



ANNUAL REVIEWS **Further**

Click [here](#) for quick links to Annual Reviews content online, including:

- Other articles in this volume
- Top cited articles
- Top downloaded articles
- Our comprehensive search

Convicting the Innocent

Samuel R. Gross

School of Law, University of Michigan, Ann Arbor, Michigan 48109;
email: srgross@umich.edu

Annu. Rev. Law Soc. Sci. 2008. 4:173–92

First published online as a Review in Advance on
June 25, 2008

The *Annual Review of Law and Social Science* is
online at lawsocsci.annualreviews.org

This article's doi:
10.1146/annurev.lawsocsci.4.110707.172300

Copyright © 2008 by Annual Reviews.
All rights reserved

1550-3585/08/1201-0173\$20.00

Key Words

false convictions, wrongful convictions, exonerations, prosecution, trial, criminal justice

Abstract

Almost everything we know about false convictions is based on exonerations in rape and murder cases, which together account for only 2% of felony convictions. Within that important but limited sphere we have learned a lot in the past 30 years; outside it, our ignorance is nearly complete. This review describes what we now know about convicting the innocent: estimates of the rate of false convictions among death sentences; common causes of false conviction for rape or murder; demographic and procedural predictors of such errors. It also explores some of the types of false convictions that almost never come to light—innocent defendants who plead guilty rather than go to trial, who receive comparatively light sentences, who are convicted of crimes that did not occur (as opposed to crimes committed by other people), who are sentenced in juvenile court—in fact, almost all innocent defendants who are convicted of any crimes other than rape or murder. Judging from what we can piece together, the vast majority of false convictions fall in these categories. They are commonplace events, inconspicuous mistakes in ordinary criminal investigations that never get anything close to the level of attention that sometimes leads to exoneration.

INTRODUCTION

False convictions have gotten a lot of attention in recent years, and for good reason. In the past three decades, more than 200 innocent American defendants have been exonerated and freed by DNA tests, and over 200 others have been exonerated without the benefit of DNA evidence, including more than 100 who had been sentenced to death. In addition, we have learned about several major scandals in which police officers systematically framed dozens, or in one case hundreds, of innocent defendants who were ultimately exonerated en masse.

The message is clear: Innocent people are convicted of serious crimes in the United States on a regular basis. There is no disputing the importance of this news. What is surprising is that it is news.

We are not a modest nation. We frequently insist that the American criminal justice system (or in other contexts, the American medical system) is “the best in the world.” Convicting the guilty and clearing the innocent has got to be the central operational goal of any system of criminal justice, so one reason for our superlative superiority must be that we never (well . . . , hardly ever) convict the innocent—as prominent Americans forcefully assert with no evidence in support. In 1923, Judge Learned Hand wrote in a federal district court opinion that “[o]ur [criminal] procedure has always been haunted by the ghost of the innocent man convicted. It is an unreal dream” (*United States v. Garrison* 1923). At the time, with no systematic data one way or the other, this could be taken as a statement of faith, an expression of red-blooded self-confidence and optimism. Eighty-three years later, Justice Antonin Scalia was more specific in a concurring opinion in the Supreme Court, if less eloquent. He claimed that American criminal convictions have an “error rate of 0.027%—or, to put it another way, a success rate of 99.973%” (*Kansas v. Marsh* 2006). Given what we knew by 2006, the charitable explanation for such an assertion is self-deception.

The recent exonerations have been highly influential. They are responsible for a spate of

new laws that make post-conviction DNA testing more readily available (Garrett 2008, Natl. Conf. State Legis. 2008). They have sparked moves to reform basic aspects of criminal investigation, including eyewitness identification and custodial interrogation procedures; testimony by jailhouse informants; and the preservation, testing, and use of physical evidence (Connors et al. 1996, Moore 2007). In January 2000—two weeks after the thirteenth innocent inmate had been released from Illinois’s death row—Governor George Ryan imposed a moratorium on executions in Illinois, which is still in effect (Johnson 2000). Three years later, Governor Ryan commuted the death sentences of all prisoners then on death row in Illinois, in large part because of the danger of executing innocent defendants (Ryan 2003). And across the country, concern about executing the innocent has been the major cause for a substantial reduction in support for capital punishment—from about 75% in 1995 to about 65% since 2000 (Gross & Ellsworth 2002)—and a much sharper drop in new death sentences, from 323 in 1996 to 115 in 2005 (Snell 2007).

In theory, we should have known all along that false convictions happen and that they are caused by false or misleading evidence from eyewitnesses, police officers, forensic scientists, and other witnesses. That has to be true. No system of adjudication is error free, and ours is hardly a candidate for perfection. But knowing that something must be true is not the same as seeing that it is true; knowing abstractly that innocent people are convicted is a far cry from knowing their names and faces and learning how their lives were destroyed. That is what the hundreds of exonerations in the last few decades have accomplished: teaching us not only that innocent people are convicted, but who some of them are and how it happened to them. These are highly important lessons.

What else have we learned about false convictions? That is the subject of this review. The answer, in brief, is that we have learned a few important things, but only a few. Our ignorance still vastly exceeds our knowledge.

THE DATA

We cannot study an event if we cannot tell when it happens. This is a severe problem for false convictions because, by definition, we do not know when they occur. If we did, innocent defendants would not be convicted in the first place. The frequency of false convictions is sometimes described as a “dark number” (Schehr 2005)—an unknown quantity—and it is. Worse, it cannot be estimated from any information we do know.

There are other dark numbers in criminal justice research, including in particular the number of crimes that are unknown to the police. That dark number, however, can be estimated by a comparatively straightforward method: the victimization survey, in which a representative sample of the general population is asked how often members of their households were victimized in the past year, and in what manner (e.g., Rand & Catalano 2007). This is an imperfect tool but serviceable. We do not know the exact number of unreported robberies, rapes, and assaults, but we do know approximately how many occur, and where, and who the victims are. We have no comparable estimates for false convictions.

False convictions are not merely unobserved, but in most cases are also unobservable. The problem is not simply that we do not know for sure whether a particular prisoner is innocent. We also may not know for sure whether he is HIV positive, but we can test him, or the prison population as a whole, or a random sample. There is no general test for the accuracy of criminal convictions. If there were, we would use it at trial.

The only wrongful convictions we do know about are those that end up as exonerations: cases in which sufficiently strong evidence has been assembled to persuade a prosecutor, a court, or a governor that a convicted defendant is not guilty. “Exoneration” in this context is a legal concept. It means that a defendant who was convicted of a crime was later relieved of all legal consequences of that conviction because of new evidence of innocence. Some ex-

onerated defendants are no doubt guilty of the crimes for which they were convicted, in whole or in part, but the number is likely very small. It is extremely difficult to obtain this sort of relief after a criminal conviction in America, and it usually takes overwhelming evidence (Gross et al. 2005).

On the other hand, it is clear that countless false convictions do not end in exoneration. Among other reasons, many if not most of the exonerations that have occurred depended on unlikely strokes of luck: The real culprit—who might have gone straight, or been hit by a truck—was arrested for another crime and confessed to the one in question as well; a laboratory slide that should have been destroyed was kept by accident; and so forth. As a result, exonerations are rare, usually newsworthy events.

What follows is a complete list of the sets of known exonerations in the United States in the past 30 years:

1. DNA exonerations: Exonerations based on DNA evidence are tracked by the Innocence Project (2008a) at Cardozo Law School in New York. From 1989, when the first one occurred, through 2007, there were 210 DNA exonerations; all but a handful of the defendants were convicted of crimes that included rape, although a substantial number were also convicted of other crimes against the same victims—for example, murder.
2. Death-row exonerations: The Death Penalty Information Center (2008) in Washington, DC, monitors exonerations of prisoners who were sentenced to death. There were 126 from 1973 through 2007, 15 of which are also included among the DNA exonerations.
3. Other individual exonerations: There is no canonical list of individual exonerations of defendants who were neither sentenced to death nor freed by DNA evidence. The best study to date, by Gross et al. (2005), compiled data on 135 such exonerations from 1989 through 2003—105 defendants who had been convicted of murder (78%), 16 who had been

convicted of rape (12%), and 14 (10%) who had been convicted of other crimes.¹

4. Mass exonerations: We know of three such events. The Tulia Scandal involved 35 innocent defendants who were convicted of selling cocaine in Tulia, Texas, on the uncorroborated word of a single dishonest undercover narcotics agent, and exonerated in 2003 (Hughes 2003). In the Rampart Scandal, which unraveled in Los Angeles in 1999, a group of officers in the Rampart division of the Los Angeles Police Department routinely planted guns and drugs on innocent suspects. Ultimately, at least 100 defendants, and possibly as many as 150, were exonerated (PBS 2001). And in the Dallas Sheet Rock Scandal, which came to light in 2002, a group of police officers and undercover informants planted fake drugs (in fact, gypsum, the main component of sheetrock) on dozens of innocent people, mostly undocumented aliens from Mexico. Most of the cases that we know about were dismissed before conviction, but some unknown number of defendants pled guilty and were deported (Donald 2002).²

In total, we know about perhaps 600 to 700 exonerations of all types from across the country over a period of 35 years. For some we have a great deal of information, for some very little. That is it. And yet almost everything we know

¹Throughout this review, discussions of data on exonerations from 1989 through 2003 that are not attributed to other sources are based on the database assembled by Gross et al. (2005), including both published and previously unpublished data.

