A Quantitative Look at the Two-Suspect Scenario

Two men are placed at the scene of a homicide. Each has an unsavory past and either could be the murderer—or an innocent man. It all depends on whether a witness should be believed, how the evidence is pieced together, and how the prosecutor decides to proceed. Should he try one man and set the other free? If the first prosecution fails, will he then try the second man? Can he try them simultaneously?

It seems disconcerting, at best, that a prosecutor would go after two men for the same crime, knowing full well that at least one was innocent. But this is what happened in Bradshaw v. Stumpf, a case in which a prosecutor sought the death penalty against two men—admittedly accomplices—by arguing inconsistently that each was the primary aggressor who fired the fatal shot. John Stumpf was sentenced to death on a theory of the case that the same prosecutor later attacked in the trial of Stumpf's accomplice. On federal habeas review, Stumpf claimed that this tactic violated his due process right to a reliable trial. The Supreme Court left this issue unresolved when it remanded the case to the Sixth Circuit.

This Comment presents a quantitative thought experiment to evaluate the claim that prosecutorial inconsistency is fundamentally unreliable. It concludes—perhaps counterintuitively—that when a prosecutor is genuinely unable to decide which of two suspects is guilty, bringing both cases to juries is the most reliable approach so long as there are protections against simultaneous convictions. While there may be other reasons to disfavor dual prosecutions, courts should reject claims of unreliability in cases in which the

2. See id. at 2403-04.
4. Stumpf, 125 S. Ct. at 2407-08.

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prosecutor has not manipulated the evidence in order to pursue multiple trials. Part I introduces the debate in the lower courts and sets out the controversy. Part II then offers a model that challenges the reliability claim.

I. EXISTING APPROACHES FOR INCONSISTENT PROSECUTIONS

Courts across the country have entertained arguments that it is unconstitutional for a prosecutor to conduct multiple trials with contradictory theories of a single crime. Although there is no single approach for evaluating these claims, reliability is a frequent theme. This appeal to reliability appears to be an outgrowth of Supreme Court decisions on prosecutorial misconduct that proscribe the presentation of testimony prosecutors know to be false and require prosecutors to correct testimony they elicit that would mislead the jury. Commentators and litigants have extended this reasoning to deduce that if the state pursues two defendants under mutually exclusive factual theories, the state must have educed false testimony in one of the trials, even if the state does not know which. Accordingly, the government must be increasing the risk that an innocent person will be convicted. This line of reasoning, while initially appealing, ultimately proves misguided when subjected to a fairly simple probabilistic analysis. As some courts have already realized, in evaluating the risk to the innocent, a distinction should be drawn between multiple prosecutions that involve unethical conduct and those that arise from a prosecutor's good faith uncertainty.

When defendants prevail on reliability claims, it is often due to blatant prosecutorial misconduct in the dual prosecution. Courts sensing that

5. See infra notes 12-20 and accompanying text.
6. See infra notes 13-14, 19-20 and accompanying text.
7. See Berger v. United States, 295 U.S. 78, 84-89 (1935); Mooney v. Holohan, 294 U.S. 103, 112 (1935); see also Nguyen v. Lindsey, 232 F.3d 1236, 1240 (9th Cir. 2000) ("It follows [from Berger and Mooney] that a prosecutor's pursuit of fundamentally inconsistent theories in separate trials against separate defendants charged with the same murder can violate due process if the prosecutor knowingly uses false evidence or acts in bad faith.").
11. See infra Part II.
prosecutors are out to win at any cost have vacated convictions in several federal and state jurisdictions. These courts have gestured toward reliability concerns in their judgments. For example, when the Eighth Circuit condemned a prosecutor’s extraction of two conflicting stories from a single witness before either trial began in order to use the more convenient story in each subsequent trial, the panel concluded that “the state’s error rendered unreliable” the conviction under review. The California Supreme Court similarly wrote that when a “change in theories between the two trials is achieved partly through deliberate manipulation of the evidence put before the jury, the use of such inconsistent and irreconcilable theories impermissibly undermines the reliability of the convictions or sentences thereby obtained.” In both of these cases, the findings of bad faith were central to the outcomes.

When prosecutors’ decisions to undertake dual prosecutions appear to stem from good faith uncertainty, however, courts are divided. The two extremes are set out by the Fifth Circuit in Nichols v. Scott and the Sixth Circuit in Bradshaw v. Stumpf. In Nichols, two men admitted to firing bullets at a victim who died from a single gunshot wound. Both men were convicted and sentenced to death under the mutually exclusive factual conclusions that each man fired the fatal shot. The Fifth Circuit affirmed, finding that the trials should be evaluated independently and that nothing in the first trial affected the reliability of the second.

