ARTICLES

SNAKE OIL WITH A BITE: THE LETHAL VENEER OF SCIENCE AND TEXAS’S DEATH PENALTY

James R. Acker*

I. INTRODUCTION

Texas is this country’s undisputed leader in making use of the death penalty. With 546 executions in the last four decades through 2017, Texas has carried out almost five times as many as Virginia, the next leading state with 113, and has accounted for more than one-third of the nation’s total during the modern era of capital punishment.1 Roughly 250 prisoners were awaiting a date with the executioner in the state as 2017 dawned, comprising the country’s third largest death row.2 The abundant executions and death sentences are attributable in part to the state’s sizeable population. With nearly 28 million residents,3 Texas is the nation’s second most populous state,4 with a commensurate amount of crime including a large number of murders committed annually.5 The state thus has many opportunities to impose and carry out death sentences.6

* Distinguished Teaching Professor, School of Criminal Justice, University at Albany. B.A., Indiana University; J.D., Duke Law School; Ph.D., University at Albany.
1 Number of Executions by State and Region Since 1976, DEATH PENALTY INFO. CTR., https://deathpenaltyinfo.org/number-executions-state-and-region-1976 (last updated Jan. 19, 2018). A total of 1466 executions were carried out nationally from 1976 through November 2017. Id. Texas, with 546 and another scheduled for December 2017, is responsible for far more executions than the next leading states, Virginia (113) and Oklahoma (112). Id. No other state executed more than 100 individuals during this period. Id.
6 Oklahoma, with a much smaller population than Texas, has a higher per capita rate of
But other factors also are at work in explaining why Texas has embraced capital punishment with such enthusiasm. Prosecutors, particularly in parts of the state, have not been reluctant to pursue capital sentences. For example, in Houston, the nation’s fourth largest city and the hub of surrounding Harris County, the district attorney’s office has been known to aggressively pursue death sentences, especially during the administration of Johnny Holmes, Jr. (1979-2001) and his successor, Chuck Rosenthal (2001-2008). Additionally, Texas lagged for years in supplying well qualified and adequately funded defense attorneys for indigents charged with capital crimes, thus skewing the adversarial system in favor of the prosecution and the production of death sentences. The state and federal courts that serve Texas have been significantly less likely than courts elsewhere to find reversible error in capital cases. And executions than Texas. Oklahoma ranks first nationally on that measure (.229 executions/10,000 population), and Texas ranks second (.207 executions/10,000 population). State Execution Rates. DEATH PENALTY INFO. CTR., https://deathpenaltyinfo.org/state-execution-rates/?cid=8&did=477 (last updated Feb. 11, 2015).

Four of Texas’s 254 counties—Bexar, Dallas, Harris, and Tarrant—accounted for 51 percent of the death sentences imposed in Texas between 1976 and 2008, while no death sentences were imposed during that time period in more than half (130) of the counties in the state. Adam M. Gershowitz, Statewide Capital Punishment: The Case for Eliminating Counties’ Role in the Death Penalty, 63 VAND. L. REV. 307, 315–16 (2010). See also Robert J. Smith, The Geography of the Death Penalty and Its Ramifications, 92 B.U.L. REV. 227, 232 (2012) (“Texas has 254 counties, of which 222 (88%) sentenced no one to death from 2004 to 2009.”).


it may well be that Texans simply possess distinctive attitudes about crime and punishment, thus generally leaning jurors and inhabitants of the state toward favoring the death penalty for murder.\textsuperscript{12}

On top of these possible explanations, Texas’s capital sentencing statute\textsuperscript{13} is unlike that of nearly all other states in the country, in that it conditions offenders’ death penalty-eligibility on proof of their future dangerousness.\textsuperscript{14} In supplying evidence in support of such predictions, and at virtually every other stage of the state’s capital punishment process, criminal justice officials have alternately enlisted expert witnesses and scientists who have helped move accused and convicted offenders progressively closer to the execution chamber, and ignored or discounted scientific norms and developments inconsistent with securing and carrying out capital sentences. All too often, the determinations made in support of death sentences are of dubious reliability—including opinions and conclusions based on what many would agree qualify as junk science—thus greatly enhancing the risk of miscarriages of justice in capital cases.

