn't Enough, N.Y. TIMES, Mar. 4, 2012, at SR8.

^{185.} See id. (describing a trial lasting only eight days, with two for jury selection).

^{186.} The only physical evidence linking Elmore to the crime was a microscopic hair "match," see id., a forensic discipline that has since be debunked. See supra Section I.A.

^{187.} Prosecutors withheld exculpatory physical evidence from Elmore, in violation of *Brady v. Maryland*, a Supreme Court case requiring the prosecution to turn over "all potentially exonerating evidence." Bonner, *supra* note 184, at SR8.

^{188.} The police appeared to have planted evidence framing Elmore and the judge found evidence of "police ineptitude and deceit." *Id.*

^{189.} Id.

^{190.} Id.

^{191.} *Id*.

^{192.} See North Carolina v. Alford, 400 U.S. 25, 37 (1970) (holding that an "express admission of guilt . . . is not a constitutional requisite to the imposition of criminal penalty").

^{193.} See Bonner, supra note 184, at SR8.

that Edward is innocent but that prosecutors acknowledged as much. Nonetheless, because Edward pleaded guilty, he is not an "exoneree."

B. Competing Narratives

As Daniel Medwed has extensively documented: "It is not uncommon for prosecutors and innocence project lawyers to battle over terminology, with prosecutors rejecting the notion that the dismissal is premised on 'actual innocence." It is easy to find examples of putative exonerations, or cases in which defense supporters seek and/or celebrate the vindication of innocent people while prosecution supporters seek to prevent and/or decry triumphs of procedure over justice. In addition to exemplifying the over- and under-inclusiveness of a process-based definition of exoneration, these cases also highlight the diverging societal narratives that result from hinging claims of innocence on highly technical court processes rather than a uniform, substantive definition.

One example of the divergent narratives that can result from contested claims of innocence arising out of a process-based definition of exoneration is the infamous Amanda Knox case. In 2007, Knox was a twenty-year old American exchange student when her British roommate, Meredith Kercher, was murdered in their flat in Perugia, Italy. Knox became a suspect when she gave a series of inconsistent statements to police about her whereabouts at the time of the crime during several successive days of interrogation. The prosecution's theory was that Kercher's murder occurred during a sex game with Knox, Knox's boyfriend Raffaele Sollecito, and an acquaintance, Rudy Guede. Knox, Sollecito, and Guede were convicted in 2009. In 2015, the Italian Corte Supreme di Cassazione (Supreme Court) reversed their convictions on the ground that the evidence was legally insufficient: the DNA evidence used to link them to the crime was unreliable. The Court's opinion, however, did not take into account Knox's inconsistent, incriminating statements to police because they had been suppressed prior to trial.

^{194.} Medwed, supra note 22, at 13 n.4.

^{195.} Nina Burleigh, The Fatal Gift of Beauty xxiii–xxv (2012).

^{196.} Under Italian law, Knox's incriminating statements were inadmissible because she was interrogated without an attorney, CODICE DI PROCEDURA PENALE [C.P.P.] arts. 63–64 (It.), but they were the reason why she became the prime suspect, *see* Julia Grace Mirabella, *Scales of Justice: Assessing Italian Criminal Procedure Through the Amanda Knox Trial*, 30 B.U. INT'L. L.J. 229, 240–42 (2012).

^{197.} See Danielle Lenth, Life, Liberty, and the Pursuit of Justice: A Comparative Legal Study of the Amanda Knox Case, 45 McGeorge L. Rev. 347, 352 (2013); Michael Vitiello, Bargained-for-Justice: Lessons from the Italians?, 48 U. Pac. L. Rev. 247, 249 (2017); David Harrison & Philip Sherwell, Amanda Knox: "Foxy Knoxy" Was an Innocent Abroad, Say U.S. Supporters, Telegraph (Dec. 5, 2009), http://www.telegraph.co.uk/news/6736512/Amanda-Knox-Foxy-Knoxy-was-an-innocent-abroad-say-US-supporters.html; Barbie Nadeau, Sex Murder Prison Diaries, Newsweek (Jan. 16, 2008), http://www.newsweek.com/sex-murder-prison-diaries-87481.

^{198.} Nadeau, supra note 197.

^{199.} Burleigh, supra note 195, at xxiii.

^{200.} See Lenth, supra note 197, at 373.

Scholars and the American media nonetheless described the Court's opinion as "exonerating" Knox.²⁰¹ Knox's parents publicly alleged that Italian police coerced her into a false confession.²⁰² As a result, they were charged in Italy with criminal defamation.²⁰³ James Whitman has described the fallout from the *Knox* trial as "an intense public-relations battle over her guilt."²⁰⁴ Knox supporters describe the Italian Supreme Court decision as vindicating her innocence,²⁰⁵ while her condemners characterize her as a rich American who escaped justice.²⁰⁶ The case presents the question that this Article aspires to answer: was Knox's conviction a miscarriage of justice, or was her release, if not a miscarriage of justice, at least a victory of mere procedural technicality (Italy's *per se* exclusionary rule prohibiting the admission of Knox's uncounseled confession, which likely would have been admissible in an American court), resulting in "wrongful acquittal"? More importantly, how, if at all, can the difference be defined?

Another example of the divergent narratives that arise from the lack of a shared, objective definition of innocence is the case of Rob Will in Texas. Will was convicted and sentenced to death for shooting a sheriff's deputy.²⁰⁷ Will maintains his innocence and claims that his trial attorneys failed to investigate and present evidence relating to an alternate suspect.²⁰⁸ His federal *habeas* lawyers presented evidence that this other man confessed repeatedly to the murder.²⁰⁹ The State claimed that the witnesses' statements about the confession were not credible.²¹⁰ Despite expressing concerns about his potential innocence, the district court denied *habeas* relief, finding that Will had failed to prove that his trial attorneys' deficiencies were severe enough to warrant relief.²¹¹ Will's failed quest for *habeas* relief means that his case cannot go into the Registry. Nonetheless, Will's supporters continue to maintain his innocence.²¹² Again, this case demonstrates both the loss of a complete list of the causes of wrongful convictions—one that includes barriers to

^{201.} See Vitiello, supra note 197, at 251 (noting that the Italian Supreme "exonerated" her); see also Lenth, supra note 197, at 374 (noting how the media focused primarily on her return home).

^{202.} James Q. Whitman, *Presumption of Innocence or Presumption of Mercy?*: Weighing Two Western Modes of Justice, 944 Tex. L. Rev. 933, 938 (2016); see Doug Longhini, *Amanda Knox's Parents to Go on Trial in Perugia*, CBS News (March 20, 2012), http://www.cbsnews.com/news/amanda-knoxs-parents-to-go-on-trial-in-perugia (stating that Knox was physically abused while in police custody).

^{203.} Longhini, supra note 202.

^{204.} Whitman, supra note 202, at 938.

^{205.} See, e.g., MARK C. WATERBURY, THE MONSTER OF PERUGIA: THE FRAMING OF AMANDA KNOX (2011) (criticizing Amanda Knox trial and justice system of Perugia, Italy, and arguing for Knox's innocence).

^{206.} E.g., Mark Townsend & Daniel Boffey, *Amanda Knox Is Free Because She's Rich and American, Says Patrick Lumumba*, THE GUARDIAN (Mar. 28, 2015), https://www.theguardian.com/us-news/2015/mar/28/amanda-knox-free-rich-american-patrick-lumumba-meredith-kercher-murder.

^{207.} Brandi Grissom, Appeal of Death Row Case Is More Than a Matter of Guilt or Innocence, N.Y. TIMES, Mar. 11, 2012, at A23.

^{208.} See id. (arguing IAC and presenting new affidavits and testimony nine years after the initial trial).

^{209.} Id.

^{210.} Id.

^{211.} Id.

^{212.} Id.

postconviction relief (in Will's case, the punishingly high prejudice standard of *Strickland v. Washington*)—and the divergent narratives that result from the lack of a shared conception of innocence.

C. The Social Psychology of Cognitive Biases

These divergent narratives play into the cognitive biases that breed prosecutorial and public resistance to widespread claims of innocence.

1. Prosecutorial Resistance

One commonality shared among many of the cases in which a putatively exonerated defendant's innocence remains controversial is prosecutors who seem unwilling, even in the face of powerful evidence, to acknowledge wrongful convictions or their roles in securing them.²¹³ Due largely to the exceptionally high barrier of official immunity, few are the subject of, or have serious concerns about, civil liability, so their resistance cannot be explained simply as crass self-protection.²¹⁴

The case of Kerry Cook, the subject of *The Exonerated*,²¹⁵ is a good example of this reflexive defensiveness.²¹⁶ Cook was released from death row in Texas more than two decades ago.²¹⁷ In 1977, he was convicted of raping and murdering his neighbor Linda Edwards.²¹⁸ He always maintained his innocence.²¹⁹ His conviction had many of the ingredients of a wrongful one, including prosecutorial and police misconduct, and a purported confession reported by a jailhouse informant in

^{213.} See MEDWED, supra note 25, at 123–67 (discussing "prosecutorial resistance to post conviction claims of innocence"); Daniel S. Medwed, The Prosecutor As Minister of Justice: Preaching to the Unconverted From the Post-Conviction Pulpit, 84 WASH. L. REV. 35, 47–53 (2009) (same); Daniel S. Medwed, The Zeal Deal: Prosecutorial Resistance to Post-Conviction Claims of Innocence, 84 B.U. L. REV. 125, 132–48 (2004) (same); Jon B. Gould & Richard A. Leo, One Hundred Years Later: Wrongful Convictions After a Century of Research, 100 J. CRIM. L. & CRIMINOLOGY 825, 857 (2010) (attributing resistance to being seen as "soft on crime"); Bruce A. Green & Ellen Yaroshefsky, Prosecutorial Discretion and Post-Conviction Evidence of Innocence, 6 Ohio St. J. CRIM. L. 467 (2009) (discussing prosecutor's role in post-conviction relief); Hartung, supra note 6, at 252 (describing an "institutional bias in favor of preserving convictions"); Joe Nocera, A Texas Prosecutor Faces Justice, N.Y. Times, Nov. 13, 2012, at A27 ("Very few prosecutors"). are willing to admit they've made errors. They fight efforts to reopen cases.").

