WHERE HAVE ALL THE INNOCENTS GONE?

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The DNA revolution has revealed that, contrary to received wisdom, the conviction of an innocent defendant by the vaunted American criminal justice system is far from a freakish event. The National Registry of Exonerations now lists more than 2,200 cases of wrongful convictions. Of course, 2,200 cases is a minuscule number compared to the roughly 1.5 million felons in state and federal prisons at any given moment. The last quarter century has seen a vigorous debate about the error rate that leads to the conviction of innocent defendants. Estimates have ranged from 0.027% to 15%; most estimates are in the 0.5% to 2% range. This Article presents the first study to draw on an existing data set of actual claims of innocence to estimate the overall error rate in the criminal justice system. The data come from the North Carolina Innocence Inquiry Commission, a unique program that allows applications for exoneration from convicted felons. Conservative assumptions about the North Carolina data set produce a likely error rate of 0.125% to 0.5%. Though the estimates of the wrongful conviction rate are thus limited to North Carolina, there is no reason to think that the error rate is materially different in other states.

This Article is, in part, a response to Paul Cassell's article, Overstating America's Wrongful Conviction Rate? Reassessing the Conventional Wisdom About the Prevalence of Wrongful Convictions. Though the findings here as to the estimated error rate are higher than Professor Cassell's, we do agree that previous estimates tend to be too high for reasons this Article will explore.

TABLE OF CONTENTS

INTRO	DDUCTION	866
Α.	The Overture	867

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I.	THE FIRST MOVEMENT: TEN YEARS OF THE NORTH CAROLINA INNOCENCE INQUIRY COMMISSION	869
	THE SECOND MOVEMENT: CAN WE NARROW THE ESTIMATED WRONGFUL CONVICTION RATE? The North Carolina Data Commenting on Paul Cassell's Estimates	872
III.	THE THIRD MOVEMENT: ESTIMATING THE EXONERATION RATE OF THE NORTH CAROLINA INNOCENCE INQUIRY COMMISSION	883
IV.	THE FOURTH MOVEMENT: CAN WE IMPROVE THE NORTH CAROLINA INNOCENCE PROCESS?	885
V.	THE FIFTH MOVEMENT: HENRY McCollum Walks Free	890

INTRODUCTION

I am pleased to be a part of this *Arizona Law Review* conversation seeking to shed light on the rate of wrongful convictions. Paul Cassell's article precedes mine, and he will follow mine with a reply. Because he has graciously shared a draft of his reply, I am able to respond to some of his comments on my Article. He and I have been friends for over 20 years. We have disagreed vigorously on the issue of how much *Miranda* has depressed the rate at which suspects make incriminating remarks to police during interrogations. We will disagree in this exchange as well though here I think our points of agreement are quite substantial. Indeed, the reader will find that the disagreement Cassell and I have is more with some mainstream estimates of the wrongful conviction rate than with each other. My view has changed because of my North Carolina study, which will occupy the bulk of my Article. I now think the general wrongful conviction rate is much lower than earlier estimates, including my own.

Readers should keep in mind the simplicity of the study's design. For the first time, we have a data set of formal claims of innocence from a specified universe of convicted persons. For the ten-year period ending in 2016, the North Carolina Innocence Inquiry Commission ("NCIIC" or "the Commission") received 2,005 claims of factual innocence from convicted felons. The number of convicted felons in North Carolina during this period was roughly 400,000.² If we assume that every innocent felon filed a claim, and that no guilty felons filed a claim, the wrongful conviction rate would be 0.005 or 0.5%. For reasons I will explain later, the 60% of felons who were not sentenced to prison are much less likely to file a

^{1.} George C. Thomas III, Is Miranda a Real-World Failure? A Plea for More (and Better) Empirical Evidence, 43 UCLA L. Rev. 821, 821, 837 (1995); Paul G. Cassell & Bret S. Hayman, Police Interrogation in the 1990s: An Empirical Study of the Effects of Miranda, 43 UCLA L. Rev. 839 (1995); George C. Thomas III, Plain Talk About the Miranda Empirical Debate: A "Steady-State" Theory of Confessions, 43 UCLA L. Rev. 933, 934–35 (1995).

^{2.} I will explain how this estimate is derived. See infra notes 56-57 and accompanying text.

claim. If we remove them from the denominator, we have a wrongful conviction rate of 1.25%. These are the parameters of a wrongful conviction estimate with which I will begin.

There are two complicating problems. First, we do not know how many claimants are truly innocent. Given the prospect of release from prison and a statutory cash award for years in prison, the 2,005 claimants must include guilty persons who hope to "beat the system." Also we do not know how many innocent felons do not file a claim. The balance of this Article will sort through various estimates of these factors and arrive at an estimate of wrongful convictions substantially lower than 1.25%.

But I begin with a story of how the criminal justice system failed and how the NCIIC helped correct the justice system's awful error.

A. The Overture

On September 28, 1983, Henry McCollum was taken to a North Carolina police station to be questioned about the brutal rape and murder of an 11-year-old female.³ It was half a century after the U.S. Supreme Court revealed to the world, if the world needed any lessons, that black suspects and defendants often suffered horrific treatment at the hands of Southern, white law enforcement.⁴ Some things change slowly. A black man, McCollum was "mentally retarded," and had "an IQ between 60 and 69 and the mental age of a 9-year-old." His nickname was "Buddy." He came to the attention of police because a high-school student relayed a rumor she had heard that McCollum was the one who killed the child. Buddy was in town from New Jersey to visit his mother. McCollum denied any knowledge of the crime but was taken to the police station and interrogated for five hours. 9

The McCollum materials do not reference a tape of the interrogation, and we cannot know for certain what strategies the police used in the interrogation room. We do know for certain that McCollum eventually signed a confession admitting that he raped and helped murder the victim. We do know that the confession McCollum signed was wildly inconsistent with a confession given later

^{3.} State v. McCollum, 321 N.C. 557, 558 (1988).

^{4.} *See, e.g.*, Chambers v. Florida, 309 U.S. 227, 229–32 (1940); Brown v. Mississippi, 297 U.S. 278, 281–82 (1936). *See generally* James Goodman, Stories of Scottsboro (1995).

^{5.} McCollum v. North Carolina, 512 U.S. 1254, 1255 (Blackmun, J., dissenting).

^{6.} *Id*

^{7.} Transcript of Motion for Appropriate Relief at 22, North Carolina v. McCollum, No. 83CRS15506-07, 2014 WL 4345428 (N.C. Super. Sept. 2, 2014), http://innocencecommission-nc.gov/wp-content/uploads/state-v-mccollum-brown/postconviction-hearing-state-v-mccollum-and-brown.pdf.

^{8.} Henry McCollum and Leon Brown, N.C. COALITION FOR ALTERNATIVES TO DEATH PENALTY, https://nccadp.org/story/henry-mccollum-and-leon-brown/ (last visited Sept. 27, 2018).

^{9.} *Id*

^{10.} State v. McCollum, 321 N.C. 557, 558–59 (1988).

by his half-brother, Leon Brown, who was also charged in the rape and murder. ¹¹ McCollum's confession was also inconsistent with some of the critical physical evidence in the case. ¹² At the 2014 exoneration hearing for McCollum and Brown, a witness for the NCIIC noted dozens of inconsistencies between their statements as well as inconsistencies between their statements and the physical evidence. ¹³

The stories McCollum and Brown told were inconsistent in another, more fundamental, way. They named two other males who joined in the rape and murder of the victim. He but both of those young men had rock-solid alibis, and the State abandoned the cases against them. Police and investigators ignored this fundamental inconsistency between the McCollum–Brown confession and the State's theory of the case as it developed. Even stranger, the case was presented to the jury on the theory that there had been four rapists. In It had to be tried that way to be consistent with McCollum's and Brown's confessions. But everybody on the State's side of the case, inevitably including the prosecutors, must have known that the four-male theory of the case was false. And yet the State proceeded to obtain a death penalty verdict for both defendants.

We know other facts suggesting that McCollum's confession was almost certainly false. We know that Roscoe Artis, a serial rapist, lived next door to the field where the victim's body was found.¹⁷ We know that DNA taken from a cigarette butt found next to the victim matched Roscoe Artis's DNA profile from 2012.¹⁸ We know that a review of the evidence presented by the Commission at a hearing led the State of North Carolina to agree that Henry McCollum was probably innocent of the rape and murder for which he had served 31 years on death row.¹⁹

These facts suggest that McCollum's account of the police interrogation has the ring of truth to it.²⁰ Most of the facts that follow appear on the website for the North Carolina Coalition for Alternatives to the Death Penalty.²¹ Police, sheriff's deputies, and agents from the state bureau of investigation were in a room with McCollum for five hours.²² They promised him over and over that if he just gave them the information they wanted, he could go home.²³ They would not

13. *Id.* at 14–35.

^{11.} Transcript of Motion for Appropriate Relief, *supra* note 7, at 11–18.

^{12.} *Id.* at 13–15.