This article examines the several stages of Texas capital prosecutions in which improper, suspect, or unreliable expert and scientific opinions have contributed to the prosecution, conviction, sentencing, and execution of persons accused of committing murder. Such opinions have figured into decisions made from the beginning to the end of capital cases—from ascertaining defendants’


\textsuperscript{13} See TEX. CODE CRIM. PROC. ANN. art. 37.071, § 2 (West 2018).

\textsuperscript{14} Id., art. 37.071, § 2(b)(1). Oregon’s statute closely resembles Texas’s capital sentencing law, and similarly predicates death penalty eligibility on a finding of the offender’s future dangerousness. OR. REV. STAT. ANN. § 163.150(1)(b)(B) (West 2018). Under Virginia law, for the offender to be eligible for the death penalty, the jury must find either that the offender poses a risk of future dangerousness or that the murder “was outrageously or wantonly vile, horrible or inhuman, in that it involved torture, depravity of mind or aggravated battery to the victim.” VA. CODE ANN. § 19.2-264.4(C) (West 2018). See James R. Acker & Charles S. Lanier, Matters of Life and Death: The Sentencing Provisions in Capital Punishment Statutes, 31 CRIM. LAW BULLETIN 19, 49–52 (1995); Megan Shapiro, An Overdose of Dangerousness: How “Future Dangerousness” Catches the Least Culpable Defendants and Undermines the Rationale for the Executions It Supports, 45 AM. J. CRIM. L. 145, 162–63 (2009).
competency to stand trial through their execution—and have involved virtually all stages of the justice process and all justice system officials. Wittingly or unwittingly, unreliable expert testimony and dubious science have been employed in the administration of Texas’s death penalty law.\textsuperscript{15} The misappropriation of science risks enabling and perpetuating grave miscarriages of justice in the state’s capital murder cases.

II. CAPITAL PUNISHMENT IN TEXAS: THE LAW

A pair of Supreme Court decisions involving Georgia’s death penalty are widely recognized as marking the end of one era of capital punishment in the nation’s history and ushering in another. In 1972, in \textit{Furman v. Georgia},\textsuperscript{16} five justices concluded that laws providing juries with unbridled discretion to decide which offenders convicted of capital crimes should live, and which should die, violated the Eighth Amendment’s prohibition against cruel and unusual punishments.\textsuperscript{17} Four years later, in \textit{Gregg v. Georgia},\textsuperscript{18} the Court gave its approval to revised legislation that incorporated standards designed to limit and guide capital sentencing discretion.\textsuperscript{19}

Whatever bragging rights may be associated with these landmark rulings, Texas has a legitimate claim to them as well. When the Court invalidated the death penalty, in \textit{Furman}, as it was administered in 1972, \textit{Branch v. Texas}\textsuperscript{20} was joined for decision with

\textsuperscript{15} See Shapiro, supra note 14, at 163.
\textsuperscript{16} Furman v. Georgia, 408 U.S. 238 (1972) (per curiam).
\textsuperscript{17} The opinions of Justices Douglas, Stewart, and White identified problems associated with the death penalty’s administration. \textit{See id.} at 249–50 (Douglas, J., concurring) (citation omitted); \textit{id.} at 309–10 (Stewart, J., concurring); \textit{id.} at 312–13 (White, J., concurring). The justices respectively argued that when juries are given unfettered sentencing discretion, death sentences risk being imposed in impermissibly discriminatory fashion, arbitrarily, or are incapable of promoting legitimate penological objectives such as retribution or deterrence. \textit{See id.} at 257–58 (Douglas, J., concurring), \textit{id.} at 309–10 (Stewart, J., concurring); \textit{id.} at 313 (White, J., concurring). Justices Brennan and Marshall were of the opinion that the death penalty is per se unconstitutional, or inherently violates the Eighth Amendment’s cruel and unusual punishments clause, independently of procedural or administrative infirmities. \textit{See id.} at 305 (Brennan, J., concurring); \textit{id.} at 358–59 (Marshall, J., concurring), Chief Justice Burger and Justices Blackmun, Powell, and Rehnquist dissented. \textit{Id.} at 375.
\textsuperscript{19} See \textit{id.} at 206–07.
Furman. And in 1976, in Jurek v. Texas, a companion case to Gregg, the justices reviewed and approved of Texas’s revised capital punishment legislation, although the Georgia case again commanded the most attention. The current capital murder and sentencing provisions in Texas have undergone change since the Supreme Court reviewed and approved them in Jurek, but in many significant respects they continue to resemble the original provisions.