^{214.} See Connick v. Thompson, 563 U.S. 51 (2011) (holding that a prosecutor's office's deliberate indifference to its constitutional obligations could not be established by evidence of a systemic failure to train prosecutors); Van De Kamp v. Goldstein, 555 U.S. 335 (2009) (holding that prosecutors were entitled to absolute immunity for supervision, training, and information-system management decisions related to the conduct of trials); Imbler v. Pachtman, 424 U.S. 409 (1976) (holding that prosecutors engaged in activities associated with the judicial process are entitled to immunity from a 42 U.S.C. § 1983 civil suit).

^{215.} See John Staton, Play Tells Story of 6 Wrongly Accused of Murder, WILMINGTON STAR NEWS (Nov. 1, 2019), https://www.starnewsonline.com/entertainment/20191101/play-tells-story-of-6-wrongly-convicted-of-murder.

^{216.} See Michael Hall, Released from Prison, But Never Exonerated, a Man Fights for True Freedom, N.Y. TIMES, Apr. 1, 2012, at A25B (describing how the prosecution retried Cook four times).

^{217.} Id.

^{218.} Id.

^{219.} Id.

exchange for a deal in his own case.²²⁰ His conviction and death sentence were twice reversed on appeal.²²¹ On remand the final time, while he was in pretrial detention for what would have been his fourth capital murder trial, Cook agreed to enter an *Alford* plea in exchange for a sentence of time served, permitting him immediate release from prison.²²² Two months later, the results of DNA analysis of semen taken from Edwards's underwear matched that of her lover and excluded Cook as its source.²²³ The State, however, still deems Cook as Edwards's rapist and murderer.²²⁴

The Morin exoneration described *supra* is another good example of this phenomenon. Even after DNA analysis seemed to exonerate Morin, the police in his case still preferred the testimony of the jailhouse informants who had testified to his alleged confession. The Commission of Inquiry would later describe the police's belief as "tunnel vision of the most staggering proportions."

To an outside observer, this prosecutorial unwillingness to admit error can seem irrational, even vindictive. To any student of social psychology, it should not be a surprise. The role of cognitive biases in the decision-making of prosecutors and other criminal justice system actors, like confirmation bias, perseverance bias, and cognitive dissonance, has been well canvassed in scholarly literature as well as in official inquiries into wrongful convictions.²²⁷ The roles assigned to parties in an adversarial system, particularly police and prosecutors on the one hand and defense attorneys on the other, give rise to powerful cognitive blinders. These blinders are formally known in psychology as a subset of "motivated reasoning" and colloquially known in the criminal justice system as "tunnel vision."²²⁸

Contested exonerations give rise to a variation on this theme. As Crowley and Neufeld explain:

Acknowledgment and analysis of error in wrongful convictions is also hampered by systemic actors' reluctance to admit error and by top-down political pressure to escape blame. The adversarial setup of criminal prosecutions

^{220.} Id.

^{221.} Id.

^{222.} See id. (noting Lee pleaded no-contest with no admission of guilt, otherwise known as an Alford plea).

^{223.} Id.

^{224.} Id.

^{225.} THORP, supra note 7, at 26.

^{226.} Id.

^{227.} See Dan Simon, In Doubt: The Psychology of the Criminal Justice Process 22–25 (2012) (discussing bias in law enforcement personnel); Medwed, *supra* note 25, at 127–29 (discussing bias in prosecutors); Alafair Burke, *Neutralizing Cognitive Bias: An Invitation to Prosecutors*, 2 N.Y.U. J.L. & Liberty 512, 516–20 (2007) (same); Keith A. Findley, *Tunnel Vision, in* Conviction of the Innocent: Lessons from Psychological Research 303–19 (Brian L. Cutler ed., 2012) (discussing belief perserverence).

^{228.} See Simon, supra note 227, at 22–39 (discussing "tunnel vision"); Thorp, supra note 7, at 26 (same); Keith A. Findley & Michael S. Scott, The Multiple Dimensions of Tunnel Vision in Criminal Cases, 2006 Wis. L. Rev. 291, 292 (2006) (same); Alafair S. Burke, Improving Prosecutorial Decision Making: Some Lessons of Cognitive Science, 47 Wm. & Mary L. Rev. 1587, 1598, 1604–05 (2006) (discussing "tunnel vision" and "motivated reasoning").

contributes additional incentives to deflect blame for errors, notwithstanding prosecutors' official mandate to "do justice," rather than simply advocate for conviction and the preservation of the conviction on appeal. The remedies currently available for identifying and correcting criminal justice error are centered on assigning blame for procedural or rights violations to individual actors, playing to individuals' natural defensiveness as well as individual and organizational liability concerns. ²²⁹

In sum, the cognitive barriers to prosecutors admitting that they have secured the conviction of an innocent are almost insurmountably high. For this reason, a rigorous and universal definition of wrongful conviction, not limited to official processes (which themselves are stymied by these biases), needs to be developed outside of the context of individual cases.

2. Innocence Consciousness

Achieving societal consensus around whether and when exonerations have occurred is crucial to shaping how the public evaluates narratives of wrongful conviction. As Findley explains: "The DNA cases . . . told stories of innocent lives ruined . . . with the clarity, purity, and simplicity that little besides DNA could provide; they were the black-and-white stories of the unambiguously innocent robbed of their lives." These exonerations were powerful not just because they were unambiguous but also because they involved "innocence" rather than mere or even severe unfairness. A factually guilty person who escapes justice because a key prosecution witness dies after a successful appeal holds a very different position in popular culture than a person convicted of someone else's crime (or of no crime at all). ²³²

Again, the *Davis* case is illustrative. Davis maintained his innocence until his execution. His case divided observers. To Davis's supporters, which included the NAACP, the Innocence Project, Archbishop Desmond Tutu, former President Jimmy Carter, former FBI Director William Sessions, and Pope Benedict XVI, he was an innocent man convicted and executed on the basis of police misconduct and faulty eyewitness identification. And one of the proposed signed a petition

^{229.} Crowley & Neufeld, supra note 50, at 365 (internal citations omitted).

^{230.} See Rob Warden, The Revolutionary Role of Journalism in Identifying and Rectifying Wrongful Convictions, 70 UMKC L. Rev. 803 (2003) (describing the role journalism can play in defining wrongful convictions and affecting public perception of narratives); Zalman, supra note 50, at 449 (describing how the United States, China, and England have different definitions of innocence that lead to different public perceptions).

^{231.} Findley, *supra* note 12, at 185.

^{232.} See NAUGHTON, supra note 40, at 16–17 (noting that the layperson "prioritises the question of factual guilt or innocence over procedural justice"); Zalman, supra note 50, at 451 (describing the difference between a "correct" outcome and a procedurally fair outcome).

^{233.} Bazelon, supra note 112; Severson, supra note 129.

^{234.} Bazelon, supra note 112; Severson, supra note 129.

asking the Georgia State Board of Pardons to commute his death sentence.²³⁵ To the family of Davis's victims, he was a guilty man who used celebrity and public opposition to the death penalty to delay but not prevent justice.²³⁶

IV. RECONCEPTUALIZING INNOCENCE: A WRONGFUL CONVICTION CHECKLIST

Scholars have decried the unattainability of a "ground truth" of innocence. ²³⁷ Richard Leo recently defended the Registry's exoneration-based definition of innocence, arguing that substituting the Registry's conception of exoneration for the present factual-innocence one could be rewarding. Specifically, Leo cites the Registry's combination of an "erasure" of conviction by procedural mechanism in conjunction with "some new evidence of innocence" as a useful definition of innocence. ²³⁸ Leo describes the Registry's definition as an imperfect but adequate "proxy" for actual innocence. ²³⁹ Leo, at various points, concedes both the overand under-inclusiveness concerns about the Registry's definition detailed in this Article. ²⁴⁰ He ultimately defends the Registry's process-based definition as the lesser of two evils in comparison with his other, rejected alternative of "cases in which factual innocence can be proven to a near or absolute certainty" based on physical impossibility or dispositive scientific proof. ²⁴¹

If these are the only two choices (official exoneration based on new evidence or conclusive proof of actual innocence), then Leo is right. This Article, however, posits a third choice: a different solution to the tradeoffs between certainty and validity, which does not delegate to courts and prosecutors the difficult job of developing a substantive standard for likely innocence. It is not a perfect definition of innocence, but it is closer to the ground truth than previous conceptional frameworks.

The primary appeal of the definition of wrongful convictions based on official processes of exoneration is a perception of "objectivity" in the sense that its criteria are external to those who compile lists of exonerees.²⁴² This definition alleviates the burden on researchers to develop their own substantive conception of innocence. But a substantive conception of likely innocence, which does not rely in any way on official processes or decisions by judges and prosecutors, does not have to be internally subjective. Instead, there are other empirical and jurisprudential principles, already well developed, from which one can divine a more meaningful

^{235.} Bazelon, supra note 112.

^{236.} See Severson, supra note 129 (stating that the family felt justice was adequately served, especially after twenty years of appeals).

^{237.} E.g., Barry C. Scheck, Conviction Integrity Units Revisited, 14 OHIO St. J. CRIM. L. 705, 709 (2017).

^{238.} Leo, *supra* note 21, at 62–65.

^{239.} See id. at 66 (describing the Registry's definition as "significantly improving" upon older definitions of innocence).

^{240.} Id. at 66-70.

^{241.} See id. at 73 (arguing that the Registry's expanded definition creates a "justifiable trade-off" between greater confidence in actual innocence and gathering more information about sources of error).

^{242.} E.g., Findley, supra note 101, at 1184.

conception of likely innocence. Such a conception does not depend on the whim, caprice, open-mindedness, fairness, caseload, or attention span of a particular prosecutor or judge, rather it remains tethered to preexisting standards.