²Mass exonerations should not be confused with other scandals that involve systematic patterns of fraud and misconduct, especially in forensic laboratories (Giannelli 2007). For example, in one of the most notorious cases of lab fraud, Fred Zaine, a police serologist, falsified test results in at least 134 cases in West Virginia from 1979 through 1989, before moving on to pursue his fraudulent career in Texas. As far as we know, however, most of the victims of Zaine's fraud were guilty. There have been several exonerations of cases in which he testified, but, unlike the mass exonerations described in the text, each required a separate investigation to prove the defendant's innocence (Giannelli 1997).

about false convictions in the United States depends on this small, assorted, messy data set.

HOW MANY INNOCENT PEOPLE ARE CONVICTED OF CRIMES?

What We Know

The most important question about false convictions is also the most basic: How frequently are innocent people convicted of crimes? If false convictions really were vanishingly rare—0.027% or some other absurd figure—they would not be much of a problem. That estimate, and other similar ones, are based on some version of dividing the number of known false convictions—exonerations—by the total of all convictions, ignoring the fact that almost all of these exonerations occurred in a few narrow categories of crime (primarily murder and rape) and that even within those categories many false convictions remain unknown, perhaps the great majority. By this logic we could estimate the proportion of baseball players who have used steroids by dividing the number of major league players who have been caught by the total of all baseball players at all levels: major league, minor leagues, semipro, college, and Little League—and maybe throwing in football and basketball players as well.

To actually estimate the proportion of erroneous convictions, we need a well-defined group of cases within which we identify all convictions that are in error, or at least a substantial proportion of them. It is hard to imagine how that might be done for criminal convictions in general, but it may be possible, at least roughly, for the two types of crimes for which exonerations are most common: rape and capital murder. For rape, that prospect has not yet been realized. For capital murder, we can now estimate that at least 2.3% of death sentences are based on false convictions.

Rape. Rape is a partial exception to the general background problem of studying false convictions: If semen was recovered from the victim but was not tested before trial, and if it

is available now, there is a highly reliable test for the accuracy of a rape conviction. That, of course, is why DNA testing has been revolutionary. To get a reasonable estimate of the proportion of wrongful convictions, however, we also need to test a set of cases that are at least reasonably representative of rape convictions in general in a specified jurisdiction and time period. That might be possible.

Starting in 2001, the Virginia Department of Forensic Science discovered several hundred boxes containing closed rape files from 1973 through 1988—before pretrial DNA testing was done in that laboratory—many of which contain biological evidence that was never tested for DNA. The state is planning to test those DNA samples (Shear & Stockwell 2005). As far as we know, the group of cases that will be tested is reasonably representative of all rapes from 1973 through 1988 for which biological evidence was sent to the Virginia Department of Forensic Science; there is no reason to believe that the preservation of biological samples was associated with any assessment of the defendant's guilt or innocence. This study may provide uniquely valuable data on the frequency of false convictions among rape cases in Virginia in the 1970s and 1980s. So far, the state has released the results of tests for a small preliminary sample, which found 2 previously unknown wrongful convictions out of 22—a false conviction rate of 9% within that tiny sample.³ Other DNA archives, with biological evidence from old rape prosecutions, may be discovered and studied in other jurisdictions.

Capital murder. Murder cases stand out for a different reason than rape cases: Because they receive far more attention than other criminal prosecutions, both before conviction and after, a higher proportion of false convictions are brought to light. This is especially true for

³The state tested 31 cases in that initial batch (Shear & Stockwell 2005) but completed the testing in only 22. In four cases, no DNA was detected, in one case there was insufficient DNA for analysis, and in four cases there were no DNA samples from the defendants for comparison (Rudin & Eisenberg 2007).

capital murders. Death sentences represent less than 1/10 of 1% of prison sentences, but they account for about 22% of known exonerations from 1979 through 2003, a disproportion of more than 250 to 1 (Gross & O'Brien 2008). This suggests that a substantial proportion of innocent defendants who are sentenced to death are ultimately exonerated, perhaps even a majority. If so, we can use capital exonerations as the starting point for estimating the false conviction rate among death sentences.

Of the 7534 death sentences pronounced from 1973 through 2004, 111 ended in exoneration, or 1.5% (Gross & O'Brien 2008). That figure, however, is an underestimate of the rate of exoneration. The capital defendants who have been exonerated since 1973 spent an average of 9.5 years in prison, in some cases much longer than that (Death Penalty Inf. Cent. 2008). In time, some defendants who were sentenced to death since 1973 but not yet exonerated will be. To address that problem, Gross & O'Brien calculated the exoneration rate for inmates who had been on death row at least 15 years as of 2004, and for those who had been on death row at least 20 years. For each group, the rate was 2.3%.

This figure—2.3%—is the actual proportion of exonerations for death sentences imposed in the United States between 1973 and 1989. Because “exoneration” is a legal concept, a few of the exonerated capital defendants may have participated in the crimes for which they were convicted. All the same, the proportion of capital exonerations is almost certainly an underestimate of the true rate of false capital convictions.

Convincing courts, prosecutors, or governors to release a defendant from death row is very hard. It is unlikely that this happens often when the defendant is in fact guilty. However, there are undoubtedly a considerable number of innocent capital defendants who have not been exonerated, even among those who were convicted 15 years ago or more. Some may yet be cleared and freed; most probably will not. That is particularly true for defendants who were removed from death row but not exonerated.

Forty-one percent of all defendants sentenced to death between 1973 and 2004 left death row because their capital sentences or the underlying convictions were reversed by one means or another (Gross & O'Brien 2007). The great majority of them were resentenced to life imprisonment. A recent study of federal habeas corpus litigation by King and colleagues (2007) found that federal courts virtually never grant relief on claims by death row prisoners based on factual innocence. This is not surprising. Under prevailing law, such claims are almost impossible to win (*Herrera v. Collins* 1993, *Schlup v. Dello* 1995). But King et al. also found that capital defendants who raise claims based on actual innocence are more likely to get relief on other grounds than are defendants who do not make such claims. Anecdotal evidence is consistent: Death-sentenced defendants who can raise serious questions about their guilt are more likely than others to have their sentences reduced to life imprisonment. Because those who really are innocent are much more likely than others to be able to present substantial arguments based on innocence, they are also disproportionately likely to have their death sentences reduced. Once that happens, however, the focus and urgency of a possible execution are removed, and they are less likely to be exonerated. Only 15% of the capital exonerations in the Gross & O'Brien data (17/111) involved defendants who had been sentenced to death but were no longer on death row.

Risinger (2007) examined capital rape-murder cases from 1982 through 1989. Using DNA exonerations as his measure of innocence, Risinger estimates that at least 3.3% of defendants sentenced to death for rape-murder in that period were innocent, and perhaps as many as 5%. Risinger's study is limited to DNA exonerations, so there is little doubt that all the exonerated defendants are innocent, but for the same reason his estimates are based on a total of 11 exonerations and are therefore inevitably imprecise.

In sum, there are two estimates of the false conviction rate for death sentences from 1973 through 1989, and they range from 2.3% to 5%.

We may someday have a good estimate of the false conviction rate for rape cases in Virginia (and perhaps elsewhere) in the 1970s and 1980s. So far all we can say is that initial indications—2 exonerations out of 22 convictions—suggest that the proportion of false rape convictions from that time period is not trivial.

Can we generalize from the false conviction rate for capital murder? Should we assume that the error rate for other crimes is at least as high, and perhaps higher considering that fewer resources are devoted to less serious cases? We don't know, of course—there are no useful data—but my best guess is the opposite.