To be eligible for the death penalty in Texas, a defendant must first be convicted of capital murder. Under current law, proof is required at the trial’s guilt phase that the defendant killed his victim(s) “intentionally or knowingly,” accompanied by one or more of nine enumerated statutory aggravating circumstances. The present list

21 Furman, 408 U.S. at 253 (citations omitted). Branch had been convicted of rape and sentenced to death pursuant to Texas law. Id. at 239 (citation omitted). Another case from Georgia, Jackson v. Georgia, which involved a rape conviction and death sentence, also was joined for decision with Furman (Furman had been convicted and sentenced to death for a murder committed in Georgia). Id. (citation omitted).

22 Jurek v. Texas, 428 U.S. 262 (1976). The alignment of the justices was the same as in Gregg v. Georgia. See supra note 18 (indicating the lead opinion was joined by Justices Stewart, Powell, and Stevens; Chief Justice Burger and Justices White, Blackmun, and Rehnquist concurred in the judgment; and Justices Brennan and Marshall dissented). Justices Brennan and Marshall’s opinions apply to both Jurek and Gregg. See Gregg, 428 U.S. at 227, 231; Jurek, 428 U.S. at 264, 276–77 (citations omitted).

23 See Jurek, 428 U.S. at 276 (plurality opinion).

24 Male pronouns are used throughout this article because 241 of the 247 persons under sentence of death in Texas in Spring 2017 were men. See Death Row, supra note 2 at 60–61. All but six of the 548 persons executed in Texas since 1977 have been men. See Searchable Execution Database, Death Penalty Info. Ctr., https://deathpenaltyinfo.org/views-executions (last visited Feb. 28, 2018) (click “F” under the Gender of Person Executed filter category and “TX” under the state filter category).


26 The aggravating circumstances, enumerated in Tex. Penal Code § 19.03(a), are as follows:

(1) the person murders a peace officer or fireman who is acting in the lawful discharge of an official duty and who the person knows is a peace officer or fireman;

(2) the person intentionally commits the murder in the course of committing or attempting to commit kidnapping, burglary, robbery, aggravated sexual assault, arson, obstruction or retaliation, or terrorist threat . . . ;

(3) the person commits the murder for remuneration or the promise of remuneration or employs another to commit the murder for remuneration or the promise of remuneration;

(4) the person commits the murder while escaping or attempting to escape from a penal institution;

(5) the person, while incarcerated in a penal institution, murders another:

(A) who is employed in the operation of the penal institution; or

(B) with the intent to establish, maintain, or participate in a combination or in the profits of a combination;

(6) the person:

(A) while incarcerated for an offense under this section or Section 19.02, murders another; or

(B) while serving a sentence of life imprisonment or a term of 99 years for an offense under Section 20.04, 22.021, or 29.03, murders another;
of aggravating factors qualifying a capital murderer for death-penalty eligibility has grown from the original five circumstances included in the legislation when it was enacted in 1973, and when the law was considered by the Supreme Court in Jurek. Following a defendant’s conviction for capital murder, if the prosecution chooses to pursue a death sentence, a penalty phase of the trial is conducted before the same jury that found the defendant guilty.

Under the law now in effect, in cases other than those involving guilt for capital murder “as a party” (pertaining to accomplice or codefendant liability for a killing committed by the principal), the jury initially is instructed to consider a single sentencing issue focusing on the defendant’s likely future dangerousness: “whether there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society.” In addressing this question, the jurors are told to consider all evidence admitted at both the guilt and sentencing phases of the trial, “including evidence

(7) the person murders more than one person:
   (A) during the same criminal transaction; or
   (B) during different criminal transactions but the murders are committed pursuant to the same scheme or course of conduct;
(8) the person murders an individual under 10 years of age; or
(9) the person murders another person in retaliation for or on account of the service or status of the other person as a judge or justice of the supreme court, the court of criminal appeals, a court of appeals, a district court, a criminal district court, a constitutional county court, a statutory county court, a justice court, or a municipal court.

id. § 19.03(a)(1)–(9).