What follows are external, preexisting empirical and legal sources that a reviewer—e.g., a court or a researcher—could use as a comprehensive, objective checklist of considerations, not reliant on official processes of exoneration, that suggest probable wrongful conviction. These considerations are: known causes of wrongful convictions; rules and standards governing prosecutorial charging; intake criteria of innocence projects and commissions; intake criteria of prosecutorial conviction integrity units; statutes and caselaw governing fresh evidence and actual-innocence claims; and constitutional doctrines governing prosecutorial failure to disclose favorable evidence and IAC, particularly those involving the quantum of prejudice requiring reversal of a conviction. Many of these sources overlap with the themes related to false convictions, and the list of factors drawn from each of the categories of sources are highly repetitive. This repetitiveness, however, should be taken as an indicator of the strength of correlation between the listed innocence factors and wrongful convictions.

A. Known Causes of Wrongful Convictions

As indicated *supra*, the common causes of wrongful convictions are well established. They include official misconduct, IAC, junk science, unreliable eyewitness identifications, coercive interrogations, snitches, confessions produced by the Reid Method, and misuse of statistics.²⁴³ Unfortunately, however, there is no way to know how often these factors contribute to wrongful convictions as opposed to rightful ones. Nonetheless, an objective, substantive wrongful conviction checklist must consider these factors, which are known to correlate to the incidence of wrongful convictions.

B. Model Rules & Standards: Prosecutorial Charging, Disclosure, & Relief

The ABA *Model Rules of Professional Conduct* and *Standards on the Prosecution Function* ("*Prosecution Standards*") guide the ethical behavior of American prosecutors, particularly with regard to the quantum of evidence required to bring and maintain charges, even after conviction. Both require prosecutors to refrain from prosecuting charges not supported by at least probable cause. ²⁴⁴ They also require prosecutors to disclose and investigate "new, credible and material evidence creating a reasonable likelihood" of actual innocence ²⁴⁵ and to remedy any conviction when there is clear and convincing evidence of

^{243.} See supra Section I.A.

^{244.} See Model Rules of Pro. Conduct r. 3.8(a) (Am. Bar Ass'n 2020); Crim. Just. Standards for the Prosecution Function Standard 3–4.3 (Am. Bar Ass'n 2017).

^{245.} Model Rules of Pro. Conduct r. 3.8(g) (Am. Bar Ass'n 2020).

innocence.²⁴⁶ The *Prosecution Standards* are more stringent, additionally prohibiting prosecutors from initiating or maintaining charges in the absence of sufficient admissible evidence to support a conviction.²⁴⁷ Similar standards exist in the UK, Canada, Australia, and at supranational tribunals.²⁴⁸

Most states and the District of Columbia have adopted rules of professional conduct ratifying some variation of these standards.²⁴⁹ Because of this, several state supreme courts have had to address allegations of misconduct by prosecutors for violating these rules. In the process, they have defined the necessary quantum of evidence ethically to prosecute. In cases in which these courts have found that prosecutors brought or maintained charges without sufficient basis, the most frequent factor that emerges is the recantation of a crucial prosecution witness.²⁵⁰

C. Innocence Project Intake Criteria

While the Innocence Project's definition of a successful exoneration is narrow and stringent,²⁵¹ its exonerations started with discretionary decisions in which staff had to determine whether an inmate's claim of actual innocence was credible enough initially for investigation and ultimately for judicial relief. Some of these pre-exoneration decisions have criteria that reveal more about the meaning of "actual innocence" than conclusive exonerations.²⁵²

While innocence projects do not ordinarily share their intake criteria publicly, some agreed to provide them for this Article. While there is variance across individual projects, common characteristics emerge from these criteria in the United States, including the availability of forensic testing not done prior to trial, objective proof that prosecution evidence was false, and prosecution witness recantation

^{246.} Id. r. 3.8(h).

^{247.} CRIM. JUST. STANDARDS FOR THE PROSECUTION FUNCTION Standard 3–4.3(a)–(b) (AM. BAR ASS'N 2017). *Cf.* U.S. DEP'T OF JUSTICE, U.S. ATT'YS' MANUAL 9–27.200(B) (prohibiting federal prosecutors from prosecuting in the absence of probable cause or the belief that there is sufficient evidence to sustain a conviction); NAT'L DIST. ATT'YS' ASS'N, NAT'L PROSECUTION STANDARD 4-2.2 (3d ed. 2009) (prohibiting prosecutors from filing charges unless they reasonably believe that they can be substantiated by admissible evidence at trial).

^{248.} See Int'l Ass'n of Prosecutors, Standards of Professional Responsibility and Statement of the Essential Duties and Rights of Prosecutors 4.2(d) (April 23, 1999), available at: https://www.iap-association.org/getattachment/Resources-Documentation/IAP-Standards-(1)/English.pdf.aspx [hereinafter International Prosecution Standards]; R. v. Boucher, [1954] S.C.R. 16 (Can.) (noting that the prosecutor's job is "not to obtain a conviction, it is to lay before a jury what the Crown considers to be credible evidence relevant to what is alleged to be a crime").

^{249.} See, e.g., Cal. Rules of Pro. Conduct r. 3.8.

^{250.} See, e.g., Matter of Hudson, 105 N.E.3d 1089, 1092 (Ind. 2018) (suspending a prosecutor for proceeding to trial in a child-molestation case after the complaining witness credibly recanted).

^{251.} See supra Section II.A.1

^{252.} Some of these criteria are not well suited to inform a substantive definition of innocence—e.g., availability of a procedural mechanism for postconviction relief and its likelihood of success; availability of untested biological evidence likely to determine agency conclusively; whether the defendant could have obtained crucial evidence prior to trial through due diligence; or whether the defendant was convicted after trial or pursuant to a guilty plea (given the typical sentencing discount that comes with pleading guilty).

(whether already in existence or obtainable by defense investigators).²⁵³ Innocence Canada does not make its intake criteria public, but does list examples of types of new evidence that support claims of innocence, including new scientific techniques like advanced DNA testing or new understandings of shaken-baby syndrome, relevant evidence that was not disclosed by the prosecution prior to trial, and significant evidence that someone else committed the crime.²⁵⁴

D. Conviction-Integrity Units

Increasingly, prosecutors' offices have conviction-integrity units, which review claims of innocence brought to their attention by defendants who their offices have convicted, deemed "plausible," "reasonable," or "legitimate." Typical criteria for undertaking reinvestigation of an old case track the known causes of wrongful conviction set forth *supra*, including faulty eyewitness identifications, false confessions, snitches, prosecutorial misconduct (particularly violations of *Brady v. Maryland*²⁵⁵), and invalidated forensic science. ²⁵⁶

E. Data from Innocence Commissions, Public Inquiries, & the New Zealand Justice Ministry

The data available from the UK CCRC, the Scottish Criminal Cases Review Commission ("SCCRC"), and the New Zealand Ministry of Justice ("NZMoJ") show a great deal of commonality among the causes of suspected wrongful convictions, although both scholars and the commissions catalogue the causes in different ways. The Innocence Commission for Virginia ("ICVA") also makes public its instructions for investigators.²⁵⁷

^{253.} See, e.g., E-mail from Steve Wax, Legal Director, Oregon Innocence Project (Oct. 31, 2018) (on file with author) [hereinafter Wax E-mail].

^{254.} Innocence Canada, *Our Case Review Process*, available at: https://www.innocencecanada.com/our-case-review-process/ (last visited Nov. 19, 2020).

^{255. 373} U.S. 83 (1963).

^{256.} See Dennis A. Rendleman, Two Faces of Criminal Prosecution: Harvey Dent, Mike Nifong, Craig Watkins, 9 J. Inst. Just. & Int'l Stud. 171, 174–76 (2009). According to Inger Chandler, the chief of the Harris County, Texas Conviction Integrity Unit, one of the unit's screening criteria is the existence of "well-known recurrent themes in wrongful convictions, such as faulty eyewitness identification, false confessions, incentivized informants (snitches), prosecutorial misconduct (Brady violations), and invalidated forensic science." Inger H. Chandler, Conviction Integrity Review Units, 31 CRIM. Just. 14, 15 (2016). Similarly, the New York County District Attorney's Office's Conviction Integrity Unit gives "particularly scrutiny" to claims of innocence based on "red flags," which are: eyewitness misidentification, informant perjury, alibi, witness recantation, and newly discovered evidence bearing on innocence. N.Y.U. Center on the Admin. of Crim. Law, Establishing Conviction Integrity Programs in Prosecutors' Offs. 46 (2012) [hereinafter Conviction Integrity Programs].

^{257.} GOULD, *supra* note 100, app. I. at 245–49.

1. The UK

The UK CCRC is required to furnish an annual report to Parliament.²⁵⁸ The report provided in 2000 compiled the most common reasons why the CCRC referred suspected wrongful convictions to the Court of Appeal in 1999–2000.²⁵⁹ It listed those reasons, in descending order of frequency, as: (1) official misconduct by police and prosecutors (not including discovery failures); (2) new scientific evidence; (3) other new evidence, including evidence that sheds a negative light on the credibility of key prosecution witnesses; and (4) discovery failures.²⁶⁰ Biba Sangha and Robert Moles have categorized the common causes of wrongful convictions in cases in which UK CCRC reviews resulted in overturned convictions, including official misconduct (including prosecution suppression of exculpatory evidence), false confessions, false prosecution evidence, unreliable scientific evidence, and erroneous jury instructions.²⁶¹

2. Scotland

The SCCRC classifies its grounds for review and referral. Its most common grounds for referral are new evidence and defective legal representation. ²⁶²

3. New Zealand

New Zealand presently has no innocence commission.²⁶³ Instead, until the newly-created New Zealand CCRC goes live, inmate claims of wrongful convictions must be made to the NZMoJ.²⁶⁴ A review of the fifty-three claims assessed by the NZMoJ between 1995–2003, conducted by retired High Court Judge Sir Thomas Thorp, revealed that the five most common grounds, in descending order, were (1) newly discovered evidence, (2) police or prosecutorial misconduct (including withholding discoverable evidence), (3) incompetent defense counsel, (4) perjury, and (5) faulty eyewitness identification.²⁶⁵

4. Virginia

The ICVA identifies the primary factors linked to erroneous convictions in Virginia, including eyewitness misidentifications and suggestive identification procedures, antiquated forensic science, inadequate assistance of defense counsel,

^{258.} THORP, supra note 7, at 34.