^{14.} *McCollum*, 321 N.C. at 558–59.

^{15.} See Henry McCollum and Leon Brown, supra note 8.

^{16.} *McCollum*, 321 N.C. at 558–59.

^{17.} Transcript of Motion for Appropriate Relief, *supra* note 7, at 36.

^{18.} *Id.* at 32–35 (explaining that the odds of the DNA being from another African-American male are 1 in 4.2 trillion).

^{19.} *Id.* at 124–25.

^{20.} We also know from other cases where the interrogation has been preserved on tape that police sometimes resort to similar strategies to get a confession. *See, e.g.*, Miller v. State, 770 N.E.2d 763, 766 n.3, 768 (Ind. 2002) (reciting that police questioned a mentally retarded suspect for six hours, confronted him with assertions that they knew he was guilty, and then lied to him about the evidence against him).

^{21.} Henry McCollum and Leon Brown, supra note 8.

^{22.} *Id*

^{23.} *Id*.

permit his mother to see him.²⁴ The law enforcement officers fed McCollum details about how the victim was killed, details they put into the confession that he signed.²⁵

Because McCollum was making up the story of the rape and murder, he probably came up with the other two assailants as a way of deflecting some of the blame. Indeed, his confession said one of the other men suggested that they kill the victim and the fourth male killed her while McCollum helped hold her down. After he signed the confession, he looked around the room filled with law enforcement officers and asked, "Can I go home now?"

Thirty-one years later, Buddy McCollum went home.

I. THE FIRST MOVEMENT: TEN YEARS OF THE NORTH CAROLINA INNOCENCE INQUIRY COMMISSION

Scientists cannot detect a black hole directly because it is, well, black. But they can identify where black holes exist with reasonable probability by looking at their gravitational effect on matter around them. A similar problem arises in trying to identify and measure the extent of the wrongful conviction population. There is a subuniverse of factually innocent prisoners that we can identify with something approaching 100% certainty—those exonerated by conclusive DNA tests. Naturally, those were the earliest convictions to be vacated on the ground of innocence. There are other claims about which we can be relatively confident—e.g., we have a confession from someone who has no reason to lie and a time- and date-stamped video of the prisoner making a deposit in a bank 1,000 miles away when the crime occurred.

The false-conviction black hole is the universe of cases that lack DNA or other technological refutations of guilt. How large is that black hole? And how do we identify the innocent prisoners who live in the black hole? I should be clear about the nature of the black hole. It contains only those who are factually innocent of the crime for which they were convicted. Either someone else committed the crime, with no involvement of the person claiming innocence, or there was never a crime in the first place. Though the second category is surely less populated than the first, it would include, for example, cases where the "victim" lies about being defrauded. I do not include cases in the wrongful conviction category where the conviction is flawed because of a due-process violation—e.g., wrongful denial of bail or ineffective assistance of counsel—but the defendant did the act that constitutes the crime for which he was convicted. Those convictions are wrongful in one sense of the word but not in the sense wrongful conviction scholars intend.

25. *Ia*

^{24.} *Id.*

^{26.} State v. McCollum, 321 N.C. 557, 559 (1988).

^{27.} Henry McCollum and Leon Brown, supra note 8.

^{28.} Sara Goudazi, *The Tricky Task of Detecting Black Holes*, SPACE.COM (Feb. 21, 2017, 6:02 AM), https://www.space.com/3457-tricky-task-detecting-black-holes.html.

Michael Risinger is correct that different crimes have different wrongful conviction rates.²⁹ Indeed, there are crimes where false convictions are likely to be extremely rare. DUI cases proven by blood-alcohol or breathalyzer tests will produce false convictions only when the technology fails. The crime of failing to file a tax return is unlikely to produce false convictions; the taxpayer either filed or did not file. The same is true of failing to pay child support or any offense where there are records to consult; this is not to say that records can never be wrong, but hopefully, those cases are rare and corrected when a defendant presents records.

Indeed, even in categories of crimes that *can* produce false convictions, there is a subset, of unknown size, where the particular defense simply excludes the possibility of a false conviction. As Michael Risinger has noted with his usual insight, many cases can never fit the classic wrongful conviction model.³⁰ Paul Cassell has developed a lengthy list of these cases.³¹ For the most part, these are cases where the defendant admits the act but asserts a defense or claims that his *mens rea* did not meet the statutory standard. For example, X admits that he killed Y but claims justification or that his *mens rea* was less than required by the homicide statute. It makes no sense to speak of wrongful convictions here. The fact finder's judgment on the affirmative defense or the *mens rea* issue is the received truth; that a different fact finder might have reached the opposite conclusion does not mean that the first one was false.

But for traditional crimes (murder, rape, robbery, theft, burglary) where the defendant does not admit the act, we know that there are wrongful convictions. The problem, of course, is that like we cannot see within a black hole, we cannot "see" the innocence of prisoners who lack definitive proof of their innocence. My study is drawn from the NCIIC's review of claims of innocence in the Commission's first ten years. I will describe the process in more detail later, but for present purposes, we need only know that it permits those convicted of almost all felonies to petition the Commission to seek to prove their innocence.³² The universe of claims should provide some indication of the rate of wrongful conviction. Roughly 2,000 claims were filed during the ten years of my study—1,946 were reviewed and closed.³³

We can begin with 1,946 as the numerator but we need a denominator—the population that could file claims. The North Carolina prison population on

^{29.} D. Michael Risinger, *Innocents Convicted: An Empirical Justified Factual Wrongful Conviction Rate*, 97 J. CRIM. L. & CRIMINOLOGY 761, 783 (2007).

^{30.} D. Michael Risinger, Unsafe Verdicts: The Need for Reformed Standards for the Trial and Review of Factual Innocence Claims, 41 Hous. L. Rev. 1281, 1295–1307 (2004).

^{31.} Paul G. Cassell, Overstating America's Wrongful Conviction Rate? Reassessing the Conventional Wisdom About the Prevalence of Wrongful Convictions, 60 ARIZ. L. REV. 835 (2018).

^{32.} N.C. INNOCENCE INQUIRY COMM'N, THE NORTH CAROLINA INNOCENCE INQUIRY COMMISSION, RULES AND PROCEDURES art. 3 (B) (rev. ed. 2016), http://innocencecommission-nc.gov/wp-content/uploads/2017/07/rules-and-procedures.pdf.

^{33.} LINDSEY G. SMITH, N.C. INNOCENCE INQUIRY COMM'N, 2016 ANNUAL REPORT 5 (2017), http://innocencecommission-nc.gov/wp-content/uploads/2017/07/2016-annual-report.pdf.

December 31, 2006 was 37,000.34 From January 1, 2007 through December 31, 2016, rounding to the nearest thousand, a total of 133,000 prisoners were admitted to North Carolina prisons for a total of 170,000 prisoners during the study period.³⁵ As 95% of the prisoners had been convicted of felonies,³⁶ which qualified them to make claims of innocence,³⁷ we can use 160,000 as the pool of prisoners who could have petitioned the Commission. Cassell notes that there is no requirement that a convicted felon actually be in prison to file with the Commission, 38 so it makes no difference how long a sentence a prisoner was serving or if he was even sentenced to prison. To be sure, the incentive to file a claim is reduced if the convicted felon is not in prison, and I will later argue that few convicted felons who were never in prison file with the Commission.

Out of a population of 160,000 potential claimants, and almost 2,000 claims,³⁹ the North Carolina innocence process exonerated only 10 claimants over

HEATHER C. WEST & WILLIAM J. SABOL, U.S. DEP'T OF JUSTICE, PRISONERS IN 2007 2 (2008), https://www.bjs.gov/content/pub/pdf/p07.pdf (Table 2 showing prisoners at end of 2006 and 2007).

See E. ANN CARSON & ELIZABETH ANDERSON, U.S. DEP'T OF JUSTICE, PRISONERS IN 2015 11 tbl.7 (2016), https://www.bjs.gov/content/pub/pdf/p15.pdf (showing admissions for 2014 and 2015); E. ANN CARSON U.S. DEP'T OF JUSTICE, PRISONERS IN 2013 10 tbl.9 (2014) (showing admissions for 2012 and 2013); E. ANN CARSON & DANIELA GOLINELLI, U.S. DEP'T OF JUSTICE, PRISONERS IN 2012 34 tbl.1 (2013), https://www.bjs.gov/content/pub/pdf/p12tar9112.pdf (showing admissions for 2011); PAUL GUERINO, PAIGE M. HARRISON & WILLIAM J. SABOL, U.S. DEP'T OF JUSTICE, PRISONERS IN 2010 25 tbl.11 (2011), https://www.bjs.gov/content/pub/pdf/p10.pdf (showing admissions for 2010); HEATHER C. WEST & WILLIAM J. SABOL, U.S. DEP'T OF JUSTICE, PRISONERS IN 2009 26 tbl.11 (2010), https://www.bjs.gov/content/pub/pdf/p09.pdf (showing admissions for 2009); HEATHER C. WEST, WILLIAM J. SABOL & MATTHEW COOPER, U.S. DEP'T OF JUSTICE, PRISONERS IN 2008 32 tbl.11 (2009), https://www.bjs.gov/content/pub/pdf/p08.pdf (showing admissions for 2007 and 2008). The data for 2016 have yet to be released. The number of admissions for 2014 and 2015 were remarkably stable, and I assumed the same number for 2016. I cross-checked the numbers with the official North Carolina corrections website and found some discrepancies, but I chose to use the BJS data. We are, after all, just trying to get a bounded estimate and not a precise calculation.