Gross & O'Brien point out that if the capital exoneration rate applied to all prison sentences, there would have been approximately 87,000 non-death-row exonerations from 1989 through 2003, more than 300 times the number reported. Similarly, if the false conviction rate for prison sentences were 2.3%, about 185,000 innocent American defendants were sent to prison for a year or more from 1977 through 2004. These estimates could be about right, but there are strong theoretical reasons to believe that the rate of false convictions is higher for murders in general, and for capital murders in particular, than for other felony convictions.

Police and prosecutors devote more time and money to murder than to lesser crimes. As a result, they often identify and prosecute murder suspects after difficult investigations that would not be pursued for robberies or rapes, let alone burglaries or auto thefts. One effect of this concentration of resources is an increase in the number of accurate convictions, as reflected in a higher clearance rate for murder (currently about 61%) than for other crimes of violence (rape, 41%; robbery, 25%) or property crimes (16%) (FBI 2007). But the same forces that increase the number of accurate murder convictions are also likely to increase the number of false convictions. Many homicide investigations are difficult because, by definition, the victims are unavailable; the authorities pursue murder investigations when the evidence is less than overwhelming and the risk of error is substantial—cases that would have been

abandoned if nobody had been killed; the extraordinary pressure to secure convictions for heinous crimes tempts police officers and prosecutors to cut corners; the prospect of life imprisonment, or execution, creates extreme incentives for the real killers to frame innocent fall guys; and everybody involved—the police, the prosecutors, the jurors, the judge—is reluctant to release a defendant who seems likely to have committed a vicious murder even if the evidence of guilt is open to doubt (Gross 1998).

What We Don't Know

Once we move beyond murder and rape cases, we know very little about any aspect of false convictions. Over 95% of the individual exonerations that we know about are in murder or rape cases, which together account for about 2% of all felony convictions, and a smaller proportion of all criminal convictions (Durose & Langan 2003). In addition, we also know about some 150 to 200 mass exonerations cases, but all of them grew out of three messy police misconduct scandals, two in Texas and one in Los Angeles. We know next to nothing about the frequency of false convictions for crimes other than murder and rape and very little about rates of false convictions for rape and noncapital murder, or even for capital murder in cases in which the defendants are not sentenced to death.

The exonerations that we do know about—those that have been in the headlines and on television for the past 20 years—are mostly variants on a single scenario. Paraphrasing Learned Hand, we might call it *The Story of the Innocent Man Convicted* (see Grisham 2006). It runs like this:

A horrendous crime is committed, a murder or a brutal rape. The police and prosecutors work hard, under pressure, to identify and arrest the criminal; along the way they may cut corners or break rules. At some point they are misled by false evidence against the defendant: an eyewitness misidentification, a false confession under coercive interrogation, fraud or

error by a forensic technician, perjury by an informant or by the real criminal. From then on, the case spirals downward: The authorities become committed to their mistake; other evidence, misleading or false, congeals around the initial error. Despite his protestations of innocence, the defendant is tried, convicted, and sentenced—perhaps to death or life imprisonment, or to many years behind bars. If the innocent defendant is one of the exonerated, then years later—after terrible suffering and endless disappointments—he is cleared and freed by DNA, or by overwhelming evidence that someone else was the perpetrator. If not, he lives out his life in prison or in disgrace, or is put to death.

This is just one of many possible false conviction stories, but it is the one that fits most of those we know about. It describes (at least roughly) many of the worst cases, in which the consequences are most severe, but other categories—that I discuss in the sections that follow—might be much more common. Unfortunately, like almost everything else on this topic, we do not know.

Violent crime. There are more prisoners behind bars in the United States for robbery than for any other crime: about 20% more than for murder and nearly three times as many as for rape (Sabol et al. 2007). And yet there have been only a handful of robbery exonerations in the past 25 years. However little we may know about the frequency of false convictions for rape and murder, we know far less about robbery.

Still, we know more about false convictions for robbery than for any other crime except rape and murder. Like rape, robbery is a crime of violence that is sometimes committed by strangers; like rape, it is susceptible to the danger of eyewitness misidentification. Before the advent of DNA testing, most of the comparatively few proven misidentifications leading to wrongful conviction were for robbery (Gross 1987). It is reasonable to suppose that the rate of false conviction for robbery is at least comparable to the rate for rape and that the total number is

considerably greater because robberies by strangers are several times more common than rapes by strangers (Gross et al. 2005). Still, even for robbery, these are inferences and vague estimates.

From here on out, the drop-off is steep. For example, there have been almost no exonerations of defendants convicted of felonious assault, the crime of violence that accounts for the largest total number of prison sentences (Durose & Langan 2003). This could be because wrongful convictions are much less common for assault than for more serious crimes, or because—in the absence of DNA evidence—it is extremely difficult to prove innocence, or because sentences for assault are comparatively short so there is less time to secure the defendants' release and less incentive to try, or for a combination of these reasons and perhaps others. These problems only become worse as we move away from violent felonies for which defendants are sentenced to years of imprisonment to less severe but more common criminal convictions.

Light felonies and misdemeanors. In April 2000, Robert Farnsworth, Jr., confessed under police pressure to stealing a cash bag from his employer, a Wendy's restaurant in Jackson, Michigan. He immediately retracted his confession and claimed that he had put the bag in a bank night deposit box, but he was convicted of grand larceny, given a six-month suspended sentence, and ordered to pay a fine and restitution. Eight months later another cash bag went missing. This time the bank took the deposit box apart and found the cash bag from Wendy's as well (Chin 2000). Needless to say, Farnsworth was exonerated by this fortunate happenstance, but his case is unique, a fluke even by the fluky standards of wrongful conviction and exoneration. He was arrested, tried, and convicted of a felony, lost his job, and went bankrupt—but that did not put him close to the range of penalties that are necessary to mobilize the support it takes for a defendant to attempt to prove innocence after conviction. For example, of the 340 exonerated defendants identified

by Gross et al. (2005), more than half were sentenced to life imprisonment or death, and 93% were sentenced to at least 10 years in prison.

Of course, Farnsworth's conviction was also a fluke. What are the odds that a cash deposit bag will disappear without a trace in the mechanism of a night deposit box? But how many other innocent defendants are convicted by more conventional mistakes, or lies, and sentenced to probation, or 90 days and a fine, for property crimes, or drug crimes, or breaking and entering? We have no idea.

Guilty pleas. By early September 1996, Stanley Washington had spent four months in jail on Rikers Island in New York City, unable to post \$2500 bail on a charge of unarmed robbery. He insisted he was innocent; his defense attorney said that if he went to trial he would probably be acquitted; the prosecutor said that if he pled guilty and entered a job training program he would be released immediately (Taylor 1996).

We don't know whether Mr. Washington ultimately pled guilty or stuck it out for several months more and went to trial—and, if so, what happened at trial. We do not know whether he was guilty or innocent. But the predicament he faced is well known. Tens of thousands of defendants each year face similar choices: plead guilty and go home; insist on your innocence and stay in jail. I do not doubt that most defendants who face this choice are guilty, but some unknown fraction are not. It is a fair guess that innocent defendants who are held without bail are less likely to accept plea bargains than guilty defendants in similar circumstances—but how much less likely? It is also a fair guess that some of those innocent defendants do plead guilty. But how many? Hundreds a year? Thousands a year? Once again, we don't know.

In some respects, innocent defendants who plead guilty in order to go home are similar to innocent defendants who receive comparatively light sentences for comparatively light crimes, but not entirely. A conviction for a violent felony and four or five months in custody (even time served before conviction) is a big

step up from the suspended sentence and fine that Robert Farnsworth faced. In other cases, innocent defendants who plead guilty fare far worse.

Some innocent defendants who plead guilty are exonerated, but not many. Gross et al. (2005) found 20 individual exonerations in which the underlying convictions were based on guilty pleas, or about 6% of the 340 cases they analyzed. This is a startlingly low proportion in a system in which 95% of felony convictions are obtained by guilty plea. In most respects, these guilty-plea cases were similar to other individual exonerations and highly unrepresentative of felony plea bargains in general: All but one of the 20 pled guilty to murder or rape; all had faced life imprisonment or the death penalty; the average sentence they received after pleading guilty was more than 46 years in prison; only three were sentenced to less than 10 years.⁴ In other words, although their guilty pleas may have spared them the worst consequences of conviction, these innocent defendants received sufficiently draconian sentences to justify the extraordinary mobilization of resources that is usually necessary to have a shot at exoneration. Even so, innocent defendants in that position are probably less likely to be exonerated than those who go to trial. Their sentences, while harsh, are less extreme than they would otherwise have been after trial, which reduces the incentive to help them, and they are likely to have a harder time persuading people that they are innocent, potential allies and government officials alike.