^{259.} Id. at 39. Subsequent reports have not included these data. Id.

^{260.} *Id.*; *see*, *e.g.*, R. v. Mattan [1998] EWCA (Crim) 676 (posthumously reversing Mattan's conviction when it was discovered that the eyewitness who identified him fleeing the scene of a robbery/murder had previously committed a similar crime).

^{261.} Sangha & Moles, *supra* note 108, at 267.

^{262.} THORP, supra note 7, at 46.

^{263.} See supra note 37 and accompanying text.

^{264.} THORP, *supra* note 7, at 50–51.

^{265.} Id. at 53.

failure to disclose favorable evidence to the defense, and interrogation of mentally-incapacitated suspects. The ICVA instructions to investigators also identify common issues that arise during its case investigations at trial or during postconviction proceedings, including pretrial publicity, cooperating codefendants and snitch testimony, exclusion of alternate suspects, loss or mishandling of evidence, recantations or changes to witness testimony, and new forensic testing. ²⁶⁷

F. Fresh Evidence & Freestanding Actual Innocence Claims

Most jurisdictions have a mechanism by which a defendant can seek to overturn a conviction on the basis of fresh evidence that casts doubt on its safeness. Some countries and a handful of American states also have freestanding claims of actual innocence under their state constitutions, common law, or by statute. These mechanisms have high procedural barriers, particularly statutes of limitations and due diligence requirements, which make them difficult to invoke for many defendants. Nonetheless, their substantive eligibility standards, which define the threshold of doubt that fresh evidence must cast on a conviction, hint at the meaning of "wrongful" in the context of a conviction that was obtained without all relevant information. To overturn a conviction, these mechanisms require that no rational juror would have convicted the defendant had the new evidence been available or that it is probable that there would be an acquittal if trial were held with the evidence subsequently available.

^{266.} GOULD, supra note 100, at 77-78.

^{267.} See id. app. I at 247-49.

^{268.} See, e.g., Fed. R. Crim. P. 33; Fla. R. Crim. P. 3.600 (2020); N.Y. Crim. Proc. Law § 440.10 (McKinney 2003); Criminal Appeal Act 1995, c. 35, § 4(1)(b) (UK); Criminal Appeal Act 1912 (NSW) s 6(1) (Austl.); Tex. Code Crim. Proc. Ann. art. 37.071, § 5(a) (West 2019).

^{269.} See In re Weber, 284 P.3d 734, 741 (Wash. 2012); see. e.g., Md. Code Ann., Crim. Proc. § 8-301 (West, 2018).

^{270.} See MEDWED, supra note 25, at 125; see, e.g., FED. R. CRIM. P. 33 ("Any motion for a new trial grounded on newly discovered evidence must be filed within 3 years after the verdict or finding of guilty."); ALA. CODE § 15-17-5(a)(5) (setting a statute of limitations of thirty days for a motion for new trial on the basis of newly discovered evidence).

^{271.} See, e.g., United States v. Calderon, 829 F.3d 84, 90 (1st Cir. 2016); United States v. Vernace, 811 F.3d 609, 620 (2d Cir. 2016); United States v. Schneider, 801 F.3d 186, 201–02 (3d Cir. 2015); United States v. Higgs, 663 F.3d 726, 742 (4th Cir. 2011); United States v. Bolton, 908 F.3d 75, 99 (5th Cir. 2018); United States v. Smith, 749 F.3d 465, 491 (6th Cir. 2014); United States v. Goodwin, 770 F.2d 631, 639 (7th Cir. 1985); United States v. Bell, 761 F.3d 900, 912 (8th Cir. 2014); United States v. Wilkes, 744 F.3d 1101, 1110 (9th Cir. 2014); United States v. Jordan, 806 F.3d 1244, 1252 (10th Cir. 2015); United States v. Kersey, 130 F.3d 1463, 1466 (11th Cir. 1997); United States v. Slatten, 865 F.3d 767, 790 (D.C. Cir. 2017); Wyatt v. State, 78 So. 3d 512, 524 (Fla. 2011); State v. Patterson, 735 N.E.2d 616, 124 (Ill. 2000); State v. McKinney, 33 P.3d 234 (Kan. 2001), overruled by State v. Davis, 158 P.3d 317 (Kan. 2007) (overruling McKinney on grounds other than the due diligence requirement); Ratten v The Queen (1974) 131 CLR 510, 517 [17] (Austl.).

^{272.} *E.g.*, Fla. R. Crim. P. 3.600(a)(3); N.Y. Crim. Proc. Law § 440.10(g); United States v. Wright, 625 F.2d 1017, 1019 (1st Cir. 1980); United States v. Aponte-Vega, 230 F.3d 522, 525 (2d Cir. 2000); United States v. Seago, 930 F.2d 482, 491 (6th Cir. 1991); United States v. Gonzalez, 933 F.2d 417, 448 (7th Cir. 1991); United States v. Herbert, 698 F.2d 981, 985 (9th Cir. 1983); *Patterson*, 735 N.E.2d at 124; *McKinney*, 33 P.3d at 242; Jones v. Texas, 711 S.W.2d 35, 36–37 (Tex. Crim. App. 1986) (en banc); *Collie v. R* [1997] 3 NZLR 283, 293

In interpreting these standards, courts have identified types of new evidence that frequently satisfy the test for a new trial: official misconduct, including *Brady* violations and securing the unavailability of potential defense witnesses;²⁷³ perjury by crucial prosecution witnesses;²⁷⁴ recantation by crucial prosecution witnesses;²⁷⁵ confessions by alternate suspects;²⁷⁶ alibi witnesses;²⁷⁷ exculpatory eyewitness evidence;²⁷⁸ evidence contradicting the testimony or undercutting the credibility of key prosecution witnesses, including prior records of arrest or conviction or the use of hypnosis to enhance recollection;²⁷⁹ evidence that eyewitness-identification procedures were unduly suggestive;²⁸⁰ evidence corroborating defendants' contested testimony at trial;²⁸¹ and the diminished mental capacity of defendants.²⁸²

Within these broad categories of fresh evidence, courts have further refined their conceptions of materiality by searching for limiting principles.²⁸³ For example, in the context of recanting prosecution witnesses, courts consider factors like the relevance of the recanted testimony, and the credibility and cogency of the recantation,

⁽CA); R. v. Pendleton [2002] UKHL 66, [19] (appeal taken from Eng.); *Ratten*, 131 CLR at 526 [4]; *Mickelberg v The Queen* (2004) 29 WAR 13, 31 (Austl.).

^{273.} See, e.g., United States v. Ouimette, 798 F.2d 47, 50–52 (2d Cir. 1986); United States v. Espinosa-Hernandez, 918 F.2d 911 (11th Cir. 1990).

^{274.} See, e.g., United States v. L'Donna, 179 F.3d 626, 628 (8th Cir. 1999); United States v. Jones, 84 F. Supp. 2d 124, 126–27 (D.D.C. 1999).

^{275.} See, e.g., Mickelberg, 29 WAR at 18.

^{276.} See, e.g., Casias v. United States, 337 F.2d 354, 356 (10th Cir. 1964) ("No one can doubt that a confession by another party to the crime for which the petitioner has been tried and convicted, if discovered after conviction, would be grounds for a new trial."); DeBinder v. United States, 303 F.2d 203, 204 (D.C. Cir. 1962) (finding defendant may deserve new trial if there was a "credible confession of another to the commission of [the] crime").

^{277.} *See*, *e.g.*, Campbell v. United States, 377 F.2d 135, 135–36 (D.C. Cir. 1966) (noting that a new trial could be granted based on ICA for failing to call alibi witness); Mejia v. United States, 291 F.2d 198, 200–01 (9th Cir. 1961).

^{278.} See, e.g., Jackson v. United States, 371 F.2d 960, 962 (D.C. Cir. 1966) (noting that new trial could be granted based on eyewitness testimony, but not granting it in this case).

^{279.} See, e.g., Coates v. United States, 174 F.2d 959 (D.C. Cir. 1949) (reversing denial of motion for new trial where facts testified to by complaining witness were disputed by police officer at the scene); United States v. Gordon, 246 F. Supp. 522 (D.D.C. 1965) (granting motion for new trial where witness's criminal record would have affected his credibility at trial); cf. United States v. Miller, 411 F.2d 825, 827 (2d Cir. 1968) (reversing the denial of motion for new trial on *Brady* grounds when the Government failed to disclose its use of hypnosis to gain information from a key witness).

^{280.} See, e.g., Marshall v. United States, 436 F.2d 155, 160 (D.C. Cir. 1970) (discussing that "improperly suggestive" lineups could be grounds for a new trial if not harmless error).

^{281.} See, e.g., Amos v. United States, 218 F.2d 44 (D.C. Cir. 1954) (reversing the denial of Amos's motion for new trial based on the discovery of a witness who could corroborate his claim that the complaining witness had threatened Amos with a knife before Amos stabbed him).

^{282.} See, e.g., Nagell v. United States, 354 F.2d 441, 449 (5th Cir. 1966) (reversing the denial of Nagell's motion for a new trial based on newly discovered evidence that he had suffered brain damage, which may have affected his insanity defense); cf. United States v. Brodwin, 292 F. Supp. 2d 484, 494 (S.D.N.Y. 2003) (finding that discovery of co-defendant's co-conspirator's mental illness was grounds for a new trial).