In the Sixth Circuit, John Stumpf pleaded guilty to aggravated murder but argued during the mitigation hearing that his accomplice fired the fatal shot. The state argued otherwise and Stumpf was sentenced to death. A few months later, Stumpf’s accomplice, Clyde Wesley, was tried by the same prosecutor, who then argued that Wesley was the gunman. Because a jailhouse snitch had

12. See, e.g., Groose, 205 F.3d at 1047-48; Thompson v. Calderon, 120 F.3d 1045, 1059 (9th Cir. 1997) (en banc), rev’d on other grounds, 523 U.S. 538 (1998); In re Sakarias, 106 P.3d 931, 941-51 (Cal. 2005) (finding a dual prosecution in bad faith and prejudicial as to one defendant but harmless as to the other); see also Jacobs v. Scott, 513 U.S. 1067, 1069 (Stevens, J., dissenting from denial of certiorari) (finding a “serious question of prosecutorial misconduct” when the state takes “flatly inconsistent positions in two different cases”).

13. Groose, 205 F.3d at 1052.


17. 69 F.3d 1255; see also State v. Watkins, 659 N.W.2d 526, 532 (Iowa 2003) (classifying good faith multiple prosecutions as within the “right of the prosecution to rely on alternative theories in criminal prosecutions”).
come forward between the two trials, the Sixth Circuit found that “this [was] not a case where the prosecutor selectively presented evidence.” Nevertheless, the Sixth Circuit vacated Stumpf’s conviction, concluding that “inconsistent theories render convictions unreliable [and thus] constitute a violation of the due process rights of any defendant in whose trial they are used.” When the Supreme Court remanded on technical grounds last Term, it asked the Sixth Circuit to reconsider how this analysis applies when limited to the sentencing phase of the trial.

So, what should be done in cases like Nichols and Stumpf? Intuitively, the reliability argument is effective. The justice system should strive not to subject innocent persons to trials for capital murder. But a contrary position may be equally convincing: If the prosecutor does not know who is guilty, shouldn’t the decision lie with a jury? Why force a prosecutor either to sacrifice a conviction in hand or to abandon a new lead? This Comment offers a quantitative rationale for avoiding this dilemma in favor of inconsistent prosecutions.

II. A PROBABILISTIC EVALUATION OF DUAL PROSECUTIONS

The notion of reliability is naturally tied to probability and statistics. This Part presents a brief model to assess the reliability of various possible rules for inconsistent prosecutions. Incorporating conviction-hungry prosecutors and error-prone juries, the model demonstrates that so long as juries make some positive contribution to the truth-seeking process, dual prosecutions will result in fewer wrongful convictions than the alternatives.

Consider a circumstance not unlike the premise of Stumpf. A crime has been committed by one of two suspects. The prosecutor legitimately does not know who is guilty, but there is probable cause to indict either or both. Indicting both suspects would require the prosecutor to tell a different story of the crime in each trial. If this were a minor crime, perhaps the prosecutor would leave the case unsolved, but there is strong pressure on the prosecutor to secure a conviction. What rule for inconsistent prosecutorial theories

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19. Stumpf, 367 F.3d at 613.
20. The Supreme Court found that Stumpf could not properly contest his conviction for aggravated murder because he had pleaded guilty to the charge without any influence of inconsistent prosecutions. Stumpf, 125 S. Ct. at 2407. But because the Sixth Circuit had not expressly considered how its logic applied to sentencing alone, the Court remanded. Id. at 2407-08.
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minimizes the prospects for wrongful conviction and maximizes the prospects for convicting the true perpetrator? Judges have recommended three plausible regimes.

First, a rule of judicial estoppel says that once a prosecutor makes an argument that a court accepts—i.e., once one person has been convicted—she may not pursue a contrary theory. Under this rule, a conviction-seeking prosecutor would randomly select which of the two suspects to try first. If the first trial results in an acquittal, the second defendant would be tried. But if the first trial results in a conviction, this rule’s incentives would lead the prosecutor to stop pursuing the second suspect lest she jeopardize the original conviction.

A second rule provides for offsetting convictions. A prosecutor would be free to pursue inconsistent theories simultaneously, but the rule requires both convictions to be vacated if both defendants are convicted. Offsetting convictions would act like mistrials, and the state could then try the defendants again.

The final rule envisions trials as independent judicial proceedings, as did the Fifth Circuit in Nichols. This rule says that what happens in one

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21. Simultaneously achieving both goals is rarely possible. Following the common sentiment that “it is better that ten guilty persons escape, than that one innocent suffer,” WILLIAM BLACKSTONE, 4 COMMENTARIES *352, this analysis aims to minimize wrongful convictions.