In 2010, 95% of the North Carolina prisoners had been convicted of felonies. See RADU ROSU, N.C. DEP'T OF CORRECTIONS, RESEARCH BULLETIN, 2 (2011), https://randp.doc.state.nc.us/pubdocs/0007064.PDF (using data for 2010, midway through the study period).

The innocence process during almost this entire period was open to anyone 37. convicted of a felony. See generally N.C. INNOCENCE INQUIRY COMM'N, supra note 32. Beginning August 1, 2016, the process was limited to A through E felonies. See KENDRA MONTGOMERY-BLINN, THE N.C. INNOCENCE INQUIRY COMM'N, ANNUAL REPORT TO THE 2015-16 Session of the General Assembly of North Carolina and the State Judicial 15

http://digital.ncdcr.gov/cdm/fullbrowser/collection/p16062coll9/id/163365/rv/compoundobj ect/cpd/163056. This modification involves only five months, most felonies still qualified for a claim of innocence, and my study seeks only a rough estimate. Thus, I counted all 170,000 prisoners in the pool of those who could file a claim.

Paul G. Cassell, Jurisdiction-Specific Wrongful Conviction Rates: the North 38. Carolina and Utah Examples, 60 ARIZ. L. REV. 891 (2018).

See SMITH, supra note 33, at 5. 39.

ten years.⁴⁰ If we assume that the Commission found all the innocent persons among those in prison during that period (roughly 160,000), it would mean a rate of wrongful convictions of 0.006%. But, of course, it cannot be true that the Commission found and exonerated all innocent prisoners.

We can look through the other end of the telescope and assume that every innocent prisoner filed a claim with the Commission and that no guilty prisoners filed a claim. The number of claims investigated and closed during the survey period was 1,946.⁴¹ That gives us a wrongful conviction error rate of 1.2% (1,946 divided by 160,000⁴²). But that cannot be right either. There must be innocent prisoners who, for one reason or another, do not file claims, and we would rightly suspect that some claimants are lying about their innocence. Given the potential windfall to a successful claimant—a get-out-of-jail card and statutory damages based on time in prison⁴³—we would expect quite a large number of lying claimants.

We thus have a bounded wrongful conviction estimate from 0.006% if the Commission identified all the innocents in the prison system to 1.2% if everyone who filed was in fact innocent and all innocent prisoners filed. The 1.2% is a defensible upper bound because, as we will see, there are many guilty claimants in the pool, almost certainly a larger number than the number of innocent prisoners who do not file. We obviously would like to narrow the range, and that is the focus of the next Part.

II. THE SECOND MOVEMENT: CAN WE NARROW THE ESTIMATED WRONGFUL CONVICTION RATE?

A. The North Carolina Data

During the period of my study, over half of the prisoners in North Carolina had been convicted of drug offenses, larceny, burglary, robbery, or assault.⁴⁴ Thus, there were plenty of cases where a wrongful conviction could exist and a claim could be filed with the Commission. Figure 1 has the filed claims broken down by the type of claim.

41. *Id.* at 7.

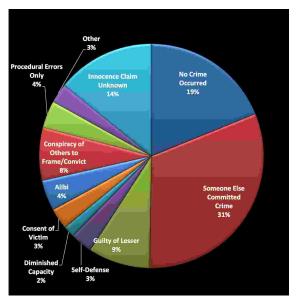
42. I use the prison population here rather than the total number of individuals convicted of felonies—an assumption I will defend later. *See infra* text accompanying notes 54–60.

^{40.} See id.

^{43.} The statutory compensation is limited to \$750,000 and is based on the number of years in prison, see N.C. GEN. STAT. §§ 148-82 to 148-84 (2012), but tort suits against North Carolina have reportedly resulted in damages as high as \$7.85 million. See Joseph Neff & Mandy Locke, N.C. Agrees to \$12 Million Dollar Settlement for Two Wrongly Imprisoned Men, McClatchy DC Bureau (Aug. 13, 2013, 12:37 PM), https://www.mcclatchydc.com/news/crime/article24751990.html (noting one settlement for \$7.85 million).

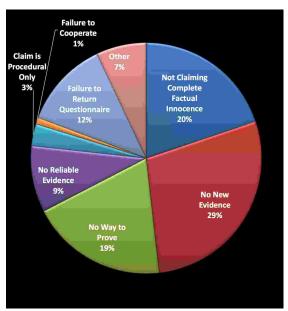
^{44.} See Cara Stevens, N.C. Dep't of Pub. Safety, Research Bulletin Issue No. 55, (2012), https://randp.doc.state.nc.us/pubdocs/0007067.PDF (using data for end of 2010, midway through the study period).

FIGURE 1



The number of innocence claims is the place to begin. There were 1,946 claims that were reviewed and closed in the ten-year period of my study. To begin, we must remove 20% of the 1,946 claims because they do not claim "complete factual innocence" and another 3% because the claims are procedural only.⁴⁵

FIGURE 2



^{45.} *See infra* Figure 2.

This gives us a universe of 1,498 potentially innocent claimants; let's round to 1,500. So now if we assume every claimant was factually innocent, and all factually innocent prisoners filed a claim, the upward bound of our wrongful conviction estimate is 0.094%. We must make some adjustment for guilty claimants in the pool. I assume that almost all of the 12% who did not return the questionnaire were guilty and simply gave up when the process became too labor intensive; I will include that group when I make a general estimate of the number of guilty claimants in the pool of 1,500. What we need is a global estimate of guilty claimants in the pool of 1,500 who claim complete factual innocence. The NCIIC makes no systematic attempt to determine whether, after review, the claimant is likely guilty because the Commission takes many non-DNA cases and thus "the definition of affirmation of guilt can vary widely."

Three principles can help us make an educated guess. First, the Innocence Project affiliated with Cardozo Law School found that 50% of those who seek DNA testing have their guilt confirmed by a DNA test.⁴⁷ This was, to me, a surprising discovery. Either the prisoners who contact the Innocence Project do not understand the accuracy of DNA testing or are hoping for a miracle. Of the remaining 50%, about 33% are exonerated, and the remaining 17% have inconclusive outcomes.⁴⁸ If we divide the inconclusive cases in the same percentage as the ones that reach a definitive outcome, we would have roughly 60% guilty in the pool (60% of known outcomes, 50/83, are guilty).

Sixty percent guilty in the pool of claimants is lower than the number Mark Godsey estimates from his 14 years directing the Ohio Innocence Project. He, like the Innocence Project research analyst, estimates 50% are confirmed guilty, but of the remaining 50%, perhaps only 5% are innocent with 45% inconclusive. ⁴⁹ If we divide the inconsistent cases in the same percentage as the ones that reach a definitive outcome, we have a pool of claimants that contains 90% guilty prisoners. ⁵⁰

We are shooting in the dark here, so let's take the average between Godsey's estimate, 90%, and the Cardozo Innocence Project data, 60%, giving us a pool that contains 75% guilty claimants. Cassell prefers using Godsey's estimate,

^{46.} Email from Lindsey G. Smith, Exec. Dir., N.C. Innocence Inquiry Comm'n, to George C. Thomas III, Rutgers Univ. Bd. of Governors Professor of Law, Judge Alexander P. Waugh, Sr. Distinguished Scholar, Rutgers Univ. (Aug. 4, 2017, 3:17 PM) (on file with author).

^{47.} Email from Vanessa Meterko, Research Analyst, Innocence Project, to George C. Thomas III, Rutgers Univ. Bd. of Governors Professor of Law, Judge Alexander P. Waugh, Sr. Distinguished Scholar, Rutgers Univ. (July 25, 2017, 3:06 PM) (on file with author).

^{48.} *Id*

^{49.} Email from Mark Godsey, Daniel P. and Judith L. Carmichael Professor of Law and Dir., Lois and Richard Rosenthal Inst. for Justice/Ohio Innocence Project, Law Rosenthal Inst. for Justice, University of Cincinnati College of Law, to George C. Thomas III, Rutgers Univ. Bd. of Governors Professor of Law, Judge Alexander P. Waugh, Sr. Distinguished Scholar, Rutgers Univ. (Sept. 10, 2017) (on file with author).