What about the mass of felony defendants, those who plead guilty but do not go straight home, who face substantial prison terms but not life or the death penalty? About one million defendants were convicted of felonies in state courts in 2000, 95% by pleas of guilty (Durose & Langan 2003). The main reason they plead guilty is that in return they received

a small fraction of the punishment they would have received after conviction at trial. Nearly one-third were not incarcerated at all, and the median term for those who did serve time was three years. By contrast, among defendants who were exonerated from 1989 through 2003—94% of whom went to trial—the median sentence was life in prison. Even among the most serious crimes, those who were exonerated, as a group, received far more severe punishments than most. Of 121 exonerated rape defendants (only 3% of whom pled guilty), over 30% were sentenced to life imprisonment, the median term for the remainder was 30 years, and only three received terms under 10 years. Among all rape defendants sentenced in state courts in 2000 (81% of whom pled guilty), only 2.5% were sentenced to life imprisonment, 10% received probation, and the median sentence for the rest was 7 years (Durose & Langan 2003). As Bowers (2008) points out, for many innocent defendants who face severe penalties, plea bargaining is likely to be their best opportunity to limit the harm they suffer.

Do some innocent defendants plead guilty to rape in return for five-year sentences or to robbery for three-year sentences? We know it happens in similar settings. For example, of the 35 Tulia defendants who were exonerated, 8 went to trial and were convicted of drug dealing. They received sentences that averaged nearly 47 years and ranged up to life imprisonment. The remaining 27 defendants pled guilty; one of them was not sentenced, 11 received some combination of probationary terms and fines, and 15 were sentenced to terms that ranged from 3 months to 18 years and averaged about 7 years.

We know about the Tulia guilty pleas because they were part of a mass exoneration. It would have been prohibitively expensive to conduct an individual investigation to establish the innocence of each defendant. It would never have happened. How frequently do innocent defendants in general plead guilty and receive reduced but still substantial prison terms? Needless to say, we don't know.

⁴In this calculation, life sentences are counted as 99 years; if a range of sentences was imposed, the minimum is used; one case in which the defendant was exonerated before sentencing is excluded.

Juvenile convictions. About 10% of the reported exoneration cases from 1979 through 2003 involved defendants who were under 18 at the time of the crimes for which they were convicted. All but one of these juveniles were convicted as adults,⁵ and all were sentenced to death, life imprisonment, or many years behind bars. Like their older counterparts, all but two were convicted of rape or murder. But what about juveniles convicted in juvenile courts?

In 2003, approximately 66,000 juveniles were incarcerated in public and private juvenile facilities, compared to 2740 who were incarcerated as adults in state prisons and about 7000 who were incarcerated in local jails (Snyder & Sickmund 2006). The small minority of juvenile offenders who end up in adult prisons are overrepresented among those who are exonerated and released from those prisons. But how many innocent juveniles are convicted in juvenile court and imprisoned in juvenile facilities? There are reasons to suspect that the error rate may be higher than in adult court (Drizin & Luloff 2007), but we really have no clue.

No-crime cases: mistakes. In 1819, Jesse and Stephen Boorn, two brothers from Manchester, New Hampshire, were convicted and sentenced to death for the murder of their brother-in-law, Russell Colvin, who had disappeared seven years earlier. They were freed several months later after Russell Colvin was found in New Jersey, alive and well, and was tricked into returning to Manchester a month before Stephen's scheduled hanging (Warden 2005). Borchard (1932) describes five additional cases, involving eight defendants who were convicted of killing victims who were later found alive.

This is not the usual sort of false conviction. In the familiar script, the defendant is convicted

of a vicious crime that someone else committed. The Boorn brothers, in contrast, were convicted of a crime that never occurred. Most of the no-crime false convictions we know about are the deliberate frame-ups by police that were uncovered in mass exonerations. I return to those cases in the next section, together with a handful of other exonerations for crimes that were deliberately made up. In addition, however, we also know of several individual no-crime exonerations—eight from 1989 through 2003—in which the authorities mistakenly concluded that a loss of property or life was caused by crime.

Robert Farnsworth's case is in this category. The cash bag he was accused of stealing was not stolen at all but lost by the bank. The seven remaining accidental no-crime convictions were all homicides: a man accused of killing his wife, who apparently committed suicide; a son accused of murdering his mother, who also killed herself; and five parents accused of killing infant children who died of other causes, or—in one extraordinary case—never existed.⁶ In most of these cases, the defendants were ultimately able to produce powerful medical evidence that contradicted the prosecution's theory of the cause of death. For example, the son was convicted of killing his mother on the theory that she died from being pushed down a flight of stairs, but medical evidence revealed that she had taken a lethal dose of antidepressants.

An eighth no-crime murder exoneration occurred in October 2004 in Pecos County, Texas.

⁵The one exception is telling. The exonerated juvenile in question was convicted of homicide by a jury—a procedure that is rare in juvenile cases but the rule for trials of adult defendants—and received an adult-like sentence of 18 to 20 years. In addition, I have learned of one exoneration from a juvenile conviction after 2003, a 12-year-old who pled guilty to murder and served a year in a juvenile facility before the true culprit confessed (Drizin & Luloff 2007, p. 300).

⁶Victoria Banks was falsely convicted of manslaughter in Alabama in 2001. She is a mentally retarded woman who confessed to killing her newborn baby. There is no physical evidence that the baby ever existed, and medical tests confirm that she had a tubal ligation that was intact throughout the relevant period, making pregnancy impossible. But Ms. Banks—who confessed to her imaginary crime and pled guilty to manslaughter after being charged with capital murder—did not dispute her guilt, and as of last report the state of Alabama, to its shame, continues to imprison this mentally deficient and delusional woman for manslaughter as well as unrelated charges. One of her two codefendants—who is also mentally retarded—was exonerated and released in 2003 after three and half years in prison; a second retarded codefendant had her sentence reduced and was released in 2002 (Crowder 2003).

Ernest Willis, who spent 17 years on death row for a double arson murder, was set free when the county prosecutor concluded that the prosecution's expert evidence of arson was valueless and that in fact the fire was probably an accident (Possley & Mills 2004). Willis was lucky: Five years after he was sentenced to death, the National Fire Protection Association (1992) issued new guidelines that for the first time applied scientific principles to the analysis of the remains of suspicious fires, and revealed that the expert evidence of arson in Willis's case, and many others, had no scientific basis. Cameron Willingham, of Corsicana, Texas, was not so lucky. He, too, was sentenced to death for arson murder. The fatal fire in his case was strikingly similar to the one Ernest Willis was convicted of setting, and the evidence for and against arson was essentially identical to that in Willis's case. Willingham steadfastly maintained that the fire was an accident, but the courts, the prosecutor, and the governor all agreed that there was no reason to revisit the conclusions reached at trial. He was put to death in February 2004, eight months before Ernest Willis was released.

If a crime has actually been committed, an innocent defendant can sometimes prove that someone else did it: someone who left his DNA or his fingerprints at the crime scene; someone who was arrested for another murder and confessed to this one as well, or bragged about doing it, or did other similar crimes; someone who was caught with the loot, or the car, or the victim's blood on his shirt. Proving that someone else committed the crime is by far the most common method of achieving an exoneration, but it is unavailable if there was no crime at all. In extremely rare cases, there may be physical proof that the crime never happened: the murder victim turns up alive; the missing cash bag is recovered from the night deposit box. Otherwise, a defendant who is convicted of a crime that never occurred faces the nearly impossible task of proving a negative in a context in which very strong proof is required. There is, for example, no way to prove that a fire was *not* caused by arson. At best, an arson defendant might convince the authorities that there

was no evidence of specific telltale signs that the fire was deliberately set: multiple points of origin, the use of accelerants, etc. But an arsonist could start a fire by intentionally dropping a lit cigarette on a sofa or crossing wires to create a short circuit.

In other words, it may well be that innocent defendants who are convicted of crimes that never happened are particularly unlikely to be exonerated. We certainly do not know of many such cases. But how common are false convictions of this sort? Police are trained to be suspicious of the husband who reports that his wife died by accident, or the parents who bring a badly injured baby to an emergency room and say he fell off his high chair, or the father who survives a fire in which his family is killed. In these and similar settings, mistakes can run in either direction. For all we know, the police and medical examiners describe homicides as accidents much more often than the other way around. But when the authorities do mistake an accident for a crime—and expert pathologists, toxicologists, or arson investigators back them up—the accused may have little hope. How frequently does this happen? As usual, we have no idea.