22. This proposal is popular in the secondary literature. See, e.g., Poulin, supra note 9, at 1451-53. A more extreme proposal would forbid a prosecutor from ever changing her story. See Steven F. Shatz & Lazuli M. Whitt, The California Death Penalty: Prosecutors’ Use of Inconsistent Theories Plays Fast and Loose with the Courts and the Defendants, 36 U.S.F. L. REV. 853, 865-66, 905-06 (2002). No court has adopted this extreme approach, and it seems unworkable to force prosecutors to make decisions knowing that future discoveries would be forever lost to the justice system. Accordingly, I do not consider this approach.

23. A variation on this theme would permit the state to determine which of the two convictions to vacate. See, e.g., Thompson v. Calderon, 120 F.3d 1045, 1071 (9th Cir. 1997) (en banc) (Kozinski, J., dissenting) (arguing that “[i]n the case of mutually inconsistent verdicts . . . the state is required to take the necessary steps to set aside or modify at least one of the verdicts”), rev’d on other grounds, 523 U.S. 538 (1998). However, this approach would place the final decision in the hands of the prosecutor who, by hypothesis, is unsure as to the correct perpetrator. It seems consistent with American factfinding practice to empanel new juries. See also Transcript of Oral Argument at 12-13, Stumpf, 125 S. Ct. 2398 (No. 04-637) (recording Justice Scalia as suggesting that executive clemency could be the proper remedy in the case of dual convictions). Note that if both defendants were acquitted, double jeopardy would preclude any retrials.

24. See Nichols v. Scott, 69 F.3d 1255 (5th Cir. 1995); see also People v. Watts, 91 Cal. Rptr. 2d 1, 10 (Ct. App. 1999) (“That the evidence adduced during one proceeding provides proof that one thing in fact occurred, while the evidence adduced during a second proceeding provides proof that a different thing in fact occurred, is an unavoidable risk of the judicial process.”).
courtroom has no bearing on what happens in another. Thus, even two factually inconsistent death sentences would be permitted. The Nichols framework results in the greatest possibility that somebody will be convicted but offers no safeguards against wrongful convictions. A rule of judicial estoppel would result in the fewest trials, because if the (randomly chosen) first defendant were convicted, there would be no second trial. The goal, however, is to minimize the probability that the innocent man will be convicted.  

To figure out which rule convicts the innocent suspect least frequently, we can model the problem as the interaction of type-I and type-II errors. Assume that the trials are conducted independently and that, when the innocent man is tried, the jury wrongfully convicts with probability $\alpha$. Similarly, in trials of the factually guilty man, the jury errs and acquits with probability $\beta$. Incorporating the rational course of action for a prosecutor seeking convictions, the conviction probabilities can be computed for the right and wrong suspects, under each of the three policy options, as functions of $\alpha$ and $\beta$.  

With a rule of judicial estoppel, under which the prosecutor has incentives to randomly select one of the suspects to try, there are two ways to wrongfully convict the innocent man: either he is tried first (which happens with probability 0.5) and convicted; or the guilty man is tried first (with probability 0.5), he is acquitted, and the wrong man is then tried and convicted. So, the total probability of a wrongful conviction is $0.5\alpha + 0.5\beta$. Under the Nichols rule, the innocent man is convicted with probability $\alpha$ regardless of what happens in the guilty man’s trial. And, with offsetting convictions, the innocent man is convicted in the first trial with probability $\alpha$, but the conviction stands only if the jury trying the guilty man also errs and acquits, a phenomenon with total probability $\alpha\beta$. When both juries convict, with probability $\alpha(1 - \beta)$, the convictions are nullified and the prosecutor continues trying both men. The overall error rate is given in Table 1.

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25. To be sure, there are real costs to being subjected to a criminal trial, even for defendants who are ultimately acquitted. These costs should play into the decision whether to allow dual prosecutions, reliability notwithstanding.