^{50.} The number is actually 91% but let's round to 90%: 91% of known cases are guilty (50/55).

and he has plausible arguments for that position,⁵¹ but Godsey's estimate is not based on careful record keeping and is, instead, an impressionistic, back-of-the-envelope calculation. One might prefer the precise records of the Cardozo Innocence Project and dismiss Godsey's estimate altogether. Moreover, dividing the inconclusive outcomes in Godsey's estimate the way I did might exaggerate the estimate of guilty claimants. If we assume that 60% of the inconclusive outcomes are guilty (the Cardozo ratio), we would have a Godsey estimate of 77%,⁵² which is about what we get when we average the high Godsey guilty estimate with the Cardozo estimate. If we use the 75% guilt assumption, we have 375 claims from actually innocent claimants (25% of 1,500). By the way, to be clear, the 75% guilty-claimants estimate includes the 12% who filed a claim with the Commission and then abandoned it.⁵³

But we must further adjust the 375 figure for those who are innocent but do not file a claim. In an earlier version of this Article, I assumed that half of the innocents would not file a claim. Cassell persuades me that this assumption is too robust. There are, to be sure, those innocents who lack the cognitive ability to file a claim and those who, for whatever reason, simply do not want to be bothered, but I agree with Professor Cassell that this percentage would be far less than half.

Cassell assumes that 90% of the innocent convicted felons will file a claim. ⁵⁴ I am willing to accept that assumption as long as we are talking about prisoners. The powerful incentive to get out of prison, the incentive to clear one's name, and the availability of compensation up to \$750,000 are powerful motivators. Using Cassell's 90% assumption, we can estimate that there were 417 innocents in the pool of North Carolina prisoners (375 divided by 0.9). This would give us a wrongful conviction rate of 0.26% (417 divided by 160,000), or roughly one-quarter of 1%.

Cassell makes another adjustment, however, that I find less plausible. He rightly points out that one does not have to be sentenced to prison to petition the Commission, 55 and we estimate the imprisonment rate for felons in North Carolina as roughly 40%. 56 Thus, he would increase the denominator of those who could file a claim from 160,000 to 400,000. 57 Using my 417 figure of wrongfully convicted in the pool of applicants, the wrongful conviction rate would be 0.10%, or roughly one-tenth of 1%.

56. See N.C. Sentencing and Policy Advisory Comm'n, Quick Facts: Felony Convictions Fiscal Year 2012/13 1 (2014), https://www.nccourts.gov/assets/documents/publications/2012-

^{51.} Cassell, *supra* note 38, at 895.

^{52.} Sixty percent of 45 (inconclusive outcomes) is 27, which added to 50 is 77.

^{53.} See supra Figure 2.

^{54.} Cassell, *supra* note 38, at 895.

^{55.} *Id.* at 898.

¹³_QF_Felony_0.pdf?NDI.IVt4Shgawk_PDLDBcv9za4MGU_RB (showing 39% of felony convictions resulted in "active punishment"); N.C. GEN. STAT. § 15A-1340.11(1) (2011) (defining "active punishment" as imprisonment that has not been suspended).

^{57.} If the number of prisoners, 160,000, is 40% of the total, the total is 160,000 divided by 0.4 or 400,000.

But convicted felons who are not sentenced to incarceration cannot recover statutory damages, which are based on each year spent in prison.⁵⁸ Once we remove the possibility of statutory damages and, of course, the "get-out-of-jail" incentive, I suspect the motivation to file is dramatically reduced. Moreover, the felons who are not sentenced to prison are, by definition, more likely to be guilty of minor felonies. Would someone falsely convicted of a felony assault and sentenced to probation be willing to go through the quite-complicated and time-consuming process of pursuing a claim with the Commission?

To test my assumption that few innocent felons file claims if they were never in prison for the crime for which they were exonerated, I consulted The National Registry of Exonerations.⁵⁹ I examined all cases in the registry from North Carolina where the convicted person made an innocence claim from January 1, 2007 to the end of 2016. There were 26 cases in the sample, and only 2 involved an initial claim made from outside the prison.⁶⁰ And in both cases, the claimants

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^{58.} See §§ 148-82 to 148-84.

^{59.} See NAT'L REGISTRY EXONERATIONS, http://www.law.umich.edu/special/exoneration/Pages/about.aspx (last visited Oct. 25, 2018).

See Benjamin Chavis, Jr., NAT'L REGISTRY EXONERATIONS (Nov. 17, 2016), http://www.law.umich.edu/special/exoneration/Pages/casedetail.aspx?caseid=5021; Teddy REGISTRY **EXONERATIONS** http://www.law.umich.edu/special/exoneration/Pages/casedetail.aspx?caseid=4765. describing exoneration of Mills and Williams). Isbell, Mills, and Williams filed an innocence claim with the Commission in 2012. See State v. Isbell, Mills, Williams, N.C. INNOCENCE INQUIRY COMMISSION, http://innocencecommission-nc.gov/cases/state-v-isbellmills-williams/ (last visited Sept. 24, 2018). Because they had pleaded guilty, the vote to refer to the judicial panel had to be unanimous, and it was not. See id. Isbell and his codefendants were later exonerated by agreement with the State. See Teddy Isbell, supra. It is difficult to know how to count Isbell's case in my survey of North Carolina claims. The codefendants, Mills and Williams, were also apparently out of prison when they filed with the Commission in 2012, see id. (noting that Mills and Williams received sentences of 10-15 years upon pleading guilty in 2001 and 2002), so it could count as three rather than one. But the same evidence exonerated all three. See id. Moreover, they filed their application with the Commission after two other codefendants, who were in prison, were exonerated by the Commission. See id. (describing exoneration of Kagonyera and Wilson). Had that exoneration not occurred, it seems reasonably likely that Isbell, Mills, and Williams would not have filed, in which case I could count it as zero. I counted it as a single case as a compromise. I made two other adjustments in my sample. First, if the claim was made when the claimant was in prison but was not decided until after he had left prison, I did not count that as a claim made outside of prison. The other adjustment involved the outlier case of the Wilmington Ten, a group of mostly black defendants convicted of fire-bombing a grocery store owned by a white man during racially charged months in 1971. See Benjamin Chavis, Jr., supra. Their convictions were reversed in 1980, and the motion for exoneration of all ten was granted in 2012. Id. This is such an unusual, politically charged case that I considered removing it from the sample. I compromised instead by counting it as 1 case, which makes for a total of only 2 cases out of a sample of 26, and both cases involved defendants who had served lengthy sentences and thus qualified for compensation. The State paid roughly a million dollars in damages to the living members of the Wilmington Ten. See id. The State paid Isbell, Mills, and Williams roughly 1.5 million dollars. See Teddy Isbell, supra.

had already served years in prison, for which the State paid roughly two million dollars in damages.⁶¹ I found zero cases where the claimant had never served a prison sentence. That suggests quite strongly that the proper denominator is something much closer to 160,000 than to 400,000 and that the wrongful conviction rate in North Carolina during my study was somewhere around one-quarter of 1%.

Now, to be sure, this is only an estimate. Cassell might be right that Godsey's 90% is a better estimate of the number of guilty claimants in the pool. Or Godsey's estimate might be too high, and the Innocence Project's adjusted rate of 60% might be closer to the mark. Or perhaps I should have added some innocent-but-never-incarcerated felons to my denominator. Thus, a better way to express the findings of my study is to take my finding of one-quarter of 1% as the center of a range. We can halve it to get a lower bound and double it to get an upper bound. I believe that the wrongful conviction rate in North Carolina during those ten years is bounded by one-eighth of 1% and one-half of 1%.

If we take Cassell's estimate that he separately derived from the North Carolina data using a different methodology and substitute 160,000 for his denominator of 400,000 (for reasons I have explained), the top end of his estimated range comes in at almost one-tenth of 1%,⁶² which is not far from my lower bound of one-eighth of 1%. Both his and my estimates are at the lower end of what other researchers have postulated.

Michael Risinger has employed a more precise methodology than any other researcher to conclude that the error rate in capital rape-murder cases is bounded by 3.3% and 5%.⁶³ Risinger cautions not to extrapolate from his data to convictions for other crimes.⁶⁴ We might expect murder cases to produce a higher error rate because there is no victim to identify the assailant. But given the (now well-known) problems with eyewitness identification,⁶⁵ it might be true that having a victim see an assailant actually makes the conviction less likely to be accurate. Marvin Zalman, after reviewing various estimates, puts the likely general wrongful conviction error rate at 0.5% to 1%.⁶⁶

My methodology in this Article, one that Professor Cassell replicates in his reply,⁶⁷ is the only approach where an estimate of the wrongful conviction rate is based on formal claims of innocence. For that reason, and despite our somewhat conflicting assumptions, I think both my and Cassell's estimates are sound (though still just estimates). Given what the innocence movement has revealed about the inherent inaccuracies built into human memory, and particularly our memory of

65. George C. Thomas III, *Two Windows Into Innocence*, 7 OHIO ST. J. CRIM. L. 575, 579–81 (2010).

^{61.} See N.C. Sentencing and Policy Advisory Comm'n, supra note 56.

^{62.} Cassell, *supra* note 38, at 900.

^{63.} See Risinger, supra note 29, at 782–83, 788.

^{64.} *Id.* at 783.