No-crime cases: perjury. Six defendants who were exonerated between 1989 and 2003 were falsely accused of rape, apparently to settle other scores or to cover up the complaining witness's promiscuity. Six others were falsely accused of sexually molesting children, apparently to deny them child custody or to drive them away from the accuser's family. Two of these defendants were released when it was discovered that the supposed victim was in jail on the date she claimed to have been raped by both of them; three were exonerated by DNA; in eight cases the victims recanted, including one case where DNA evidence also exonerated the defendant.

In the usual rape case there is no doubt that someone had sexual contact with the victim. That is established by semen or other physical evidence. Only three of these exonerations fit that pattern, two of which involved a single accuser, and all three defendants were exonerated

by DNA. In the other cases the alleged sexual acts were weeks or months in the past; biological evidence would have been unavailable one way or the other. Many complaints of this sort are not prosecuted at all, even if the charge is true; others are dismissed before trial or end in acquittal. But if the complaining witness is believed, a falsely convicted defendant will probably have to show that her story was physically impossible or get the complainant to admit to perjury. We know that very few succeed; we do not know how many fail.

In some cases, rape defendants admit to sex with the complainant but claim it was consensual. Sometimes the question of consent is rife with ambiguity. In other cases, the defendant is lying; that may be far more common than outright lies from the complainant. But if an innocent defendant in this situation is convicted—and it must happen sometimes—his only hope for release is for the complaining witness to admit that she lied. We have no idea how many defendants are falsely convicted of rape after consensual sex, but none—as far as we can tell—are ever exonerated.

We do know about 150 or more defendants who were convicted of made-up crimes: those who were framed for possessing or selling illegal drugs or guns and exonerated when massive police perjury scandals were unearthed in Los Angeles, Dallas, and Tulia. Inevitably, other such scandals have escaped notice, particularly in cases of “victimless” crimes. Borchard (1932), for example, describes a pervasive practice of New York City police officers in the 1920s: They would frame innocent women on charges of prostitution and then collect kickbacks from bail bondsmen and defense attorneys, and occasionally bribes from the innocent defendants themselves. After this scandal came to light in 1930, half a dozen defendants were pardoned and at least one police officer was convicted of perjury.

Some police perjury conspiracies seem minor by comparison to the Tulia or Rampart scandals and probably for that reason are conducted openly, with impunity. For the past several years, the New York City Police Depart-

ment has been attempting to eradicate drug crimes in low-income housing in the South Bronx. One tactic they use is to arrest every young man found in or near a particular building and charge them all with trespassing. When the cases come to court, the police file boilerplate complaints that often read: “When asked who he was visiting in the building, the defendant failed to provide a name or apartment number and stated that he was there to purchase drugs, to wit: marijuana.” This is plainly a formulaic lie, as a judge hearing one of these cases has recognized: “This Court does not credit testimony that the defendant disclosed to a person wearing a badge that he was going to buy marijuana. . . [that] does not make sense.” But the officers are not sanctioned, and nearly all defendants plead guilty to light penalties rather than face the delays and risks of trial (Fabricant 2007). A small minority of these defendants may be drug dealers, and the program might possibly reduce drug trafficking, but in the process hundreds if not thousands of innocent defendants are arrested, charged, and convicted.

Finally, there are cases in which individual officers lie to convict individual innocent defendants without any larger plan or conspiracy. The paradigmatic case may be the officer who abuses a suspect and then charges him with assault or resisting arrest. Many defendants who complain about this sort of abuse are probably lying; others are never prosecuted or not convicted. As far as we know, however, those who are falsely convicted are never exonerated.

No-crime cases: state of mind. There are more ways than one to be innocent. A defendant who kills is innocent if he acts in self-defense or in defense of another. In most states, this defense requires that the defendant honestly and reasonably believe that taking the action that killed the deceased was necessary to prevent the deceased from killing or severely injuring the defendant himself or a third person. A defendant who kills may also be innocent because he was insane at the time and therefore lacked criminal responsibility. Decisions on these questions often turn on uncertain

and ambiguous evidence; in some respects they may reflect community values rather than judgments on the facts of the homicides. But convictions of defendants who claimed insanity or self-defense may simply be wrong. We have no information on how often that happens because except in the rarest of cases the wrongly convicted defendant will never be exonerated.

No-crime cases: witch hunts. In 1984, a psychiatrist in Minnetonka, Minnesota, interviewed four-year-old Aubree LaBois about her parents, Edward and Karri LaBois, who ran a daycare center. The psychiatrist asked Aubree leading questions about sex abuse at the center and showed her “anatomically correct” dolls to illustrate the questions; Aubree agreed that she had been sexually molested by her parents (Adams & Zack 2003).

Childcare sex abuse prosecutions were common in the United States in the 1980s and early 1990s. They frequently involved allegations of satanic rituals. Many of the accusations were bizarre if not impossible on their face. Children at the Little Rascals Day Care Center in Edenton, North Carolina, said that they had seen babies killed, children taken out on boats and thrown overboard to feed sharks, and children taken to outer space in a hot air balloon (PBS 1997). In Kern County, California, children described mass orgies with as many as 14 adults who forced groups of children to inhale 18-inch lines of cocaine or heroin, gave them injections with syringes that left large bruises, and hung the children from hooks as the adults repeatedly sodomized them (Nathan & Snedeker 1995). Needless to say, no physical evidence ever corroborated any of these unlikely claims. In other cases, the accusations were merely implausible and appear to have been generated by overeager prosecutors and therapists who demanded that the young children they examined tell them that they had been molested and would not take “no” for an answer.

More than 70 daycare defendants were convicted of child molestation and other serious felonies; hundreds of others were arrested and charged (Gross et al. 2005). For all we know,

a few of them may have committed some acts of sexual molestation, incidents that grew into fantastic allegations as the children were interviewed and reinterviewed repeatedly by police officers, prosecutors, and therapists. There is little doubt, however, that the great majority were totally innocent. Almost all were eventually released by one means or another before they completed their terms, but, with only one or two exceptions, they have not been exonerated.

A witch hunt is easy to spot in retrospect, when the mass hysteria that generated it has passed. When that happens, accusations that once destroyed lives are greeted with yawns. The case of Edward and Karri LaBois is a good example. At first they denied allegations of sex abuse at their daycare center, but when they heard that the authorities were planning to take Aubree away, they took her themselves and fled. Nineteen years later, when they were found and arrested, all charges were dismissed in two weeks. Aubree—by then 23 and a mother herself—denied she had ever been molested and said she had been misled and confused by the psychiatrist who interviewed her when she was four. Her statements from 1984 were seen as “conflicting” and unreliable, and fresh interviews with other children from the daycare center and their parents produced no evidence of abuse. As the Minnetonka police chief explained, interviews with children were “less sophisticated in 1984” when interrogators often used leading questions and grown-up sex-abuse terminology. Nineteen years on the run is a severe punishment in itself, but Mr. and Mrs. LaBois probably faced far worse if they had stayed in Minnetonka in the “less sophisticated” atmosphere of the mid-1980s.

There have been many witch hunts in American history, only some of which employed criminal prosecutions. I think it is safe to say that none of the accused witches in colonial Salem truly was in league with Satan (although one or two might have believed they were), while a few real Soviet spies were caught during the McCarthy era. Either way, from the point of view of the hunter the problem is the same:

Witches, traitors, and child molesters are all believed to be evil predators who are skillful at hiding their true nature. If you are on a crusade to unmask them, you are driven to rely on evidence that has little or no value or may be manufactured by the investigation itself: rumor and innuendo, innocent political and social associations, coerced admissions, accusations by children who are manipulated by adults, or accusations by associates who are themselves threatened with persecution.

Are we engaged in any witch hunts now? In the first five years after the September 11, 2001, attacks, 510 defendants were arrested by the federal government for crimes allegedly related to terrorism, and 307 were convicted, mostly on charges other than conducting or supporting terrorist activities (Greenberg 2006). Will these prosecutions someday be recognized as witch hunts? We do not know.