^{283.} See, e.g., Button v The Queen [2002] WASCA 35 (Austl.) (requiring courts to consider the balance of all evidence in the case – that presented at trial and the fresh evidence being raised – when adjudicating fresh-evidence claims).

including the reasons for recantation and the reasons for the original testimony now claimed to have been perjured.²⁸⁴

G. Postconviction Review of Constitutional Claims

Certain types of claims of constitutional error are reviewed primarily on post-conviction/habeas review, rather than on direct appeal. These claims include the failure of the prosecution to disclose favorable evidence prior to trial, the ineffective assistance of defense counsel, police destruction of evidence, and prosecutorial subornation of perjury. What these types of claims share in common is that they are subject to searching "prejudice" inquiries. Prejudice doctrines require defendants challenging their convictions on these grounds to show not only that prosecutors committed misconduct or their defense attorneys performed deficiently, but also that such errors had a realistic chance of affecting the outcomes of their trials—i.e., that, but for the errors, they would not have been found guilty. Because these doctrines include considerations of the effect the misconduct had on jury verdicts, cases applying them provide a natural dataset of considerations of the weight of new, favorable evidence bearing on innocence.

1. Prosecution Disclosure of Favorable Evidence

Brady requires American prosecutors, as a matter of due process, to disclose all evidence that is favorable to the defense prior to trial.²⁸⁵ Favorable evidence comprises not only exculpatory information but also evidence that could negatively affect the credibility of prosecution witnesses.²⁸⁶ Rules of professional conduct for prosecutors impose similar obligations.²⁸⁷ Other countries and supranational organizations also impose similar requirements on prosecutors.²⁸⁸

Most litigation surrounding the failure of prosecutors to live up to these obligations occurs postconviction when the defendant is seeking a new trial on the basis of nondisclosure. Because of this, American and Australian courts have limited reversals based on nondisclosure to favorable evidence that was also material to the verdict. Materiality is typically defined in reference to the likelihood that the verdict would have been different had the favorable material been disclosed. ²⁹⁰

^{284.} Mickelberg v The Queen (2004) 29 WAR 13, 19 (Austl.).

^{285.} Brady v. Maryland, 373 U.S. 83, 87 (1963).

^{286.} Giglio v. United States, 405 U.S. 150, 153–54 (1972); R. v. Paraskeva [1982] 76 EWCA (Crim) 162 (Eng.).

^{287.} Model Rules of Pro. Conduct r. 3.8(d) (Am. Bar Ass'n 2020); Crim. Just. Standards for the Prosecution Function Standard 3–5.4 (Am. Bar Ass'n 2017)

^{288.} International Prosecution Standards, supra note 248, 3(e); R. v. Keane [1995] EWCA (Crim) 31 (Eng.).

^{289.} Strickler v. Greene, 527 U.S. 263, 281 (1999); Kyles v. Whitley, 514 U.S. 419, 434–35 (1995); United States v. Agurs, 427 U.S. 97, 108 (1976); *Ratten v The Queen* (1974) 131 CLR 510, 516 [13] (Austl.). Some state supreme courts also extend this materiality requirement to their interpretation of the corresponding rules of professional conduct. *See*, *e.g.*, *In re* Attorney C., 47 P.3d 1167, 1171 (Colo. 2002) (en banc).

^{290.} United States v. Bagley, 473 U.S. 667, 682–85 (1985); *Mickelberg v The Queen* (2004) 29 WAR 13, 28 (Austl.).

Most states and the District of Columbia have codified some form of the disclosure requirement in local rules or statutes that overlap with the constitutional disclosure obligations imposed by *Brady*.²⁹¹

2. Effective Assistance of Counsel

Under *Strickland*, defendants are entitled to postconviction relief if their convictions were the result of deficient performance by defense counsel that prejudiced the outcome of trial.²⁹² In defining prejudice in this context, the Supreme Court modified the *Brady* materiality test, requiring a defendant alleging IAC to "show that there is a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different," by showing that, absent counsel's errors, "the factfinder would have had a reasonable doubt respecting guilt."²⁹³ The Court has subsequently grafted the same showing of prejudice back onto *Brady* claims on postconviction review.²⁹⁴ As a result of this intertwining of the prejudice inquiries, lower court opinions interpreting the adverse effect of both *Brady* and *Strickland* errors on jury verdicts shed light on the substance of wrongful convictions.

3. Bad Faith Destruction of Evidence & Suborning Perjury

In *Arizona v. Youngblood*,²⁹⁵ the Supreme Court held that the intentional, badfaith failure of the police to preserve evidence that was potentially favorable to a defendant violated the Due Process Clause of the Fourteenth Amendment.²⁹⁶ Under *Napue v. Illinois*,²⁹⁷ a conviction obtained through the knowing use of false evidence also violates due process.²⁹⁸ The *Napue* doctrine also requires a showing of materiality as a prerequisite to reversing a conviction.²⁹⁹

4. Prejudice

One thing that these constitutional doctrines have in common is that they are almost always litigated postconviction after specific types of additional evidence have come to light, including favorable evidence suppressed or destroyed by the State, evidence not discovered or presented by defense counsel, or the revelation that prosecution evidence was false. Procedurally, this means that defendants

^{291.} E.g., CAL. RULES OF PRO. CONDUCT r. 3.8(d).

^{292. 466} U.S. 668 (1984).

^{293.} Id. at 694-95.

^{294.} Bagley, 473 U.S. at 680-83.

^{295. 488} U.S. 51 (1988).

^{296.} See id. at 58.

^{297. 360} U.S. 264 (1959).

^{298.} See id. at 269.

^{299.} See e.g., United States v. Clarke, 442 F. App'x 540, 543–44 (11th Cir. 2011) (illustrating how courts have interpreted the *Napue* doctrine).

raising constitutional challenges are seeking to have otherwise final convictions vacated in light of new discoveries. Each individual doctrine has elements that the others do not (*Brady*: that the evidence was in at least the constructive possession of the State; *Strickland*: that counsel's failures fell below prevailing professional norms; *Youngblood* and *Napue*: that destruction or presentation of false evidence occurred in bad faith). Prevailing on any of these claims, however, requires an inmate to make a showing of prejudice—that the new information is sufficiently concerning to cast doubt on the validity of the conviction. Because of this, court opinions applying prejudice and materiality rules shed light on specific factors that drive a finding of prejudice for the defendants who succeed with these claims.

5. Lower Court Opinions

In this context, there has been a great deal of litigation in lower courts about the meaning of "exculpatory," "favorable," "material," "deficient," and "prejudicial." While these terms are notoriously imprecise, analysis of cases interpreting them reveals a series of factors that together define the evidence that prosecutors need to find and disclose, and defense attorneys need to find and present, to prevent wrongful convictions. These factors include: (1) witness recantations; ³⁰⁰ (2) inconsistent statements by prosecution witnesses;³⁰¹ (3) information pertaining to prosecution witnesses' ability to observe, recall, or recount accurately or truthfully, including the discovery that an informant testified falsely in another case; 302 (4) information relating to prosecution witnesses' motives to testify falsely, especially cooperating witnesses on whom the prosecution has bestowed leniency, immunity, or other benefits; 303 (5) false evidence, especially false testimony by key prosecution witnesses;³⁰⁴ (6) inappropriate witness coaching;³⁰⁵ (7) evidence tending to inculpate a suspect other than the defendant, including confessions by third parties, especially when those confessions are corroborated;³⁰⁶ (8) evidence tending to cast doubt on the defendant's presence at the crime scene;³⁰⁷ (9) exculpatory scientific evidence, particularly if it conflicts with evidence that was presented by the

^{300.} See, e.g., In re Hudson, 105 N.E.3d 1089, 1090-91 (Ind. 2018).

^{301.} E.g., In re Kline, 113 A.3d 202, 211 (D.C. 2011).

^{302.} See In re Jordan, 913 So. 2d 775, 782 (La. 2005).

^{303.} See United States v. Bagley, 473 U.S. 667, 683 (1985); Campbell v. Reed, 594 F.2d 4, 7 (4th Cir. 1979); Patillo v. State, 368 S.E.2d 493, 497–98 (Ga. 1988); Commonwealth v. Hill, 739 N.E.2d 670, 678 (Mass. 2000).

^{304.} See e.g., United States v. Agurs, 427 U.S. 97, 103 (1976).

^{305.} See e.g., In re Larsen, 379 P.3d 1209 (Utah 2016) (upholding suspension of prosecutor for failing to disclose that he had shown a picture of the defendant to several eyewitnesses to buttress their in-court identifications).

^{306.} See e.g., Miller v. United States, 14 A.3d 1094, 1109 (D.C. 2011).

^{307.} See e.g., Boyd v. United States, 908 A.2d 39, 61–62 (D.C. 2006) (remanding case to trial court after reversing Boyd's conviction for being the fourth participant in a kidnapping and murder when the government failed to disclose statements of eyewitnesses who only saw three men in the car driven by the kidnappers).

prosecution at trial; 308 and (10) testimony relating to the limitations of, or defects in, the prosecution's scientific evidence. 309

6. Prosecutors' Brady Policies

Many prosecutor offices have official policies that guide individual prosecutorial decisions of what to disclose under *Brady*. The specifics of these policies also shed light on the meaning of "favorable" and "material." The New York County District Attorney's Office has a *Brady* policy that defines certain categories of evidence that must be disclosed, regardless of materiality, which typifies these polices. Its non-exhaustive list includes: (1) identification by a witness of someone other than the defendant as the perpetrator, or failure of a witness to identify the defendant as the perpetrator; (2) inconsistent witness statements; (3) material variances in witness statements; (4) benefits conferred upon witnesses or third parties; (5) witnesses' criminal records, including known but uncharged conduct; and (6) mental and physical health issues that could impair witnesses' abilities to perceive, recall, or recount.³¹⁰

V. CONCEPTUALIZING INNOCENCE THROUGH A COMPREHENSIVE CHECKLIST

Taken together, these areas of criminal procedure doctrine paint a comprehensive typology of factors indicative of substantive innocence—one that does not depend on particular procedural mechanisms, but rather on the existence of credible indicia of wrongful conviction. This comprehensive and granular checklist of factors for assessing potential wrongful convictions attempts to get closer to a ground truth of factual innocence. This Article does not recommend a specific adjectival construct (substantial, reasonable, clear and convincing, evidence, doubt, possibility, probability, etc. of innocence)³¹¹ to quantify a likelihood of innocence. Instead, it attempts to develop a jurisprudentially-based, fact-specific checklist of factors that indicate an unacceptably high likelihood of false conviction, regardless of how such a checklist might be employed in the construction of databases or the review of putative false convictions. In this context, the existence of multiple

^{308.} *See* Hinton v. Alabama, 571 U.S. 263, 273–74 (2014); Driscoll v. Delo, 71 F.3d 701, 709 (8th Cir. 1995); Baylor v. Estelle, 94 F.3d 1321, 1324 (9th Cir. 1996); *Gilham v The Queen* [2012] NSWCCA 131 (25 June 2012) ¶¶ 365–412 (Austl.).