^{66.} See Marvin Zalman, Qualitatively Estimating the Incidence of Wrongful Convictions, 48 CRIM. L. BULL. 221, 230 (2012).

^{67.} Cassell, *supra* note 38, at 894–901.

faces,⁶⁸ what we know about the deeply flawed forensics that have been used for decades,⁶⁹ and our discovery that false confessions are far from rare,⁷⁰ a wrongful conviction rate of one-tenth of 1%, or even my upper bound of one-half of 1%, might seem intuitively far too low.

Two justifications for these low estimates occur to me. First, all of the claims in my study occurred after December 31, 2006. One hopes that this far into the innocence movement, many judges, prosecutors, defense lawyers, forensic experts, and even eyewitnesses have a greater appreciation for the risk of error and take greater care in cases where guilt is not obvious.

Second, one data source shows that 94% of felony convictions are obtained by plea bargains.⁷¹ If the resistance of factually innocent defendants to plead guilty is as powerful as some researchers suggest, 72 then a very low incidence of wrongful convictions in 94% of convictions would offset a much larger error rate in cases that go to trial. Using a 94% guilty-plea estimate, roughly 150,000 prisoners in my study would have been convicted on guilty pleas and only 10,000 would have been convicted after a trial. If the wrongful conviction rate for guilty pleas is .0005 (one-fifth of my midrange error-rate estimate of .0025), then only 74 of the 417 innocent claimants pleaded guilty, meaning that 343 of the innocent claimants were convicted at trial. Because 10,000 of the prisoners (we are assuming) were convicted after a trial, that gives us a wrongful conviction rate of 3.43% in cases that go to trial. Thus, the error rate in criminal trials could be depressingly high and yet the overall error rate well under 1%. If one reads a sample of the cases on the National Registry, the vast majority of which are trial cases, one can easily understand how the trial error rate could be 3.43% or even higher. Because a disproportionate percentage of murder cases go to trial, 73 this helps explain Risinger's error rate in capital

^{68.~} Dan Simon, In Doubt: The Psychology of the Criminal Justice Process 90–119 (2012).

^{69.} DAVID A. HARRIS, FAILED EVIDENCE: WHY LAW ENFORCEMENT RESISTS SCIENCE 57–127 (2012).

^{70.} See Samuel R. Gross, What We Think, What We Know, and What We Think We Know About False Convictions, 14 Ohio St. J. Crim. L. 753, 770 fig. 2 (2017) (showing false confessions as one of the five leading causes of wrongful convictions). See generally RICHARD A. LEO, POLICE INTERROGATION AND AMERICAN JUSTICE (2008).

^{71.} See, e.g., SEAN ROSENMERKEL, MATTHEW DUROSE & DONALD FAROLE, JR., U.S. DEP'T OF JUSTICE, FELONY SENTENCES IN STATE COURTS, 2006 - STATISTICAL TABLES, 25 tbl.4.1 (2010), https://www.bjs.gov/content/pub/pdf/fssc06st.pdf (showing 94% guilty pleas for all offenses).

^{72.} One study of exonerations concluded that only 8% of exonerations were from guilty-plea convictions. *See* Oren Gazal-Ayal & Avishalom Tor, *The Innocence Effect*, 62 DUKE L.J. 339, 352 (2012). The authors examined other empirical evidence and concluded that there is a powerful "innocence effect" that makes innocent defendants significantly less likely to accept plea bargain offers that would induce pleas from guilty defendants.

^{73.} In one study, 27% of murder defendants went to trial, compared to 2% of all defendants. *See* Brian A. Reaves, U.S. Dep't of Justice, Felony Defendants in Large Urban Counties, 2009 - Statistical Tables 24 tbl.21 (2013), https://www.bjs.gov/content/pub/pdf/fdluc09.pdf.

rape-murder cases. There is clearly still work to be done to bring down the error rate in cases that go to trial.

I do not, for a moment, claim I have solved the black-hole problem of measuring the number of wrongful convictions, but I have presented a bounded estimate (one-eighth of 1% to one-half of 1%) that draws from actual data rather than pure speculation or questionnaires.⁷⁴ While I have made no attempt to compare the North Carolina criminal justice system to the other 49 states' systems, and I am unsure how one would even go about doing that, the U.S. Supreme Court has standardized much of the state criminal procedure that leads to a conviction or an acquittal: prosecutors are loosely bound to disclose exculpatory evidence in their possession.⁷⁵ Defendants have the right to cross examine prosecution witnesses and the right, roughly, to present a defense. 76 Juries must be informed of their duty to find guilt beyond a reasonable doubt and any instruction must convey what that means.⁷⁷ The Court has refused to require unanimous jury verdicts as a part of due process,⁷⁸ but 48 states still follow the common-law requirement of unanimity.79

In 2011, to pick a date midway through the ten-year period of my study, North Carolina's incarceration rate for prisoners with sentences of one year or more was roughly average among states.⁸⁰ This suggests North Carolina is about average in investigating, prosecuting, and convicting felons. All of these data points support the view that the North Carolina wrongful conviction rate is probably about average. And as the range for my estimate is broad, one-eighth of 1% to one-half of 1%, I believe the rate in other states probably fits within this range.

The black hole is a little less black but far from pellucid.

My friend, Michael Risinger, has tried (with limited success) to bring analytical rigor to my project, and I thank him for the effort. If this were his article, he would probably throw Part II in the trash can because it lacks the rigor that he seeks. But Michael is a scientist. I like to conduct thought experiments. If you give me an interesting question, I will seek a plausible answer. As Robert Nozick once said about the free will/determinism conundrum, "[i]f we cannot solve the problem, at least we can surround it." ROBERT NOZICK, PHILOSOPHICAL EXPLANATIONS 293 (1981).

See generally Brady v. Maryland, 373 U.S. 83 (1963); Scott E. Sundby, Fallen Superheroes and Constitutional Mirages: The Tale of Brady v. Maryland, 33 McGeorge L. Rev. 643 (2001) (describing how Brady is only a loose requirement for prosecutors).

^{76.} See Crawford v. Washington, 541 U.S. 36 (2004) (expanding right to cross examine prosecution witnesses); Chambers v. Mississippi, 410 U.S. 284 (1973) (right to confront adverse witnesses even when called by defense).

See Cage v. Louisiana, 498 U.S. 39, 41 (1990) (per curiam). 77.

^{78.} See Johnson v. Louisiana, 406 U.S. 356, 359-60 (1972); Apodaca v. Oregon, 406 U.S. 404, 406 (1972) (plurality).

See 3 WILLIAM BLACKSTONE, COMMENTARIES ON THE LAWS OF ENGLAND 79. *375-76. The two states that permit nonunanimous jury verdicts are Oregon and Louisiana. See Apodaca, 406 U.S. at 406; Johnson, 406 U.S. at 359–60.

See Stevens, supra note 44 (showing North Carolina ranked 30th).

B. Commenting on Paul Cassell's Estimates

Cassell makes three estimates of the wrongful conviction rate; the first is based on an estimate produced by Ron Allen and Larry Laudau, the second is based on my North Carolina study, and the third is based on data from Utah. 81 Cassell reduces my estimate by making some assumptions about the data that I do not make and that I consider less than optimal. I briefly discussed those contested assumptions in Section A of this Part but will return to them in a moment.

Allen and Laudau estimate the wrongful conviction rate to be 0.84%⁸² (an estimate not too far above my upper bound of one-half of 1%). Cassell reduces this to a range of 0.016%–0.062%.⁸³ This is a huge reduction in the Allen–Laudau rate. As Cassell agrees with the Allen–Laudau methodology, how does he achieve this remarkable reduction? He essentially makes two moves, each of which I question, at least as to magnitude. He begins, as do Allen and Laudau, with an assumption of the rate of wrongful convictions at trial that is drawn from Risinger's capital rape-murder study.⁸⁴ This is problematic for reasons I will explain below, but to use the Allen-Laudau methodology, one has to have an assumption of wrongful convictions at trial, so we can pass for the moment the problem with extracting a number from Risinger.

Cassell's next step is to reduce the number by limiting his study to FBI violent crimes, 74% of which are aggravated assaults.⁸⁵ Because roughly half of aggravated assaults are committed by someone the victim knows, and because only 21% of homicides are committed by strangers, Cassell reduces Risinger's 3.3% by 75% to produce an estimate of 0.82%.⁸⁶ There is much here I disagree with. Most importantly, focusing only on aggravated assault really misses the point of a general wrongful conviction rate. As many as 96% of the exonerations in Professor Samuel Gross's study would likely not fit the FBI definition of aggravated assault,⁸⁷ and it is not clear to me why we should focus on a small percentage of the exonerations.⁸⁸ I see no reason to reduce the Allen–Laudau estimate of the error rate at trials (subject to my criticism below).

^{81.} See Cassell, supra note 31, at 848; Cassell, supra note 38, at 900, 905.

^{82.} Ronald J. Allen & Larry Laudau, *Deadly Dilemmas*, 41 Tex. Tech. L. Rev. 65, 71 (2008).