Scapegoats. On August 15, 1944, an Italian prisoner of war was found dead, hanging in the woods at Fort Lawton, near Seattle. The discovery followed a night of fighting between Italian prisoners and American soldiers, many of them black, who resented what they saw as lenient treatment of the prisoners. Twenty-six of the Italian prisoners were hospitalized. In the aftermath, 43 black soldiers were arrested and court martialed within two weeks; 28 were convicted of rioting, and 2 were convicted of manslaughter as well. They served from 1 to 25 years in military prisons. In 2005, a Seattle journalist published a book on the incident which disclosed, among other things, that a contemporaneous investigative report by the Army’s inspector general—which was available to the prosecutor but concealed from the de-

fense at trial—revealed that a white military policeman who testified against the black soldiers had in fact encouraged if not instigated the fighting and was himself the most likely suspect in the homicide. In October 2007, an Army Review Board reversed four of the convictions and is expected to reverse the remaining 24 because the trial was “fundamentally unfair” (Martin 2007, Yardley 2007).

The Fort Lawton soldiers were not victims of a witch hunt. There certainly was a disturbance at the base in which one prisoner was murdered and more than two dozen were injured. The authorities were determined to hold someone responsible, and the black soldiers were an easy target. Some of them may have been guilty of minor offenses; others no doubt were entirely innocent. But guilty or innocent, they served their purpose. Their convictions closed the book on the case—until a journalist reopened it and published a book of his own, 61 years later. By then all but two of the black GIs were dead. How many other scapegoats have been sacrificed in cases that were not re-investigated after 60 years? We’ll never know.

WHAT CAUSES FALSE CONVICTIONS?

The Usual Suspects

There is a canonical list of factors that lead to false convictions: eyewitness misidentification; false confession; misleading, false, or fraudulent forensic evidence; testimony by highly motivated police informants such as “jailhouse snitches”; perjury in general; prosecutorial misconduct; ineffective legal defense. All these factors are common among cases of known exonerations (Westervelt & Humphrey 2002, Scheck et al. 2003, Innocence Project 2008b). **Table 1** illustrates this pattern for three common causes among exonerations from 1989 through 2003.

The first thing to note about this table is that it is limited to the false convictions we know about—specifically, murder and rape cases. We will return to this point. The second thing to note is that it tells us less than it seems to do. False confessions, misidentifications, and

Table 1 Causes of error in exonerations in the United States (1989–2003)

	Murder (205)	Rape (121)
Eyewitness misidentification	50%	88%
Reported perjury	56%	25%
False confession	20%	7%

Note: The columns on **Table 1** add up to more than 100% because some exonerations had more than one of the listed causes.

perjury all cause false convictions, but they are not factors that we can use to identify, predict, or prevent false convictions, and it is not clear how much they contribute to the processes that produce these miscarriages of justice.

For example, nearly 90% of the rape exonerations included eyewitness misidentifications, but how could that be otherwise? Identification of the defendant by the victim is almost inevitable in a rape trial. If the victim is killed, the case will be classified as murder rather than rape. And unless the victim was physically unable to see the rapist (no light, he wore a mask, he covered her face, etc.), rape cases are rarely prosecuted unless the victim is prepared to identify the defendant. But that is true for all rape trials, most of which lead to conviction of guilty defendants. We now know that the identifications in these particular rape cases were misidentifications because other evidence, usually DNA, has proved that the defendants were innocent. But there is no reason to believe that at the time of trial anything about the content of the victim's identification testimony should have alerted the court to the danger of error. In retrospect, looking only at cases in which a convicted rape defendant has now been exonerated, misidentification and innocence are usually synonymous.

Of course, once we know that a convicted rape defendant is innocent, it is pretty clear that the victim's misidentification was a cause of his false conviction. If the victim had not identified the defendant, he probably would not have been prosecuted, let alone convicted. But that just moves the inquiry back one step: Why did the victim misidentify the defendant? Was it because of the inherent difficulty of the task? Or did the police intentionally or unintentionally focus her attention on an innocent person whom they suspected because of misleading circumstantial evidence, misinformation from an informant, or the suspect's record?

But what about the procedures the police use to obtain identifications? Many psychologists recommend that a lineup be conducted "blind"—that is, administered by an officer who does not know which person in the lineup is

the suspect (Wells et al. 1998). If the lineup is conducted blind and is properly constituted, the victim cannot be improperly influenced by the identification process, intentionally or otherwise. Isn't the use of less safe or plainly suggestive procedures a predictor of false convictions? Possibly, but the data at our disposal shed no light on that possibility one way or the other.

We do not usually know the details of the procedure used to obtain an identification from a rape victim. Even if we knew that every misidentification in a rape case that led to an exoneration was made in a suggestive lineup, we could not say with confidence that the use of suggestive lineups is a predictor of false convictions. To know that we would also need to know what was done in otherwise similar cases that led to accurate convictions, as well as in cases in which the defendants (guilty or innocent) were not convicted or were never charged at all. We do not have that information. What if, for example, the police always use the same suggestive procedures, in all lineups? If so, the use of a suggestive lineup could not predict the defendant's innocence because such lineups (we have assumed) happen in all cases, guilty or innocent, across the board.

False confessions—another recurrent cause of false convictions—are even more troublesome. They are less common among the exonerations summarized in **Table 1**, a total of 51 compared with 219 misidentifications, and they occurred primarily in murder cases. Most false confessions that we know about do lead to—cause—false convictions. But, as with misidentifications, that is uninformative: It is easy to spot a false confession after the fact, once we know that the confessor is innocent. But what about the coercive interrogations that produce most false confessions? Is a coerced confession a predictor of false conviction, a risk factor we could use to identify possible errors in advance? That is not so clear.

Coerced confessions are often true. Frequently, they are confirmed by subsequent evidence that corroborates information supplied for the first time in the confession: the location of a weapon or of stolen property, the name

of a corroborating witness, and so forth. We have no better aggregate data on the accuracy of confessions (coerced or not) than we do on the details of police-initiated eyewitness identification procedures. There is strong evidence that coercive techniques increase the odds of a false confession—that voluntary confessions are safer than ones obtained under pressure—but we do not know by how much. It is possible, for all we know, that the overwhelming majority of coerced confessions are true. If so, the fact that a defendant confessed under pressure might be a predictor of guilt rather than innocence—by comparison to cases in which there was no confession of any sort—even though coercive interrogations also lead to some false convictions. On the other hand, it is also possible that coercive interrogations do little or nothing to secure accurate information that would not otherwise have been obtained, but do increase the risk of error. We don't know.

To be clear: misidentifications, false confessions, false forensic evidence, perjurious informants, and so forth, all cause wrongful convictions. The problem is that we only know that these items of evidence are false in retrospect, after the defendant has been shown to be innocent, and the procedures that produce them often produce accurate information instead.

Demographic and Evidentiary Predictors

To identify real predictors of false conviction we need reliable data on aspects of criminal cases that are observable in advance, before we know whether a conviction is true or false. And we need that information both for proven false convictions—exonerations—and for some set of comparable data. For the most part, such data do not exist, either for exonerations or for criminal cases in the United States generally, but a few patterns are strong enough to show through our pervasive ignorance.

Two demographic predictors emerge by comparing exonerations to background statistics on crime in general:

- Black men accused of raping white women face a greater risk of false conviction than other rape defendants. Rapes of white women by black men account for well under 10% of all rapes in America, but nearly half of all rape exonerations fall in that category (Gross et al. 2005). The simplest explanation for this disparity is that white Americans are much more likely to mistake one African American stranger for another than to do so with members of their own race, as many psychological studies have shown (Meissner & Brigham 2001). If that is the explanation, then black defendants in other interracial crimes of violence—in particular robberies—face a similar risk, but we do not have enough exonerations to observe that directly.
- Young murder suspects are at greater risk of false confession than other murder suspects. Drizin & Leo (2004) report on 125 proven false confessions, 44 of which led to false convictions; 35% were by suspects under the age of 18. The vast majority of these confessions were for murder, but less than 10% of all arrested murder suspects are juveniles (e.g., Pastore & Maguire 2005). The same could well be true of juveniles suspected of nonhomicidal crimes, but again, we lack data.

Gross & O'Brien (2007) compared death-row exonerations to a sample of executed capital defendants from the same period, on the assumption that those who were executed are overwhelmingly likely to have been guilty. Although far from perfect, this comparison has advantages. Both sets of cases are far better documented than American criminal convictions generally, and both have run the entire gamut of postconviction capital review. They identify a few evidentiary factors that predict false convictions:

- Exonerated capital defendants are less likely than executed defendants to have serious criminal records. Most defendants in both categories did have criminal records, but many more of the

exonerated had none (38% versus 9%); more than half of the executed defendants, but fewer than a third of the exonerated, had been convicted of a violent felony (53% versus 32%).