28 The Supreme Court reviewed Texas’s capital sentencing procedures in Jurek v. Texas. The plurality opinion explained that “[t]he new Texas Penal Code limits capital homicides to intentional and knowing murders committed in five situations: murder of a peace officer or fireman; murder committed in the course of kidnaping, burglary, robbery, forcible rape, or arson; murder committed for remuneration; murder committed while escaping or attempting to escape from a penal institution; and murder committed by a prison inmate when the victim is a prison employee.” Jurek, 428 U.S. at 268 (citing Tex. Penal Code § 19.03 (1974)).
29 Prosecutors are not required to seek a death sentence in capital murder cases. If a death sentence is not sought, a defendant found guilty of capital murder is sentenced by the trial judge to life imprisonment or life imprisonment without the possibility of parole. See Tex. Code Crim. Proc. Ann. art. 37.071, § 1 (West 2018).
30 See id. art. 37.071, § 2(a)(1), 44.29(c). In cases in which defendants’ original capital sentences were vacated on appeal and a new death sentence is sought, a different jury is empaneled to consider punishment. See id. art. 44.29(c).
31 See id. art. 37.071, § 2(b)(2).

of the defendant’s background or character or the circumstances of the offense that militates for or mitigates against the imposition of the death penalty.”

Jurors are further instructed that if they unanimously conclude beyond a reasonable doubt that the answer to the future dangerousness question is yes, they must then answer:

Whether, taking into consideration all of the evidence, including the circumstances of the offense, the defendant’s character and background, and the personal moral culpability of the defendant, there is a sufficient mitigating circumstance or circumstances to warrant that a sentence of life imprisonment without parole rather than a death sentence be imposed.

The jurors are specifically instructed to “consider mitigating evidence to be evidence that a juror might regard as reducing the defendant’s moral blameworthiness.” A negative answer to the sentencing question, which can be returned only on the agreement of all twelve jurors, requires the judge to sentence the offender to death. An affirmative answer, requiring the agreement of ten jurors, results in the judge imposing a sentence of life imprisonment without parole, as does the jurors’ inability to arrive at a verdict.

Texas adopted life imprisonment without parole as the alternative sentence to death in 2005, becoming one of the last jurisdictions to do so.

54 See id. § 2(d)(1).
55 See id. §§ 2(c), (d)(2). A negative answer to the question, resulting in the offender’s being sentenced to life imprisonment without possibility of parole, can be returned by vote of 10 jurors. See id. § 2(d)(2).
56 See id. § 2(e)(1).
57 See id. § 2(f)(4).
58 See id. § 2(f)(2).
59 See id. § 2(g).
60 See id. § 2(b).
61 See id. § 2(g).
62 See id. Jurors are instructed that if they reach agreement (by securing ten or more votes) that sufficient mitigating circumstances exist to warrant a sentence of life imprisonment without parole, the defendant will receive a life without parole sentence. See id. § 2(e)(2)(A). However, they are not instructed about what sentence will be imposed if they neither unanimously vote in favor of death nor reach agreement by at least ten jury members that sufficient mitigating circumstances exist to result in a sentence of life imprisonment without parole. See id. By failing to require that jurors must be informed about what sentence is imposed under those circumstances, the statute arguably invites jurors to speculate, and hence raises constitutional questions. See Robert Clary, Texas’s Capital Sentencing Procedure Has a Simmons Problem: Its Gag Statute and 12-10 Rule Distort the Jury’s Assessment of the Defendant’s “Future Dangerousness”, 54 AM. CRIM. L. REV. 57, 57 (2017).
In addition to introducing life imprisonment without parole as the alternative punishment option in death penalty trials, Texas’s current capital sentencing provisions differ in other important aspects from the original post-Furman procedures. The statute was amended in 2001 to specifically prohibit the state from offering evidence “to establish that the race or ethnicity of the defendant makes it likely that the defendant will engage in future criminal conduct.”44 Under the 1973 statute, jurors were instructed to consider the future dangerousness question as well as two additional issues: “whether the conduct of the defendant that caused the death of the deceased was committed deliberately and with the reasonable expectation that the death of the deceased or another would result,”45 and “if raised by the evidence, whether the conduct of the defendant in killing the deceased was unreasonable in response to the provocation, if any, by the deceased.”46 Those questions were removed when the statute was amended in 1991.47

Absent from the original legislation were explicit directives regarding the jury’s consideration of mitigation evidence and the offender’s moral culpability.48 The Supreme Court had made clear in another one of its 1976 death penalty decisions, Woodson v. North Carolina,49 that in capital cases the sentencing authority must be allowed to consider case-specific offense circumstances and offender characteristics before making a punishment decision.50 Two years later the justices ruled explicitly that relevant mitigation evidence cannot be excluded from the penalty phase of a capital trial.51


See CRIM. PROC. ANN. art. 37.071, § (b)(1) (West 1975-1976)).