^{83.} See Cassell, supra note 31, at 848.

^{84.} *Id.* at 826–28.

^{85.} *Id.* at 831.

^{86.} *Id.* at 837.

^{87.} See Gross, supra note 70, at 757 tbl.1 (showing assault exonerations as 4% of total.) To be sure, 26% of exonerations are for sexual assaults, but the FBI definition of aggravated assault includes the purpose of inflicting severe or aggravated injury. See Crime in the United States, Offense Definitions, FBI, U.S. DEP'T JUSTICE (Sept. 2010), https://www2.fbi.gov/ucr/cius2009/about/offense_definitions.html. This purpose seems unlikely to be present in most sexual assaults.

^{88.} A related, though less important, objection to Cassell's adjustment for nonstranger crimes is his use of nonstranger-homicide cases, 79%, to further reduce the 3.3% figure. Cassell, *supra* note 31, at 837. This is mysterious. The reason "nonstranger" is relevant in aggravated assault cases is that the victim can testify as to who committed the

Cassell's next move is to argue that the system is better at avoiding potential wrongful convictions today. This is undoubtedly true, but I disagree with his 50% reduction in the wrongful conviction rate. Yes, it is true that DNA testing is almost universally available at the front end of the process, and it is true that researchers and some courts are aware of the problems of junk forensic science, perjured testimony, false confessions, official misconduct, and erroneous eyewitness identifications (the five leading causes of wrongful convictions). But there is no way to quantify how this awareness has translated into a lower wrongful conviction rate, and it remains true that most cases are not susceptible to DNA testing.

Rather than offer alternative estimates of Cassell's assumptions, I point out the flaw in the enterprise. Risinger's estimate of an error rate in capital rapemurder cases is a victory for social science because it is based on DNA exonerations in a discrete set of cases. As Risinger himself stresses, however, one cannot simply transpose this rate to other crimes; in his phrase, the wrongful conviction rate is substructured—i.e., different kinds of crimes will have different, perhaps radically different, rates of wrongful convictions. When researchers try to extrapolate to a general rate, they are simply making assumptions that they like.

Thus, although the Allen-Laudau methodology advances the inquiry by making clear that we must treat guilty-plea convictions separately from trial convictions, their use of a 5% general trial error rate is simply a number plucked from the air. When Cassell begins with Risinger's upper bound of 5% and then radically reduces it, these are also numbers plucked from the air.

Naturally, I prefer my approach. When I begin my North Carolina analysis by noting that there were 1,946 persons who claimed they were innocent of the crime for which they were convicted in the ten years of my study, that number is a fact, not an estimate. Now, to be sure, I have to make assumptions about how many guilty claimants are in the universe and how many innocent people did not file a claim, but at least I begin with a number drawn from a collection of data. Cassell and I disagree about some of the assumptions here too.

He would adopt a far higher assumption of the number of guilty claimants in the sample of 1,946 North Carolina applications. As I said earlier, his 90% figure is based on Godsey's back-of-the-envelope estimate and completely ignores the more accurate data from the Cardozo Innocence Project. I prefer my method of averaging the two estimates to come up with a 75% estimate of guilty claimants in the North Carolina pool. Cassell also more than doubles the size of the denominator by assuming that the 60% of convicted felons who are never incarcerated have an equally strong incentive to file a claim with the Commission. For reasons set forth earlier, I think whatever addition to the

assault. *Id.* at 836. Not so for the homicide victim, so why do nonstranger-homicide rates have anything to do with wrongful conviction rates?

^{89.} *Id.* at 837–44.

^{90.} See Gross, supra note 70, at 770, fig. 2.

^{91.} See Risinger, supra note 29, at 783.

^{92.} Cassell, *supra* note 38, at 888.

^{93.} *Id.* at 889–90.

160,000 denominator for innocents who might have filed a claim even though never sentenced to prison, it should be far, far smaller than another 160,000. Any small addition to the denominator is compensated for by my use of a range of wrongful convictions—i.e., from one-eighth of 1% to one-half of 1%.

But I do not want our disagreements about the details of my North Carolina study to obscure our central agreements. After years of accepting general qualitative estimates of 1%–3%, I am moved by the North Carolina data to believe the general wrongful conviction rate is substantially lower than researchers have generally believed. I put the estimate at one-eighth of 1% to one-half of 1%. Cassell puts the estimate, based on my data, considerably lower. 94 But we agree that earlier estimates tend to be too high.

I also agree with Cassell that making reforms to reduce the rate of wrongful convictions should proceed cautiously. We must not forget that the prime directive of the criminal justice system is to convict the guilty. We could reduce the rate of wrongful convictions to zero by not convicting anyone. We could reduce the rate of wrongful convictions a lot by banning eyewitness testimony. Neither of those "reforms" satisfies a utilitarian analysis. Blackstone famously said that "it is better that ten guilty persons escape, than that one innocent suffer." While many have questioned whether that is the correct ratio, and some have argued for a lower number than ten to one, 96 everyone agrees that at some point, the cost of letting the guilty go free outweighs the risk to the innocent.

Wrongful eyewitness identifications are a major factor in wrongful convictions. Thus, we should seek ways to reduce the incidence of wrongful eyewitness identifications. But what would be the cost in terms of guilty defendants being acquitted? We have the beginnings of the answer to this question. In 2009, the New Jersey Supreme Court took note of the research into wrongful identifications and ordered a special master to examine the research and recommend findings. ⁹⁷ In 2011, based on the special master's report, the state court ordered a series of changes in the way eyewitness identifications are assessed for error. ⁹⁸ It also ordered a change in instructions given to juries in cases involving eyewitness identifications. ⁹⁹ The intent of the changed instruction was to make juries more skeptical of questionable identifications but not at the cost of making juries skeptical of all identifications. ¹⁰⁰ The latter effect, of course, would decrease the conviction rate for guilty as well as innocent defendants.

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^{94.} *Id.* at 10 (estimating a wrongful conviction rate of 0.045%).

^{95. 4} WILLIAM BLACKSTONE, COMMENTARIES ON THE LAWS OF ENGLAND *352.

^{96.} See Risinger, supra note 29, at 795–96 (suggesting the best ratio might be permitting one or two wrongful acquittals to prevent one wrongful conviction).

^{97.} See State v. Henderson, 27 A.3d 872, 878 (N.J. 2011).

^{98.} *Id.* at 919–26.

^{99.} *Id.* at 925–26.

^{100.} Id. at 924.

One laboratory study suggests that the now-required New Jersey instruction reduces jury reliance on all eyewitness evidence whether the identification is strong or weak. 101 As the authors of the study put it:

> The failure to find an interaction of the enhanced instruction with the quality of the eyewitness testimony contradicts the hypothesis that the New Jersey instruction increases sensitivity, improving the abilities of jurors to discern the difference between a strong and a weak identification. Instead, when jurors are confronted with a catalog of the foibles of human memory and the extra risks posed by unduly suggestive lineup procedures, they indiscriminatingly discount any and all eyewitness identification testimony. 102

Even worse, we cannot measure the effect of the new instruction on the conviction rate. Because the state has the burden of proving the defendant guilty beyond a reasonable doubt, undermining confidence in all identifications might radically reduce the convictions of guilty defendants with only a small reduction in the conviction of innocent defendants. Are we talking ten to one? We do not know. It could be higher. Should New Jersey change course on its change in jury instructions in eyewitness identification cases? Not necessarily, but more study is required, and other states might await that study before copying New Jersey.

III. THE THIRD MOVEMENT: ESTIMATING THE EXONERATION RATE OF THE NORTH CAROLINA INNOCENCE INQUIRY COMMISSION

Now that we have a ballpark estimate of the number of innocent claimants, we can examine more precisely the success rate of the North Carolina Innocence Inquiry Commission. We tentatively concluded that 375 innocent prisoners filed a claim with the Commission during the ten-year period of the study. A universe of 375 probably innocent prisoners in the pool of claims brought to the Commission is a good place to start when seeking a rough estimate of the exoneration rate. The innocent prisoners who did not file a claim, however numerous they are, cannot be counted as failures of the Commission. The number 375 already includes an adjustment that removes guilty claimants. When making further adjustments, I will assume that the percentages given for categories of all claims also apply to the subcategory of innocent claimants. For example, 14% of all claims were categorized as "claim unknown." 103 As the Commission staff cannot be held responsible for claims that they could not decipher, I will remove 14% of the 375 probably innocent claimants. This category represents 52 cases. Our denominator is now 323.

One may be tempted to remove the 12% who did not return the questionnaire, but I fear if we did that we would be double counting the guilty claimants in the pool. I assume that most who give up before even beginning are

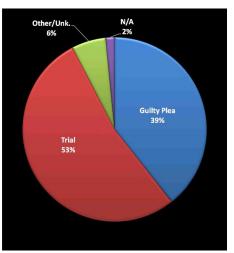
Athan P. Papailiou, David. V. Yokum & Christopher T. Robertson, The Novel New Jersey Eyewitness Instruction Induces Skepticism But Not Sensitivity, PLOS.org (Dec. 9, 2015), https://doi.org/10.1371/journal.pone.0142695.