26. In statistics, it is type-I error to reject a hypothesis when it is true. Conversely, it is type-II error to accept the hypothesis when it is false. Here, because criminal trials begin with a null hypothesis that the defendant is innocent, type-I error means convicting the innocent while type-II error means acquitting the guilty.
Table 1.
OVERALL CONVICTION RATES FOR RULES ON PROSECUTORIAL INCONSISTENCY

<table>
<thead>
<tr>
<th>RULE</th>
<th>CONVICT INNOCENT</th>
<th>CONVICT GUILTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judicial Estoppel</td>
<td>$0.5\alpha + 0.5\alpha\beta$</td>
<td>$0.5(1 - \beta) + 0.5(1 - \alpha)(1 - \beta)$</td>
</tr>
<tr>
<td>Convictions Offset</td>
<td>$\alpha\beta$</td>
<td>$(1 - \alpha)(1 - \beta)$</td>
</tr>
<tr>
<td>Independent Proceedings</td>
<td>$\alpha$</td>
<td>$1 - \beta$</td>
</tr>
</tbody>
</table>

By way of example, suppose in these close cases that juries would wrongly convict the innocent defendant twenty percent of the time ($\alpha = 0.2$) while correctly convicting the guilty defendant seventy percent of the time ($\beta = 0.3$). As Table 2 indicates, a judicial rule providing only for offsetting convictions would achieve the correct result the most often (65%) while wrongfully convicting the innocent man least often (7%).

Table 2.
TRIAL OUTCOME PROBABILITIES FOR $\alpha = 0.2$, $\beta = 0.3$

<table>
<thead>
<tr>
<th>RULE</th>
<th>CONVICT INNOCENT</th>
<th>CORRECT RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judicial Estoppel</td>
<td>0.13</td>
<td>0.63</td>
</tr>
<tr>
<td>Convictions Offset</td>
<td>0.07</td>
<td>0.65</td>
</tr>
<tr>
<td>Independent Proceedings</td>
<td>0.20</td>
<td>0.56</td>
</tr>
</tbody>
</table>

These results are symptomatic of the flaws of the other approaches: Judicial estoppel provides stronger disincentives for the state to continue investigating once it gets a conviction, and both judicial estoppel and the Nichols approach sacrifice the error-catching opportunities of parallel trials. If dual convictions offset, the wrong suspect is convicted only when both juries misjudge.

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27. The true values of $\alpha$ and $\beta$ are not known, so 0.2 and 0.3 are merely demonstrative. The value of $\beta$ was adapted from Neil Vidmar et al., *Should We Rush To Reform the Criminal Jury?: Consider Conviction Rate Data*, 80 JUDICATURE 286 (1997), which found jury conviction rates varying from 58.9% to 86.1% across different jurisdictions and crimes.

28. The correct result is both convicting the guilty defendant and not convicting the innocent defendant.
This simple analysis yields a much broader result: For all plausible jury error rates, a rule of offsetting convictions, which permits inconsistent prosecutions, most reliably protects the innocent. Figure 1 shows how the three policies considered in this Comment compare. The two axes represent the probability that a jury convicts the innocent and the probability that a jury convicts the guilty. The curve indicates where the policies of offsetting convictions and judicial estoppel have identical error rates. For all points in the shaded region, offsetting convictions result in the fewest wrongful convictions. For points below the curve, judicial estoppel is best. Notably, from the standpoint of protecting the innocent, the *Nichols* approach is never optimal.

Figure 1.

**OPTIMAL POLICY AS A FUNCTION OF TYPE-I AND TYPE-II ERRORS**

![Graph showing optimal policy as a function of type-I and type-II errors](https://example.com/graph1)

But the \((\alpha, 1 - \beta)\) combinations plotted in Figure 1 are not equally likely to occur. The rule providing for offsetting convictions is always optimal in the range defined by reasonable assumptions about jury accuracy. The dotted line in Figure 1 represents a jury that has no ability to distinguish between the innocent and the guilty and convicts either with equal probability. For all points above the dotted line (i.e., wherever \(1 - \beta\) exceeds \(\alpha\)), the jury convicts
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the guilty man more often than the innocent man and thereby adds value to the process. And whenever $1 - \beta$ is greater than $\alpha$, the best policy is offsetting convictions. If juries have any capacity to distinguish between innocence and guilt, then the use of inconsistent prosecutorial theories actually enhances reliability.

CONCLUSION

If a prosecutor is genuinely torn between two suspects, then letting separate juries decide which defendant is guilty is more reliable than forcing the prosecutor to choose only one suspect to try. To be sure, this Comment should not be misconstrued as advocating the frequent use of multiple trials. It should be a rare situation in which two suspects seem equally likely to be guilty. And as a prosecutor becomes more certain as to which suspect is guilty, the reliability concerns of dual prosecutions escalate while the benefits subside.

The motivating force behind this Comment is that our due process jurisprudence should not provide incentives for prosecutors to make unilateral judgments that displace the time-tested role of juries. While prosecutorial attempts to manipulate evidence in the pursuit of multiple prosecutions do render trials unreliable, courts should not blindly extend the label of unreliability to cases, like Stumpf, in which the prosecutors appear to have acted ethically. As this analysis shows, using the adversarial process to ferret out the truth legitimately protects the rights of the falsely accused.

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