^{309.} E.g., Richey v. Bradshaw, 498 F.3d 344, 363-64 (6th Cir. 2007).

^{310.} CONVICTION INTEGRITY PROGRAMS, supra note 256, at 54–55.

^{311.} Compare, e.g., Model Rules of Pro. Conduct r. 3.8(g) (Am. Bar Ass'n 2020) ("new, credible and material evidence creating a reasonable likelihood that a convicted defendant did not commit an offense of which the defendant was convicted") with Herrera v. Collins, 506 U.S. 390, 442 (1993) (Blackmun, J., dissenting) ("I would hold that, to obtain relief on a claim of actual innocence, the petitioner must show that he is innocent.") and Model Rules of Pro. Conduct r. 3.8(h) (Am. Bar Ass'n 2020) ("clear and convincing evidence establishing that a defendant . . . was convicted of an offense that the defendant did not commit") and Ex parte Thompson, 153 S.W.3d 416, 417 (Tex. Crim. App. 2005) ("unquestionably establishes . . . innocence").

factors from the innocence checklist is not necessarily synonymous with reasonable doubt, but certainly overlaps with it.

As a procedural matter, it is important to acknowledge that the use of this checklist would not have to lead to the legal "exoneration" of a defendant. Instead, the checklist should indicate the circumstances under which a defendant's existing conviction should be deemed unsafe in light of all available information. This checklist is intended as a comprehensive, stand-alone conception of likely false conviction, independent of official exoneration decisions.

The checklist for likely innocence proposed in this Article comprises an exhaustive list of factors, based upon the empirical and jurisprudential sources catalogued above, that correlate strongly with wrongful conviction. These factors include: (1) known causes of wrongful conviction divined from official exonerations and based on innocence-project representation, prosecutorial conviction-integrity unit reviews, and innocence-commission exonerations; and (2) factors that courts have repeatedly recognized play a role in unsafe convictions because they involve procedural injustices so severe that they call into question not only the fairness but the accuracy of convictions secured as a result. The factors tend to fit into three broad categories: (1) discovery of information that tracks, in general but not doctrinal terms, procedural miscarriages of justice or violations of constitutional law; (2) significant fresh evidence; and (3) other factors, which do not fit neatly into existing procedural silos. This Article has identified twenty-seven factors, or clusters of factors, that comprise its checklist for assessing potential wrongful convictions.

In most cases of potential wrongful conviction, many, but not all, of these factors will at least arguably be in play. The weighting of these factors, both present and absent, in any given case assessment is subjective. The seriousness of these factors can vary, both between the factors and within any individual factor as applied to a particular case. Because of this, relative weights for the factors present in any given case are not amenable to a more empirical determination, although an attempt to derive from this checklist a weighted algorithm for likely innocence would certainly be a fruitful area of future study should this checklist conception gain traction among innocence scholars. The following clusters of factors should be considered in assessing potential wrongful convictions, both by scholars attempting to define innocence for the purpose of study databases in the absence of dependence upon a procedural definition, and by courts and practitioners in assessing innocence in individual cases.³¹³

^{312.} There is no definitional significance to these categories. They are provided solely for organizational purposes. There is also no significance to the order in which the factors appear.

^{313.} While this checklist presents these factors as independent, of course, in reality, they often overlap in cases of wrongful conviction. *See supra* Introduction.

A. Factors

Cluster I: Constitutional-esque Errors Affecting Accuracy³¹⁴

- (1) Prosecutorial Disclosure: failure of prosecutors to divulge favorable evidence, regardless of whether such failure meets the doctrinal test of *Brady*.³¹⁵ If suppression is unintentional, it should count as a factor in favor of wrongful conviction when the withheld information is reasonably likely to relate to the accuracy of the trial. If suppression is intentional, it should count as a factor in favor of wrongful conviction irrelevant of the likelihood that the withheld information relates to the accuracy of the trial.
- (2) False Evidence: prosecutorial presentation of materially false evidence, regardless of the state of mind of the prosecutor who examined the witness.³¹⁶
 - (3) Coaching: inappropriate preparation of prosecutorial witnesses.³¹⁷
- (4) Witness Hiding: intentionally securing the unavailability of defense witnesses.³¹⁸
- (5) Deficient Defense: failure of defense counsel to investigate or develop potentially viable defenses, especially alibi claims, including failure to retain scientific experts to test, retest, or challenge questionable prosecution forensic-science evidence, regardless of whether such failure meets the doctrinal test of *Strickland*.³¹⁹
- (6) Forensic Misconduct: intentional misconduct or gross negligence by forensic analysts or the crime laboratory that processed evidence during the time period that evidence relating to the defendant's case was processed (e.g., "dry labbing" or undetected contamination), regardless of whether there is evidence that items specifically relating to the defendant's case were contaminated or misprocessed,

^{314.} These are errors that overlap significantly with certain constitutional doctrines—e.g., *Strickland* or *Brady*—but do not necessarily share all of the doctrinal elements necessary to make out a successful claim of constitutional error

^{315.} *E.g.*, United States v. Espinosa-Hernandez, 918 F.2d 911, 914 (11th Cir. 1990) (finding that if prosecutors knew of impeachment information during trial, new trial would be warranted); U.K. CRIM. CASES REV. COMM'N, ANNUAL REPORT 1999–2000 \P 2.4 (2000); GOULD, *supra* note 98, at 100; Rendleman, *supra* note 256, at 175; Innocence Canada, *supra* note 254; Chandler, *supra* note 256, at 15; CONVICTION INTEGRITY PROGRAMS, *supra* note 256, at 54–55.

^{316.} United States v. Agurs, 427 U.S. 97, 103 (1976) (noting the Court has held that use of perjured testimony is "fundamentally unfair"); United States v. L'Donna, 179 F.3d 626, 628 (8th Cir. 1999) ("[T]he standard for whether she should have received a new trial depends on the presence or absence of prosecutorial misconduct."); United States v. Jones, 84 F. Supp. 2d 124, 126 (D.D.C. 1999) ("A new trial may also be granted when a government witness delivers false testimony..."); Sangha & Moles, *supra* note 108, at 267; Wax E-mail, *supra* note 253.

^{317.} In re Larsen, 379 P.3d 1209 (Utah 2016).

^{318.} Espinosa-Hernandez, 918 F.2d at 913-14.

^{319.} See Campbell v. United States, 377 F.2d 135, 135–36 (D.C. Cir. 1966); GOULD, supra note 100, at 78; THORP, supra note 7, at 46.

particularly if the misconduct was not discovered promptly through laboratory audit procedures. 320

(7) Police Misconduct: police misconduct or gross negligence either during investigation of the defendant's case or a pattern of misconduct across cases that could include the defendant's, such as lost or destroyed evidence; material record-keeping omissions; coercing or inducing confessions, even if inducements do not rise to the level of a constitutional violation (e.g., lying to a suspect about evidence); inducing false testimony; or intentionally withholding information from prosecutors.³²¹

Cluster II: Material New Evidence

- (8) Reasonable Doubt: discovery of evidence unknown at the time of trial (regardless of whether it could have been discovered through due diligence),³²² the presence of which now creates a plausible theory under which the defendant could be innocent or is reasonably likely to cause a reasonable, disinterested person to harbour a reasonable doubt about guilt.
- (9) Alternate Suspect: evidence tending to inculpate a suspect other than the defendant, including a DNA match from crucial biological evidence to any individual other than the defendant from an item of material crime-scene evidence (even if such a match is not conclusively exculpatory); confessions or incriminating admissions by alternate suspects;³²³ video footage or other electronic surveillance records documenting the presence of an alternate suspect at the time of the crime; or identification by a witness of someone other than the defendant as the perpetrator.³²⁴
- (10) New Science: the existence of scientific evidence that either was not available or was available but not performed prior to trial, the favourable results of which are likely to exculpate the defendant.³²⁵

^{320.} See, e.g., Jordan Micael Smith, Forensic Fails: Forget "CSI" – What's Happening in America's Crime Labs Is a Complete Disaster, Business Insider, May 1, 2014, available at: https://www.businessinsider.com.au/forensic-csi-crime-labs-disaster-2014-4?r=US&IR=T (last visited Nov. 15, 2020).

^{321.} See U.K. CRIM. CASES REV. COMM'N, supra note 315, ¶ 2.4; THORP, supra note 7, at 39, 53; Sangha & Moles, supra note 108, at 267; Griffin, supra note 122, at 126–30; Rendleman, supra note 256, at 175–76; Chandler, supra note 256, at 15; cf. CONVICTION INTEGRITY PROGRAMS, supra note 256, at 50 (outlining questionnaire for Manhattan District Attorneys to use with police officers for potentially catching misconduct in a given case).

^{322.} *Cf.* Roach, *supra* note 60, at 288 ("[T]he Supreme Court of Canada has consistently ruled that the due diligence requirement [for petitions for a new trial on the basis of fresh evidence] must yield where a miscarriage of justice would result.").