^{102.}

^{103.} See supra Figure 1.

guilty prisoners who decide the paperwork is not worth the effort. I initially thought to remove the 39% who filed a claim despite having pled guilty¹⁰⁴ because the system was intentionally set up to make those cases hard to win, but three of the ten exonerated claimants had pled guilty or no contest,¹⁰⁵ and I decided not to make any adjustment. With a denominator of 323 and a numerator of 10, this produces an exoneration rate of 3.1%. But this, of course, is based on the estimate for the total number of innocent prisoners. I will shortly offer an estimate based on the number of claims that are not structurally barred by the North Carolina statute and thus available for the Commission to evaluate.

FIGURE 3



Here is what we have learned from our examination of ten years of the Commission. The number of claims filed by North Carolina prisoners suggests an initial error rate in processing felony cases in the one-eighth of 1% to one-half of 1% range. If true, that means the prison population in North Carolina over the last ten years included (rounded to the nearest hundred) from 200 to 800 innocents (160,000 times .00125 and times .005). The innocence inquiry process exonerated ten claimants during the period of my study, an exoneration rate I estimate to be 3.1%. Of course, all of these estimates are based on assumptions about the relationship between the prison population and the number of claims filed, plus an assumption about the number of guilty claimants. All of these assumptions are contestable, but notice this: even if the assumptions are off by 50% in either direction, all that does is change the range of innocent prisoners in the North Carolina prisons from 100 to 1,600, showing an error rate in processing of North Carolina felony cases of 0.06%–1%. The reality probably lies somewhere between those numbers. And the North Carolina exoneration rate, as a percentage of all

105. See Lindsey G. Smith, North Carolina Innocence Inquiry Commission Brief State v. Knolly Brown Jr. 7 (n.d.), http://innocencecommission-nc.gov/wp-content/uploads/state-v-knolly-brown/state-v-knolly-brown-brief.pdf; State v. Kagonyera, No. 00CRS65086, 2011 WL 8472666 (N.C. Super. Apr. 29, 2011); State v. Kagonyera, No. 00CRS56086, 2011 WL 8472667 (N.C. Super. Sept. 22, 2011).

^{104.} See infra Figure 3.

innocent felons during the period of my study, is not likely to be higher than 6%; if we reduce the probably innocent claimants by half, we get a rate of 6.2% (10 exonerees divided by 161.5).

Can we do better?

IV. THE FOURTH MOVEMENT: CAN WE IMPROVE THE NORTH CAROLINA INNOCENCE PROCESS?

The last Part concluded, based on all the assumptions indulged so far, that the exoneration rate from 2007 to 2016 was 3.1%. Following my conservative approach in this Article, I propose a bounded range of 1.55%–4.65% (50% above and below my projected rate). Why would the exoneration rate be so low? There are two reasons. The first is shared with all innocence projects: no matter the process, the burden to prove innocence is naturally on the claimant.

The burden is a heavy one, whatever the formal standard; in North Carolina the standard is "clear and convincing," 106 and the vote of the three-judge panel must be unanimous.¹⁰⁷ In all cases challenging a conviction, by definition, either the defendant accepted a guilty plea or the State had enough evidence to prove the defendant's guilt beyond a reasonable doubt. In the vast majority of states that require unanimous verdicts of 12-member juries, the evidence of guilt must have been substantial. Evidence of innocence that was presented at trial generally cannot be presented again; 108 exoneration projects are not a forum for relitigating whether the initial fact finder got it right. The North Carolina procedure, for example, requires "credible, verifiable evidence of innocence that has not previously been presented at trial or considered at a hearing granted through post-conviction relief." Evidence of innocence that was not presented at trial is usually hard to come by. Evidentiary problems thus probably explain the lion's share of the hundreds of innocent prisoners that the Commission missed. Indeed, 93% of the rejections shown in Figure 2 were for systemic reasons beyond the control of the Commission: "no claim of factual innocence," "failure to cooperate," "no new evidence," "no reliable evidence," "no way to prove," "failure to return questionnaire," and "claim is procedural only." Thus, 93% of the rejections were in cases beyond the scope of the North Carolina innocence process.

A second possible culprit for the low exoneration rate is the nature of the North Carolina process. To understand how the procedures might affect the outcomes, I present a brief description of how the Commission works. The Commission was established because of the efforts of Chief Justice I. Beverly Lake, Jr. of the North Carolina Supreme Court, aided by his law clerk, Christine Mumma. A life-long, law-and-order judge, Justice Lake "wore a pistol in court

^{106.} N.C. GEN. STAT. § 15A-1469 (h) (2016).

^{107.} *Id*

^{108.} See, e.g., § 15A-1460(1) (2016).

^{109. § 15}A-1460(1) (2016).

^{110.} Robert P. Mosteller, N.C. Inquiry Commission's First Decade: Impressive Successes and Lessons Learned, 94 N.C. L. Rev. 1725, 1733–41 (2016); Christine C. Mumma, The North Carolina Actual Innocence Commission: Uncommon Perspectives Joined By a Common Cause, 52 Drake L. Rev. 647, 648–50 (2003).

and once had a defendant's mouth duct-taped shut."¹¹¹ But a law-and-order approach is consistent with a concern for innocent defendants. "Law and order" implies that we punish only the guilty and that we do not permit a guilty defendant to go free, and possibly commit more crimes, by punishing an innocent one.

Justice Lake led a revolution in preventing and remedying convictions of innocent defendants in North Carolina, which has been ably described elsewhere. Part of the revolution was the Commission, the results of which we have been studying. The Commission has eight members: a judge, a prosecutor, a victim's advocate, a defense lawyer, a sheriff, someone who is not a lawyer or an "officer or employee of the Judicial Department," and two people appointed at the discretion of the chief justice. The application to have a case reviewed is 22 pages long. If the initial investigation persuades the Commission staff that the application might have merit, a lawyer is appointed to represent the claimant through the process by which she or he waives all "procedural safeguards and privileges."

After the waiver, the lawyer's role is limited. The Commission staff does the work of preparing the case for the hearing before the Commission, taking advantage of the discovery and disclosure rules as if the claimants were being tried for the crime for which they were convicted. A prehearing conference is held where the evidence to be presented is reviewed in the presence of the district attorney from the district where the conviction occurred. The hearing before the Commission is public, the victim or the victim's next of kin has a right to be present, forensic evidence is admissible, and testimony can be offered. The Commission staff presents the case without the burden of rules of evidence, labeled thus allowing one investigator to testify to evidence uncovered by other investigators. Although defense counsel and a member of the district attorney's office can be present at the hearing, they do not participate in the presentation of the case.

If the Commission finds "sufficient evidence of factual innocence to merit judicial review," the case is transferred to a judicial panel.¹²⁴ The Commission's

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^{111.} Eli Hager, *A One-Man Justice Crusade in North Carolina*, MARSHALL PROJECT (July 29, 2015), https://www.themarshallproject.org/2015/07/29/a-one-man-justice-crusade-in-north-carolina#.TvVJNtWI9.

^{112.} See Mumma, supra note 110.

^{113.} N.C. GEN. STAT. § 15A-1463(a) (2006).

^{114.} N.C. INNOCENCE INQUIRY COMM'N, COMMISSION QUESTIONNAIRE (2006) (on file with author).

^{115. § 15}A-1467(b).

^{116.} *Id.* § 15A-1467(f).

^{117.} Id. § 15A-1468(a2).

^{118.} *Id.* § 15A-1468(a).

^{119.} N.C. INNOCENCE INQUIRY COMM'N, *supra* note 32, art. 7 (E).

^{120.} Id. at 16.

^{121.} *Id*.

^{122.} See N.C. INNOCENCE INQUIRY COMM'N, supra note 32, art. 7 (H) (requiring presentation of "all relevant evidence").

^{123.} Telephone interview with Lindsey G. Smith, Executive Director, North Carolina Innocence Inquiry Commission (Jan. 10, 2018).