See CRIM. PROC. ANN. tit. 1, art. 37.071, § (b)(3) (Supp. 1975-1976)).


See S.B. 880, 72nd Leg., 1991 Reg. Sess. (Tex. 1991) (showing that directives regarding the jury’s consideration of mitigation evidence and the offender’s moral culpability were added in the 1991 amendment).


See Lockett v. Ohio, 438 U.S. 586, 604 (1978) (“[T]he Eighth and Fourteenth Amendments require that the sentencer, in all but the rarest kind of capital case, not be precluded from
Jurek, the justices had reasoned that the special issues in the Texas death penalty statute were sufficiently expansive to allow juries to consider and make use of evidence relevant to their sentencing decision.\footnote{See Jurek v. Texas, 428 U.S. 262, 273–74 (1976) (plurality opinion).} However, in 1989, in Penry v. Lynaugh, the Court found the statute to be unconstitutional as applied to an offender whose claimed intellectual disability and childhood abuse were offered as mitigation evidence at his capital sentencing hearing.\footnote{Penry v. Lynaugh, 492 U.S. 302 (1989). A majority of the Court rejected the claim that the Eighth Amendment forbids the execution of intellectually disabled, or mentally retarded offenders. See id. at 340. The justices later abrogated this aspect of Penry, ruling in Atkins v. Virginia, that the cruel and unusual punishments clause of the Eighth Amendment prohibits executing intellectually disabled offenders. See Atkins v. Virginia, 536 U.S. 304, 321 (2002) (citation omitted).} The justices ruled that Texas’s death penalty provisions did not provide an effective vehicle for the jury to consider intellectual disability and history of abuse as mitigating factors and, indeed, that evidence concerning them could serve as a “two-edged sword” because of its potential link to an offender’s likely future dangerousness. In response to this ruling, the Texas legislature substantially revised the capital sentencing statute in 1991 to incorporate the current provisions which address mitigating circumstances and instruct jurors to consider the defendant’s moral blameworthiness when considering punishment.\footnote{See TEX. CODE CRIM. PROC. ANN. art. 37.071, §§ 2(f), (i) (West 2018). See also Morrow & Morrow, supra note 44, at 998–99; Peggy M. Tobolowsky, What Hath Penry Wrought? Mitigating Circumstances and the Texas Death Penalty, 19 AM. J. CRIM. L. 345, 380–82 (1992); Walsh, supra note 47, at 1085–88.}

The legislation further provides that cases resulting in a death sentence are subject to automatic review on appeal by the Texas Court of Criminal Appeals. Under the Texas Constitution, the governor lacks the authority in capital and other criminal cases to considering, as a mitigating factor, any aspect of a defendant’s character or record and any of the circumstances of the offense that the defendant proffers as a basis for a sentence less than death.

\footnote{See TEX. CODE CRIM. PROC. ANN. art. 37.071, § 2(h). Capital convictions and sentences also were automatically appealed to the Texas Court of Criminal Appeals under the original post-Furman death penalty statute. Jurek v. Texas, 428 U.S. 262, 269 (1976) (plurality opinion) (citing CODE CRIM. PROC. art. 37.071, § 6 (West 1975-1976)).}
commute an offender’s sentence or otherwise grant clemency without
the prior recommendation of the Board of Pardons and Paroles.\textsuperscript{60} The
members of that Board are appointed by the governor with the
approval of the state senate.\textsuperscript{61} The governor is authorized to grant a
single reprieve, or delay in carrying out a capital sentence, for a
period not to exceed thirty days.\textsuperscript{62} During its early statehood, Texas
carried out executions by hanging, then switched to the electric chair
in 1923.\textsuperscript{63} It adopted lethal injection as its method of execution by
legislation enacted in 1977,\textsuperscript{64} and became the first state to carry out
an execution by lethal injection, doing so in 1982.\textsuperscript{65}

Not surprisingly, Texas’s statutory framework defining capital
murder and governing the capital sentencing process bears the
distinctive imprint of lawyers and politicians. It does not suggest the
handiwork of scientists and mental health professionals. Yet
embedded in the legislation, and in important aspects of its
implementation, are various assumptions, principles, and
informational needs which are logically grounded in the sciences and
about which qualified experts may, in theory, be consulted for their
opinions. The result has been an often troubled and sometimes
contentious interplay of law and science in the high stakes context of
the administration of Texas’s death penalty, from its initial stages
through its culmination, and from the outset of the modern capital
punishment era to the present.