^{323.} See Casias v. United States, 337 F.2d 354, 356 (10th Cir. 1964); De Binder v. United States, 303 F.2d 203, 204 (D.C. Cir. 1962); Innocence Canada, supra note 254.

^{324.} See CONVICTION INTEGRITY PROGRAMS, supra note 256, at 54–55; cf. GOULD, supra note 100, app. I at 247–48 (requiring ICVA intake officers to ask about witnesses, their statements, and other suspects).

^{325.} See GOULD, supra note 100, app. I at 247–49; THORP, supra note 7, at 39; Griffin, supra note 122, at 132–33; Innocence Canada, supra note 254.

- (11) Presence: evidence casting doubt on the defendant's presence or ability to be present at the scene of the crime.³²⁶
- (12) Diminished Mental Capacity: the presence of a serious mental illness or intellectual disability in the defendant prior to and/or during trial, including one that derived from youth, immaturity, and lack of formal education, regardless of whether such illness or disability was known to the court or defense counsel at trial or whether such illness or disability rendered the defendant incompetent to stand trial under *Dusky v. United States*.³²⁷
- (13) Recantations: recantation or subsequent statement(s) that is (are) materially inconsistent with trial testimony by significant prosecution witnesses.³²⁸
- (14) Impeachment: new information discrediting a key prosecution witness's ability to observe, recall, or recount the subject matter of their testimony accurately or truthfully, including physical or mental health issues.³²⁹
- (15) Incentives: benefits given or promises or threats made to significant prosecution witnesses, including leniency in their own criminal cases.³³⁰
- (16) Changing Science: a significant change in the state of prosecutorial expert evidence, including a change in the consensus of experts in a field about the significance or interpretation of results. This factor should apply to any case in which the evidence, now known to be unreliable, was presented, including expert testimony that a fire was arson based on burn patterns, testimony that a hair taken from the defendant matched a hair taken from the crime scene based on microscopic comparison, testimony that bitemarks found on a victim or at a crime scene matched the

^{326.} See Boyd v. United States, 908 A.2d 39, 62 (D.C. 2006); Campbell v. United States, 377 F.2d 135, 136 (D.C. Cir. 1966); Mejia v. United States, 291 F.2d 198 (9th Cir. 1961).

^{327. 362} U.S. 402 (1960) (per curiam); *see* Nagell v. United States, 354 F.2d 441, 449 (5th Cir. 1966); GOULD, *supra* note 100, at 78; *cf.* United States v. Brodwin, 292 F. Supp. 2d 484 (S.D.N.Y. 2003) (finding that discovery of co-defendant's co-conspirator's mental illness was grounds for a new trial).

^{328.} See, e.g., In re Kline, 113 A.3d 202, 205 (D.C. 2011); In re Hudson, 105 N.E.3d 1089, 1090–91 (Ind. 2018); In re Jordan, 913 So. 2d 775, 777 (La. 2005); Mickelberg v The Queen (2004) 29 WAR 13, 19 (Austl.); GOULD, supra note 100, at 249 (characterizing recantation as a factor that can raise doubt about a conviction); CONVICTION INTEGRITY PROGRAMS, supra note 256, at 54; Wax E-mail, supra note 253.

^{329.} See Coates v. United States, 174 F.2d 959 (D.C. Cir. 1949); United States v. Gordon, 246 F. Supp. 522, 525 (D.D.C. 1965); U.K. Crim. Cases Rev. Comm'n, supra note 315, \P 2.4; Conviction Integrity Programs, supra note 256, at 55.

^{330.} *E.g.*, United States v. Bagley, 473 U.S. 667, 682–85 (1985); Patillo v. State, 368 S.E.2d 493, 497 (Ga. 1988); Commonwealth v. Hill, 739 N.E.2d 670, 678 (Mass. 2000); Campbell v. Reed, 594 F.2d 4, 7 (4th Cir. 1979). This factor may be controversial to those who would point out that incentivized testimony is "normal" in the course of criminal prosecutions and/or that juries are able to weigh the credibility of incentivized testimony appropriately and that, therefore, incentives should not be considered suspect. While this gut instinct may resonate with many readers, the reality is that it is impossible to separate incentives to testify truthfully against a criminal defendant from incentives to testify falsely, and incentivized testimony is recognized as a significant factor for wrongful convictions in the literature. *See* GOULD, *supra* note 100, app. I at 248 (noting that it is important for ICVA intake workers to find out whether co-defendants cooperated); CONVICTION INTEGRITY PROGRAMS, *supra* note 256, at 55. This indicates not only that testimony incentives should be a factor considered in assessing the likelihood of innocence, but also that juries do not always weigh incentives correctly in their assessment of the weight of the evidence.

defendant's bite, hypnotically induced testimony, or testimony that a baby's death was caused by violent shaking based on shaken-baby syndrome.³³¹

- (17) Biased or Unvalidated Scientific Evidence: forensic analyses that were obtained in the context of unnecessary biasing information and forensic-science testimony that was inaccurate, misleading, or oversold, regardless of the good/bad faith of the analyst.³³²
- (18) Corroboration: material evidence significantly corroborating the defendant's contested testimony or theory of the case.³³³

Cluster III: Other

- (19) Maintenance of Innocence: the defendant's consistent, explicit, personal maintenance of innocence.³³⁴
- (20) Missing or Inadequate Corroboration: absence of physical evidence to corroborate crucial witness testimony or a defendant's confession under circumstances in which such corroborating evidence would reasonably be expected to exist and be obtainable.
- (21) Unreliable Eyewitness Identification: introduction at trial of a stranger eyewitness identification of the defendant when that identification either (a) was obtained from procedures proven to be suggestive by social science evidence, ³³⁵ regardless of whether such procedure has been deemed unnecessarily suggestive as a matter of constitutional or common law³³⁶ and regardless of whether evidence relating to the lack of reliability of the procedure was introduced at trial (defense expert testimony, cross-examination, or closing argument) or (b) was not significantly corroborated by other evidence, under circumstances in which such corroborating evidence would reasonably be expected to exist.

^{331.} See supra Section II.C.

^{332.} See Hinton v. Alabama, 571 U.S. 263, 273–75 (2014); Schledwitz v. United States, 169 F.3d 1003 (6th Cir. 1999); Driscoll v. Delo, 71 F.3d 701, 709 (8th Cir. 1995); Richey v. Bradshaw, 498 F.3d 344, 363–64 (6th Cir. 2007); Baylor v. Estelle, 94 F.3d 1321, 1324 (9th Cir. 1996); Gilham v The Queen [2012] NSWCCA 131 (25 June 2012) ¶¶ 365–412 (Austl.); U.K. CRIM. CASES REV. COMM'N, supra note 315, ¶ 2.4; GOULD, supra note 100, at 77; Sangha & Moles, supra note 108, at 267; Rendleman, supra note 256, at 174–75; Chandler, supra note 256, at 15; CONVICTION INTEGRITY PROGRAMS, supra note 256, at 46.

^{333.} See e.g., Amos v. United States, 218 F.2d 44 (D.C. Cir. 1954).

^{334.} To some extent, this factor is a subjective one, given the lack of clear boundaries between merely mounting a not-guilty defense, testifying in one's own defense at trial, and truly "maintaining innocence." *See supra* Section III.A.1. This factor should not be limited to individuals who maintained a not guilty plea and were convicted after trial, a very small subset of American criminal defendants. Many defendants who plead guilty do so in return for charge or sentence leniency but nonetheless consistently maintain their innocence both before and after doing so, and defendants who pleaded guilty are well represented among known exonerees. Similarly, many convicted inmates "accept responsibility" before sentencing courts and parole boards in order to obtain a sentencing reduction or early release from prison, but may nonetheless consistently maintain their innocence, immediately retract their confessions in the absence of such powerful incentives to falsely confess, or both.

^{335.} See THORP, supra note 7, at 53. See generally Leonetti, supra note 34 (exploring social science research on eyewitness identification of strangers and the suggestiveness that often occurs in traditional eyewitness-identification procedures in the U.S.).

^{336.} See GOULD, supra note 100, at 77; Rendleman, supra note 256, at 174–76; Chandler, supra note 256, at 15; CONVICTION INTEGRITY PROGRAMS, supra note 256, at 54.

- (22) Questionable Confessions: introduction at trial of the defendant's confession or substantial inculpatory admissions that were obtained through coercive interrogation techniques like the Reid method of interrogation; confessions obtained from highly vulnerable suspects; confessions obtained after prolonged detention, isolation, when the suspect was sleep deprived, or in response to evidence ploys and other misrepresentations; and confessions obtained without videotaping or other recording.³³⁷
- (23) Inconsistent Theories: use by prosecutors of a theory of the defendant's case inconsistent with the prosecution theory in another closely related case.
- (24) Police Corruption: compelling evidence that law-enforcement agents who investigated the defendant's case engaged in corrupt conduct during the course of another investigation (e.g., stealing or intentionally "misplacing" evidence, planting evidence, giving or accepting bribes, providing "protection" to criminal syndicates, frequenting sex workers, using illicit drugs, knowingly violating the constitutional rights of suspects, or "testilying"). 338
- (25) Snitch Testimony: material testimony of an incentivized informant or witness cooperating in exchange for a material benefit, regardless of whether any incentive for cooperation was disclosed to the defense prior to trial or introduced in evidence.³³⁹
- (26) Inconsistent Witnesses: prosecutorial introduction of testimony from two or more witnesses whose testimony is materially inconsistent with one another.
- (27) Pretrial Publicity: sensationalized media coverage of the case prior to trial, particularly if it involved commentary by prosecutors or police officers about the defendant's prior criminal record, character, credibility, reputation, or inculpatory statements; physical evidence; the testimony, criminal record, character, reputation, or credibility of witnesses, including the victim; or evidence that was ruled inadmissible at trial.³⁴⁰

This Article proposes that any conviction with multiple factors present from this checklist should be treated as unsafe because it carries too much risk of wrongful conviction.