^{124.} N.C. GEN. STAT. § 15A-1468(c) (2016).

vote to refer must be unanimous if the claim is from a guilty-plea conviction; otherwise, five of eight votes are sufficient to require a judicial hearing.¹²⁵ The three-judge panel must unanimously find the prisoner innocent by clear and convincing evidence before charges are dismissed.¹²⁶ The hearing at this stage reverts to the adversarial model of criminal trials: the case for the defendant is presented by defense counsel, and the prosecution can contest the presentation (though in some cases, the prosecution agrees that the charges should be dismissed).¹²⁷ If the Commission votes not to refer, or the judicial panel votes to reject the claim, the conviction remains intact.¹²⁸

Now we are equipped to address a critical question: are there structural features of the Commission's procedure that make it too difficult for innocent prisoners to achieve exoneration? The answer is probably no. If my estimate of the wrongful conviction rate is more or less accurate, there are hundreds of innocent prisoners in the North Carolina system who failed to clear the innocence hurdle. But almost all of those claims are barred by inevitable structural impediments (no new evidence, no way to prove, etc.). The process itself seems to work very well. As far as I know, the NCIIC is the only independent, neutral state agency in the country that spends countless hours investigating claims of innocence at no cost to the claimants. One need only skim the 139-page transcript of the Motion for Appropriate Relief in the McCollum/Brown case, for example, to get a sense of the painstaking work that the Commission staff does in investigating claims of innocence. 129 Even if many innocent prisoners filed claims and did not ultimately achieve exoneration, the North Carolina process is a major step in the right direction. When one looks at the North Carolina procedure, three potential structural features look somewhat unfriendly to innocent claimants though it turns out none are responsible for missing a substantial number of cases of innocence in the cases decided so far. First is the requirement that a claimant who pled guilty must have a unanimous Commission vote to have the case sent forward to the judicial panel.¹³⁰ The assumption supporting this requirement, I suppose, is that there is a stronger presumption of guilt when a defendant acknowledges guilt in open court. Given what we know about errors in eyewitness identifications, false confessions, and junk forensic science, this presumption perhaps cuts too severely against innocent defendants who, faced with a seemingly insurmountable case, take the expedient route of a favorable guilty plea.

But the ten-year experience of the Commission does not support identifying the guilty-plea requirement as a problem. Ten cases were referred by staff to the Commission for a hearing.¹³¹ Three of those involved a guilty or no-

126. *Id.* § 15A-1469(h).

^{125.} *Id.*

^{127.} Telephone Interview with Lindsey G. Smith, *supra* note 123.

^{128. § 15}A-1468(c) (commission denial); § 15A-1469(h) (judicial panel denial).

^{129.} See Transcript of Motion for Appropriate Relief, supra note 7.

^{130.} See § 15A-1468(c).

^{131.} See SMITH, supra note 33, at 5. One exoneration freed two individuals, and three more were freed by Motions for Appropriate Relief based on the Commission's investigation. *Id.*

contest plea.¹³² In two of the three cases, the Commission voted unanimously to refer the case to the judicial panel, and a total of three claimants were exonerated.¹³³ The third case failed to get a unanimous vote, and the investigation was closed.¹³⁴ We do not know what the vote was and thus do not know whether this third case produced a majority vote. In the case that was rejected, all three claimants were later exonerated through the courts,¹³⁵ and it thus counts as a failure of the North Carolina process. But a single failure, perhaps attributable to the

guilty-plea requirement of a unanimous vote, is hardly a major cause for concern.

The second potential structural problem is the requirement that the judicial panel find innocence by clear and convincing evidence. Given the evidentiary difficulties already discussed, perhaps a lower standard is appropriate. The third problem is of a similar nature. The Commission is required to have a prosecutor, a victim's advocate, and a sheriff. One does not have to be too cynical to suggest that those individuals might be more difficult to persuade to send the case to the judicial panel. If a claimant begins with three negative votes, it only takes one more to reject a claim from a trial conviction.

But, again, the experience of the Commission does not show much effect from either of these potential problems. Ten cases were presented to the Commission by staff; eight were referred to a judicial panel; one of the nonreferrals was a guilty plea, and the other had a unanimous vote of insufficient evidence to go forward. Nothing about the makeup of the Commission had any effect on the nonreferrals. As for the "clear and convincing standard" that applies at the judicial-panel stage, of the eight cases referred by the Commission, the panel found innocence in six. So, at most, the clear and convincing standard "cost" two exonerations.

It thus seems almost certain that the gap between the number of innocent claimants, whatever that number, and the exonerations is caused by inherent evidentiary problems. Indeed, now we should reexamine the exoneration rate, not as a percentage of all the probably innocent claimants in the North Carolina prison, but as a percentage of the claims that are not barred by structural impediments. As noted earlier in this Part, 93% of claims face structural statutory bars. Of the 1,946 claims resolved by the Commission, only 136 were not structurally barred. If only 25% of those are factually innocent, we have 34 innocent claimants who can present the merits of their claims. Ten exonerations produces an exoneration rate

136. N.C. GEN. STAT. §15A-1463(a) (2016).

^{132.} See State v. Knolly Brown, N.C. INNOCENCE INQUIRY COMMISSION, http://innocencecommission-nc.gov/cases/state-v-knolly-brown/ (last visited Sept. 25, 2018); State v. Isbell, Mills, Williams, supra note 60; State v. Kagonyera/Wilcoxson, N. C. INNOCENCE INQUIRY COMMISSION, http://innocencecommission-nc.gov/cases/state-v-kagonyera-wilcoxson/ (last visited Sept. 25, 2018).

^{133.} State v. Knolly Brown, supra note 132; State v. Kagonyera/Wilcoxson, supra note 132.

^{134.} See State v. Isbell, Mills, Williams, supra note 60.

^{135.} See id

^{137.} See SMITH, supra note 33, at 5.

^{138.} *Id*.

of 29%, which is very good when one considers the problem of finding new evidence of innocence. The difference between this exoneration rate and my earlier estimate of 3%–6% is a function of the statutory structural bars. A satisfactory exoneration rate for the NCIIC as it works with the current statutory scheme is not surprising. My conversations with Commission Executive Director Lindsey Guice Smith and Assistant Director Beth Tanner¹³⁹ make clear that they are committed to unearthing as many valid claims of innocence as possible. Moreover, the staff seems adequate to handle roughly 200 cases a year. In addition to Ms. Smith and Ms. Tanner, the staff consists of two staff attorneys, two investigators, a case coordinator, and an administrative assistant.¹⁴⁰

But I would recommend one structural change that might help identify more probably innocent persons convicted of felonies. All of the cases heard by the three-judge panel were all-or-nothing propositions: either the claimants persuaded—by clear and convincing evidence—that they were innocent, and they walked free, or they lost and they stayed in prison. Hat there were a third option? We could resuscitate the old common-law remedy provided by *coram nobis*. We could resuscitate the english Court of Common Pleas. Appeals at the time were limited to errors of law; the writ of *coram nobis* permitted trial judges to order a new trial when the judge had doubts about the factual basis of the verdict. He key here is the remedy: restore the case to the docket and permit a new trial. In cases where the claimant makes a plausible showing of innocence, but falls short of clear and convincing, the judicial panel could vacate the conviction but permit a reprosecution if the State still believes in the claimant's guilt.

To be sure, as Lindsey Guice Smith helpfully pointed out to me, there is nothing in the statute that would forbid the judicial panel from following a *coram nobis* approach by reversing the conviction and suggesting that it was open to the State to retry the case.¹⁴⁵ There is nothing that would forbid a prosecutor from refiling a case against an exonerated claimant; the statute does not create a "jeopardy" bar to a new prosecution.¹⁴⁶ In the cases so far, successful claimants have apparently demonstrated innocence sufficiently that the State was not interested in reprosecuting.

But why not make the *coram nobis* remedy explicit in the statute? It might make a difference in a few cases at the margin, permitting claimants a modified victory rather than a total loss.

^{139.} Telephone Interview with Lindsey G. Smith, Executive Director, North Carolina Innocence Inquiry Commission (Apr. 9, 2018); Telephone interview with Beth Tanner, Assistant Director, North Carolina Innocence Inquiry Commission (Jan. 10, 2018).

^{140.} See N.C. INNOCENCE INQUIRY COMMISSION, http://innocencecommission-nc.gov/about/ (last visited Oct. 7, 2018).

^{141.} *See* SMITH, *supra* note 33, at 5, 5 n.1.

^{142.} Dan Medwed suggested this third way when he read a draft of the paper.

^{143.} See Edward N. Robinson, The Writs of Error Coram Nobis and Coram Vobis, 2 Duke Bar J. 29, 29 (1951).

^{144.} *Id.* at 30.

^{145.} Telephone interview with Lindsey G. Smith, *supra* note 136.

^{146.} *Id*

V. THE FIFTH MOVEMENT: HENRY MCCOLLUM WALKS FREE

The North Carolina Innocence Inquiry Commission does not, and cannot, find all the factually innocent individuals who have been convicted of a felony. But it remains a model for other states. Lest we forget, the North Carolina innocence procedure has exonerated ten innocent claimants. One of them is Henry "Buddy" McCollum. After 31 years on death row for a rape and murder he did not commit, on September 2, 2014, he walked out of the Robeson County Courthouse a free man.¹⁴⁷



Without the North Carolina Innocence Inquiry Commission, Buddy McCollum would still be on death row. 148

148. To be sure, both Brown's and McCollum's exoneration occurred because of a Motion for Appropriate Relief heard by a judge in the normal course and not as part of the innocence-inquiry procedure. But the evidence supporting the Motion was collected and presented by the staff of the Commission. *See id.*

^{147.} Leon Brown was also exonerated. *State v. McCollum/Brown*, N.C. INNOCENCE INQUIRY COMMISSION http://innocencecommission-nc.gov/cases/state-v-mccollumbrown/ (last visited Sept. 26, 2018).