- Confessions were 3.5 times as common among the executed as the exonerated, 54% to 15%. Whether or not they confess, some capital defendants do not actively contest their guilt in court. These tacit admissions of guilt were much more common among the executed than the exonerated, 38% to 13%. In other words, among death-sentenced defendants, the chance of false conviction is greater in cases in which the defendants deny guilt before trial and actively assert their innocence at trial.
- The average time from the crime to the arrest of the defendant was 2.5 times longer for the capital cases that led to exonerated than for those that ended in execution. Nearly twice as many of the initial investigations for exonerated cases lasted over a month (42% versus 22%), and more than three times as many lasted over a year (13% versus 4%).

These findings suggest that the risk of false conviction increases with the difficulty and length of the investigation. Most capital defendants are familiar, repeat offenders; when they are not, police accuracy drops. Most murder defendants confess, and, despite the danger of false confessions, most confessions are true. When defendants refuse to confess, the danger of error increases. Most capital murder investigations are resolved quickly, but when they are not, the risk of false conviction is greater.

We cannot come close to predicting the accuracy of individual criminal convictions. Despite the special risks faced by black and juvenile suspects, many exonerated defendants are middle-aged and white. Long, frustrating searches increase the risk of wrongful capital conviction, but 36% of exonerated capital defendants were arrested within 10 days of the crime (Gross & O'Brien 2008). In other words, these are genuine but weak predictors of the risk

of false conviction—for defendants convicted of rape or murder.

Beyond Rape and Murder

It hardly bears repetition: We know next to nothing about false convictions for crimes other than rape and murder. We do know that those who were framed for drug and gun possession in the mass police scandals that have been exposed were overwhelmingly members of vulnerable groups: racial or ethnic minorities, illegal immigrants, gang members. In general, however, we do not know why innocent defendants are convicted any more than we know who they are or how often it happens. It's widely assumed, for example, that the risk of a false guilty plea increases as the plea bargain that is offered becomes increasingly attractive (e.g., Gazal-Ayal 2006), but (like so much else on this topic) that is just informed guesswork.

CONCLUSION

Imagine our view of automobile safety if the only car accidents we knew about were exploding Ford Pintos and major highway pileups—no fender benders, no routine crashes at intersections, no drunk drivers who run off the road. That's pretty much all we know about convictions of innocents. We know something about false convictions for rape and murder, and we know about a few scandals in which police officers framed large numbers of innocent drug and weapon defendants, but we know nothing about innocent defendants who plead guilty or are convicted of routine property or drug offenses, or even of less extreme crimes of violence. We have learned a great deal in the past 20 years, but we still miss a lot more than we catch.

We do know that convictions of innocent defendants are a regular occurrence in the most serious criminal cases. For capital murder, the false conviction rate appears to be in the range of 2% to 5%. The rate for rape may be higher or lower, but initial indications suggest that it might be in the same general vicinity. For

robbery, the error rate may well be somewhere in the neighborhood of the error rate for rape, whatever that is. Beyond that, we know that there must be false convictions for the myriad of other crimes for which hundreds of thousands of defendants go to prison each year, but virtually none of them ever come to light.

Inevitably, our image of false convictions is formed by the cases we know, most of which are horrific crimes of violence. The stories of the convictions that led to rape and murder exonerations include many reports of coercive interrogations, improper identification procedures, alternative suspects who were ignored, exculpatory evidence that was concealed, perjury, bizarre forensic errors, forensic fraud. It is easy to get the impression that the conviction of innocent defendants is a preventable aberration, the product of incompetence or misconduct or both. There are certainly cases that fit that description, but it may not be the common scenario. Even among rape and murder exonerations, there are also run-of-the-mill cases that just turned out wrong. We have little direct information about false convictions for lesser crimes—misdemeanors, routine felony guilty pleas, juvenile adjudications—but they may well consist overwhelmingly of commonplace investigative and bureaucratic errors. If so, then

most false convictions are just ordinary products of everyday criminal prosecution and adjudication, as most traffic accidents are ordinary products of everyday driving.

I do not mean that false convictions are unavoidable. Everyday driving has become much safer since the 1980s and may become safer still. The trick is to identify the most effective strategies for reducing errors. We could, for example, try to teach investigators to use better techniques (or drivers to drive more carefully), or we could install fail-safe backstops to minimize the consequences of mistakes (like seat belts and airbags). We could increase the burden of proof (or lower the speed limit), or outlaw some types of evidence, such as jailhouse informants or uncorroborated confessions (or ban certain types of vehicles). All these techniques have costs: They make the process more expensive and prevent some true convictions—or harmless driving—as well as false convictions and accidents. Inevitably, the best strategy will vary with the context.

Whatever we do, however, some false convictions will continue to occur. For those cases, the lesson of the past 30 years is clear. We must be more willing to reconsider the guilt of convicted defendants when substantial new evidence of innocence emerges.

DISCLOSURE STATEMENT

The author is not aware of any biases that might be perceived as affecting the objectivity of this review.

ACKNOWLEDGMENTS

The author is grateful for help, comments, and suggestions at various stages of writing this review from Phoebe Ellsworth, Brandon Garrett, Richard Lempert, Barbara O'Brien, J.J. Prescott, George Sepsakos, Rob Warden, and the participants at presentations at the University of Michigan Law School, New York University Law School, Texas Tech Law School, and Russell Sage Foundation. Work on this review was made possible by the generous support of the Russell Sage Foundation.

LITERATURE CITED

- Adams J, Zack M. 2003. Once fugitives, couple are freed; charges of child sex abuse against the couple dating from 1984 were dropped. *Minneapolis Star Trib.*, Nov. 26, p. 1A
- Borchard EM. 1932. *Convicting the Innocent—Errors of Justice*. New Haven, CT: Yale Univ. Press

- Bowers J. 2008. Punishing the innocent. *Univ. Pa. Law Rev.* In press
- Chin R. 2000. Crime and punishment. *St. Paul Pioneer Press*, Mar. 15, p. 1E
- Connors E, Lundgren T, Miller N, McEwen T. 1996. *Convicted by Juries, Exonerated by Science: Case Studies in the Use of DNA Evidence to Establish Innocence After Trial*. Washington, DC: U.S. Dep. Justice, Natl. Inst. Justice
- Crowder C. 2003. Accused in killing of newborn who likely never existed, Choctaw county man makes plea deal. *Birmingham News*, Jan. 11, p. 1A
- Death Penalty Inf. Cent. 2008. *Innocence: List of Those Freed From Death Row*. Washington, DC: Death Penalty Inf. Cent. <http://www.deathpenaltyinfo.org/article.php?scid=6&did=110>. Accessed April 9, 2008
- Donald M. 2002. Dirty or duped?: Who's to blame for the fake-drug scandal rocking Dallas police? Virtually everyone. *Dallas Observer*, May 2
- Drizin S, Leo RA. 2004. The problem of false confessions in the post-DNA world. *N. C. Law Rev.* 82:891
- Drizin S, Luloff G. 2007. Are juvenile courts a breeding ground for wrongful convictions? *N. Ky. Law Rev.* 34:257-322
- Durose MR, Langan PA. 2003. *Felony Sentences in State Courts, 2000*. Washington, DC: U.S. Dep. Justice, Bur. Justice Stat.
- Fabricant MC. 2007. Rousting the cops: one man stands up to the NYPD's apartheid-like trespassing crack-down. *Village Voice*, Nov. 6
- FBI. 2007. *Crime in the United States 2006*. Washington, DC: US Dep. Justice. <http://www.fbi.gov/ucr/cius2006/offenses/clearances>
- Garrett BL. 2008. Claiming innocence. *Minn. Law Rev.* In press
- Gazal-Ayal O. 2006. Partial ban on plea bargaining. *Cardozo Law Rev.* 27:2295
- Giannelli PC. 1997. The abuse of scientific evidence in criminal cases: the need for independent crime laboratories. *Va. J. Soc. Policy Law* 4:439-78
- Giannelli PC. 2007. Wrongful convictions and forensic science: the need to regulate crime labs. *N. C. Law Rev.* 86:165-235
- Greenberg KJ. 2006. *Terrorist Trial Report Card. 9/11/2001-9/11/2006*. New York: NYU Sch. Law, Cent. Law Secur. <http://www.lawandsecurity.org/publications/TTRCComplete.pdf>
- Grisham J. 2006. *The Innocent Man: Murder and Injustice in a Small Town*. New York: Doubleday
- Gross SR. 1987. Loss of innocence: eyewitness identification and proof of guilt. *J. Legal Stud.* 16:395
- Gross SR. 1998. Lost lives: miscarriages of justice in capital cases. *Law Contemp. Probl.* 61(4):125
- Gross SR, Ellsworth PC. 2002. Second thoughts: Americans' views on the death penalty at the turn of the century. In *Beyond Repair? America's Death Penalty*, ed. SP Garvey, pp. 7-57. Durham: Duke Univ. Press
- Gross SR, Jacoby K, Matheson DJ, Montgomery N, Patil S. 2005. Exonerations in the United States, 1989 through 2003. *J. Crim. Law Criminol.* 95:523
- Gross SR, O'Brien B. 2007. *Frequency and predictors of false conviction: why we know so little, and new data on capital cases*. Univ. Mich. Public Law Work. Pap. No. 93, Ann Arbor. <http://ssrn.com/abstract=1018458>
- Herrera v. Collins*, 506 U.S. 390 (1993)
- Hughes PR. 2003. Perry pardons 35 in Tulia sting. *Houston Chronicle*, Aug. 23, p. A1
- Innocence Project. 2008a. *Know the Cases*. New York: Innocence Project. <http://www.innocenceproject.org/know>. Accessed April 9, 2008
- Innocence Project. 2008b. *The Causes of Wrongful Conviction*. New York: Innocence Project. <http://www.innocenceproject.org/understand>. Accessed April 9, 2008
- Johnson D. 2000. Illinois, citing faulty verdicts, bars executions, *NY Times*, Feb. 1, p. A1
- Kansas v. Marsh*, 126 S. Ct. 2516 (2006)
- King NJ, Cheesman FL, Ostrom BJ. 2007. *Habeas litigation in U.S. District Courts*. Vanderbilt Public Law Res. Pap. No. 07-21, Vanderbilt Univ., Nashville, Tenn. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1009640
- Martin J. 2007. 63 years later, Army exonerates black troops. *Seattle Times*, Oct. 27, p. A1
- Meissner CA, Brigham JC. 2001. Thirty years of investigating own-race bias in memory for faces: a meta-analysis. *Psychol. Public Policy Law* 7:3-35
- Moore S. 2007. DNA exoneration brings change to the legal system. *NY Times*, Oct. 1, p. A1