^{337.} See GOULD, supra note 100, app. I at 248.

^{338.} See Scheck, supra note 237, at 724 (arguing that deliberate rule breaking by police in other areas of their work is related to wrongful convictions in investigations in which those officers have worked).

^{339.} This factor overlaps with incentivized testimony at factor No. 15 *supra*. As such, it also has defenders who would object to its characterization as a factor inuring in favor of likely innocence. Like incentivized testimony more generally, however, the data strongly support its correlation with wrongful convictions. *See* Chandler, *supra* note 256, at 15; CONVICTION INTEGRITY PROGRAMS, *supra* note 256, at 55.

^{340.} Cf. GOULD, supra note 100, app. I at 248 (requiring ICVA intake workers to ask whether, and to what degree, the defendant's trial led to media attention).

B. Example Applications

In order to demonstrate the application of this proposed checklist, it is helpful to apply it to some exemplary cases of both questionable exonerations and missing innocents, as discussed in Parts I & II *supra*. In the Sandra Adams case, there were: (1) a suggestive eyewitness identification, which was corroborated by Adams's license plate and her admission that she had driven past Cross on the night of the alleged crime [#21]; and (2) a discovery violation relating to, but not eviscerating, the credibility of the key prosecution witness [#1, #14].³⁴¹ These are minimal factors and indicate a low likelihood of a wrongful conviction. While hardly a stellar performance by the State of New York, the number and severity of checklist factors do not scream "injustice" so much as misdemeanor court.³⁴²

In the case of Don Adams, Jr., there were: (1) an unreliable eyewitness identifications, made several months after the crime that did not match the description of the suspect [#21];³⁴³ and (2) a recantation by the key eyewitness under circumstances that have two plausible explanations (neighborhood pressure to recant or police pressure to misidentify) [#13].³⁴⁴ This has factors from the checklist that are more heavily weighted and indicates an elevated likelihood of a wrongful conviction.

In the *Dassey* case, there were: (1) a high-pressure, suggestive interrogation [#22]; (2) youth and intellectual disability [#12]; ³⁴⁵ (3) absence of physical or electronic evidence to corroborate the confession [#20]; and (4) consistent maintenance of innocence (other than during his high-pressure interrogation) [#19]. ³⁴⁶ This case has a combination of innocence factors that any student of wrongful convictions recognizes, and the sheer number of factors indicates a high likelihood of a wrongful conviction.

Finally, in the case of Troy Davis, there were: (1) identifications by stranger eyewitnesses whose accounts were not corroborated by significant extrinsic evidence [#21] and (2) later recantations of their identifications, claiming that police had coerced them (a plausible claim in a cop-killing case) [#13].³⁴⁷ The numerical

^{341.} It is unclear from the case description in the Registry whether the violation was intentional or negligent. *Sandra Adams*, *supra* note 157.

^{342.} This is not to suggest that the court should not have granted Adams's motion for a new trial based on the withheld *Giglio* information, but only to suggest that the errors in the case do not rise to the level of a significant concern about actual innocence.

^{343.} See Don Ray Adams, supra note 169.

^{344.} See supra Section III.A.1.

^{345.} Laura Passin, What "Making a Murderer" Reveals About the Justice System and Intellectual Disability, ROLLING STONE (Jan. 11, 2016), https://www.rollingstone.com/tv/tv-news/what-making-a-murderer-reveals-about-the-justice-system-and-intellectual-disability-74126/.

^{346.} See supra Section III.A.2. Applying the "maintaining innocence" factor to someone who confessed is no doubt controversial, but is based on the fact that Dassey immediately retracted the confession at the first opportunity away from the police, in conjunction with his seeming lack of understanding about the nature of his confession. *Id*.

^{347.} Severson, supra note 129.

value of the combined factors also indicates a high likelihood of a wrongful conviction.

Conclusion

Methodological Limitation

One limitation to the use of the proposed checklist, either for scholarly study or review of convictions in practice (by courts, innocence projects, conviction integrity units, innocence commissions, or investigative journalists), is that the information necessary to apply the checklist criteria may not be available in many cases and especially in cases involving relatively minor crimes.

Objectivity

Attempting to define the likelihood of wrongful conviction substantively, by using as a proxy a comprehensive checklist to assess the intolerable risk of actual innocence, is a novel and radical proposition. There is a methodological safety in employing a purely external, "objective" measure of exoneration that most scholars and registries employ,348 whether it is based on official exoneration or legal insufficiency of evidence. Using a purely procedural or legal definition, however, can be disingenuous.³⁴⁹ Using official exoneration as a proxy for wrongful conviction is objective in the sense that the inclusion decision is made by someone other than the researcher, reform advocate, or compiler of the database, but it simply substitutes the decisionmaking of judges and prosecutors for that of the researcher. Judges and prosecutors, however, are notoriously poor decisionmakers and lack identifiable standards of doubt for their decisions.³⁵⁰ The truth is, without vastly improved crystal-ball technology, it is usually impossible to be certain whether a particular individual is innocent or guilty.351 Rather than playing it safe, this Article advocates a deep dive into the substantive thicket to define reasonable doubt in terms of a substantive checklist of factors that are strongly associated with wrongful conviction.

^{348.} *Cf.* Markman & Cassell, *supra* note 99, at 126 (criticizing the definition of innocence used by Bedau and Radelet as "subjective" because it was not based on official processes of exoneration).

^{349.} See Leo, supra note 21, at 71 ("If the innocence community relies on judgments by the legal system rather than on scholarly assessments of guilt or innocence, then some innocence critics, however mistakenly, will be less likely to challenge the accuracy of the data on which innocence scholars rely in their analyses and policy proposals.").

^{350.} See THORP, supra note 7, at 39 (noting the inherent "significant degree of personal judgement" involved in assessing whether a wrongful conviction is likely); Rendleman, supra note 256, at 175–76 (citing thirteen "lessons" from the "prosecutorial mentality" that result in wrongful convictions).

^{351.} See Hugo Adam Bedau & Michael L. Radelet, Miscarriages of Justice in Potentially Capital Cases, 40 STAN. L. REV. 21, 47 (1987) ("Apart from those few cases where it was later established that no capital crime was committed, or that the defendant had an ironclad alibi, or that someone else was incontrovertibly guilty, there is no quantity or quality of evidence that could be produced that would definitively prove innocence.").

The checklist proposed in this Article seeks to be objective in a more meaningful way, by creating a consistent, uniform, replicable list of proxies for likely innocence. Some decisions that underlie the methodology—e.g., how heavily to weight various wrongful-conviction factors—are subjective in the sense that they are the result of a judgment process inherently unable to be informed by empirical evidence. In another sense, however, they are also objective because the specific factors identified are intended to be uniform across all cases. This objectivity is far greater and more consistent than the "objectivity" afforded by delegating "exoneration" decisionmaking to the disparate choices of third parties, such as the thousands of judges and prosecutors nationwide and internationally who, even if they were devoid of decisionmaking bias, would nonetheless never replicate their judgments about reasonable doubt, prejudice, or materiality across cases collectively.

This Article is not intended to resolve decisively all of the technical details of implementing this model in a database of wrongful convictions. Instead, it is intended to demonstrate that a better alternative to official exonerations is possible for identifying likely innocence. To the extent that readers like the concept but would bicker with the details, I happily invite further refinement of this methodology—for example, refinement of individual factors to be considered or development of a more empirical basis for the weighting of factors by a scholar with a more solid background in statistical modeling than my own.³⁵²

Relative Advantage

Currently, there is a consensus in the field of innocence studies that legal innocence and official exoneration are both poor proxies for actual innocence but that there is no workable alternative.³⁵³ In essence, until now, disagreements among scholars have centered largely around which definition is the least bad. While this proposal is complicated, messy, and certainly does not have all of its details worked out, the primary purpose of this Article is to demonstrate that it is possible to divine an alternative that is not just the least of several bad proxies for actual innocence, but instead to propose a working checklist for reasonable doubt in the context of false convictions.

The checklist outlined in this Article has the power to create common ground amongst the two sides in the present scholarly debate about the primacy of actual, factual innocence versus procedural justice. The checklist's objective, substantive factors indicative of likely innocence are derived from common lodestars of procedural injustice, particularly official misconduct and IAC. One benefit of defining

^{352.} I am in the process of designing a Registry of Wrongful Convictions for New Zealand, which will employ this substantive definition of wrongful conviction. My hope is that, in applying this methodology to the facts of individual cases, I will be able further to refine the factors and their weighting.

^{353.} See, e.g., Samuel R. Gross, Barbara O'Brien, Chen Hu & Edward H. Kennedy, Rate of False Conviction of Criminal Defendants who are Sentenced to Death, 111 PROC. OF THE NAT'L ACAD. OF SCIS. OF THE U.S. 7230, 7230 (2014) (asserting that "the great majority of innocent defendants remain undetected" because "[t]he rate of such errors . . . is not merely unknown but unknowable.").

likely false convictions in this way is that it creates pressure to avoid the potential system-failure factors that this Article identifies. By contrast, a process-based definition of false conviction may create a perverse incentive for the system not to acknowledge the seriousness of the common causes of wrongful convictions.

A second benefit is that this checklist of factors captures the upsides of both sides of the debates around actual *versus* legal innocence and factual innocence *versus* procedural injustice. It captures the spirit of actual innocence (as opposed to technical legal innocence) but allows actual innocence to be defined at a lower threshold of probability than a DNA exoneration. The checklist also demonstrates the extent of the overlap between procedural injustice and wrongful conviction because the nature of the factors identified is primarily procedural, except that the threshold for "prejudice" from these errors is lower than in the jurisprudential silos on which the checklist is partially based. Most importantly, this checklist for identifying likely wrongful convictions has the ability to capture those defendants about whose convictions we ought really to worry—those defendants who lack a postconviction remedy for their wrongful convictions, the most tragic and understudied victims of criminal justice failures.