- Nathan D, Snedeker M. 1995. *Satan's Silence: Ritual Abuse and the Making of a Modern American Witch Hunt*. New York: Basic Books
- Natl. Conf. State Legis. 2008. *Comparison of State Post Conviction DNA Laws*. Washington, DC: NCSL. <http://www.ncsl.org/programs/health/genetics/DNAchart.htm>. Accessed April 9, 2008
- Natl. Fire Prot. Assoc. 1992. *NFPA 921: Guide for Fire and Explosion Investigations*. Quincy, MA: Natl. Fire Prot. Assoc.
- Pastore AL, Maguire K. 2005. *Sourcebook of Criminal Justice Statistics, 2003*. Washington, DC: U.S. Dep. Justice, Bur. Justice Stat.
- PBS. 1997. Innocence lost: the plea. *Frontline*. May 27. <http://www.pbs.org/wgbh/pages/frontline/shows/innocence>
- PBS. 2001. LAPD blues. *Frontline*. May 15. <http://www.pbs.org/wgbh/pages/frontline/shows/lapd/bare.html>
- Possley M, Mills S. 2004. Texas man executed on disproved forensics; fire that killed his 3 children could have been accidental. *Chicago Tribune*, Dec. 9, p. A1
- Rand M, Catalano S. 2007. *Criminal Victimization, 2006*. Washington, DC: U.S. Dep. Justice, Bur. Justice Stat.
- Risinger DM. 2007. Innocents convicted: an empirically justified factual wrongful conviction rate. *J. Crim. Law Criminol.* 97:761-807
- Rudin N, Eisenberg A. 2008. *Addendum to Scientific Advisory Committee Meeting Minutes: Report to the Commonwealth of Virginia Scientific Advisory Committee by the DNA Subcommittee on confirmation bias and "inconclusive" conclusions*. Richmond, VA: Dep. Forensic Sci., Jan. 7. <http://www.dfs.state.va.us/about/minutes/saCommittee/20080108.pdf>
- Ryan G. 2003. Excerpts from governor's speech on commutations. *NY Times*, Jan. 12, p. A22
- Sabol WJ, Couture H, Harrison PM. 2007. *Prisoners in 2007*. Washington, DC: U.S. Dep. Justice, Bur. Justice Stat.
- Scheck B, Neufeld P, Dwyer J. 2003. *Actual Innocence: When Justice Goes Wrong and How To Make It Right*. New York: Signet
- Schehr RC. 2005. The Criminal Cases Review Commission as a state strategic selection mechanism. *Am. Crim. Law Rev.* 42:1289
- Schlup v. Delo*, 513 U.S. 298 (1995)
- Shear MD, Stockwell J. 2005. DNA tests exonerate 2 former prisoners; Va. governor orders broad case review. *Washington Post*, Dec. 15, p. A1
- Snell T. 2007. *Capital Punishment 2006—Statistical Tables*. Washington, DC: U.S. Dep. Justice, Bur. Justice Stat.
- Snyder HN, Sickmund M. 2006. *Juvenile Offenders and Victims: 2006 National Report*. Washington, DC: U.S. Dep. Justice, Off. Justice Programs, Off. Juv. Justice Delinq. Prev.
- Taylor BN. 1996. Trapped on Rikers Island. *NY Times*, Sept. 7, p. A21
- United States v. Garrison*, 291 F. 646 (SDNY 1923)
- Warden R. 2005. *Wilkie Collins's The Dead Alive: The Novel, the Case, and Wrongful Convictions*. Chicago: Northwestern Univ. Press
- Wells GL, Small M, Penrod S, Malpass RS, Fulero SM, Brimacombe CAE. 1998. Eyewitness identification procedures: recommendations for lineups and photospreads. *Law Hum. Behav.* 22:603
- Westervelt SD, Humphrey JA, eds. 2002. *Wrongly Convicted: Perspectives on Failed Justice*. New Brunswick, NJ: Rutgers Univ. Press
- Yardley W. 2007. 1944 conviction of black G.I.'s is ruled flawed. *NY Times*, Oct. 27, p. A1



Contents

Home Away from Home: Collaborative Research Networks and
Interdisciplinary Socio-Legal Scholarship
Stuart A. Scheingold 1

Conditionality: Forms, Function, and History
Sarah L. Babb and Bruce G. Carruthers 13

Organizations, Regulation, and Economic Behavior: Regulatory
Dynamics and Forms from the Nineteenth to the Twenty-First
Century
Marc Schneiberg and Tim Bartley 31

The Political Economy of American Indian Gaming
Stephen Cornell 63

After Inclusion
Devon Carbado, Catherine Fisk, and Mitu Gulati 83

Divergent Paths: Conflicting Conceptions of Employment
Discrimination in Law and the Social Sciences
Robert L. Nelson, Ellen C. Berrey, and Laura Beth Nielsen 103

Providing Expert Knowledge in an Adversarial Context: Social
Cognitive Science in Employment Discrimination Cases
Susan T. Fiske and Eugene Borgida 123

Failed Forensics: How Forensic Science Lost Its Way and How It
Might Yet Find It
Michael J. Saks and David L. Faigman 149

Convicting the Innocent
Samuel R. Gross 173

The Psychology of Confessions
Saul M. Kassin 193

Forecasting Methods in Crime and Justice
Richard Berk 219

Undercover Policing and the Shifting Terms of Scholarly Debate: The United States and Europe in Counterpoint <i>Jacqueline E. Ross</i>	239
Jury Systems Around the World <i>Valerie P. Hans</i>	275
Women in the Legal Profession <i>Fiona Kay and Elizabeth Gorman</i>	299
The Reform of Legal Education in East Asia <i>Setsuo Miyazawa, Kay-Wah Chan, and Ilhyung Lee</i>	333
The Countermajoritarian Difficulty: From Courts to Congress to Constitutional Order <i>Mark A. Graber</i>	361
Toward a New Sociology of Rights: A Genealogy of “Buried Bodies” of Citizenship and Human Rights <i>Margaret R. Somers and Christopher N.J. Roberts</i>	385

Indexes

Cumulative Index of Contributing Authors, Volumes 1–4	427
Cumulative Index of Chapter Titles, Volumes 1–4	429

Errata

An online log of corrections to *Annual Review of Law and Social Science* articles may be found at <http://lawsocsci.annualreviews.org>