\textsuperscript{60} See Tex. Const. art. 4, § 11(b). This provision became effective in 1936 following previous
governors’ abuses of the clemency authority. Interpretive Commentary (Westlaw 2007)
(construing Tex. Const. art. 4, § 11(b)); see Graham v. Bd. of Pardons & Paroles, 913 S.W.2d
745, 749 (Tex. App. 1996); Daniel T. Kohil, How to Grant Clemency in Unforgiving Times, 31
Cap. Univ. L. Rev. 219, 234 (2003); Austin Sarat, Memorializing Miscarriages of Justice:
Clemency Petitions in the Killing State, 42 L. & Soc’y Rev. 183, 184 (2008); Steiker & Steiker,
supra note 11, at 1907.

\textsuperscript{61} See Tex. Govt. Code Ann. § 508.031(a) (West 2018); Katie R. Van Camp, The Pardoning
Power: Where Does Tradition End and Legal Regulation Begin?, 83 Miss. L.J. 1271, 1305
(2014); Steve Woods, A System Under Siege: Clemency and the Texas Death Penalty After the

\textsuperscript{62} See Tex. Const. art. 4, § 11(b).

\textsuperscript{63} Marquart, supra note 27, at 12.

\textsuperscript{64} See Tex. Code Crim. Proc. Ann. art. 43.14, § (a) (West 2018); Marquart, supra note 27,
at 132; Ty Alper, Anesthetizing the Public Conscience: Lethal Injection and Animal Euthanasia,
35 Fordham Urb. L.J. 817, 817 (2008); Deborah W. Denno, Getting to Death: Are Executions

\textsuperscript{65} See Marquart, supra note 27, at 135; Woody R. Clermont, Your Lethal Injection Bill: A
Fight to the Death over an Expensive Yellow Jacket, 24 St. Thomas L. Rev. 248, 272 (2012);
Denno, supra note 64, at 375.
III. LAW, SCIENCE, AND WHERE THE TWAIN OFTEN FAIL TO MEET IN TEXAS DEATH PENALTY CASES

A. Competency to Stand Trial

Before Texas carried out its first post-Furman execution, it suffered a reversal by the United States Supreme Court in a death penalty case. In December 1973, Ernest Benjamin Smith was charged with taking part in a robbery-murder committed in Dallas three months earlier. After the prosecution announced that it would seek a death sentence, the trial judge, on his own initiative and without first notifying defense counsel, ordered Smith to be examined by a psychiatrist to evaluate his competency to stand trial. Unaccompanied by counsel and without being advised of his Miranda rights, Smith met with Dr. James Grigson, a psychiatrist with extensive forensic experience, and spoke with him for ninety minutes. Dr. Grigson reported his conclusion that Smith was competent to stand trial in a letter written to the trial judge. Smith’s attorneys did not learn about his meeting with Dr. Grigson until the trial began in March 1974. Smith was convicted of capital murder and the prosecution called Dr. Grigson as a witness at the penalty phase of the trial. Relying on his earlier competency examination, the psychiatrist offered his opinion that Smith was a severe sociopath, that his condition could not be treated, and that “he is going to go ahead and commit other similar or same criminal acts

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66 Charles Brooks, Jr., executed on Dec. 7, 1982, was the first person executed in Texas in the post-Furman era, pursuant to the legislation enacted in 1973 and approved in Jurek v. Texas. Jurek v. Texas, 428 U.S. 262, 276 (1976) (plurality opinion); see also Searchable Execution Database, supra note 2 (click “TX” under the state filter category).
67 Estelle v. Smith, 451 U.S. 454, 473–74 (1981). Ironically, the decision by the Texas Court of Criminal Appeals upholding Smith’s death sentence had been cited approvingly by the Supreme Court in Jurek v. Texas. See Jurek, 428 U.S. at 273, 276 (plurality opinion) (citation omitted).
69 Smith, 451 U.S. at 456–57, 457 n.1 (citation omitted). The judge later explained that he routinely ordered competency evaluations in cases in which the death penalty was sought. Id. at 457 n.1 (citations omitted).
72 Smith, 451 U.S. at 457.
73 Id. (citation omitted).
74 Id. at 458 n.5, 459 (citations omitted).
75 Id. at 456, 457.
76 Id. at 459.
if given the opportunity to do so.” The jury concluded that Smith posed a risk of future dangerousness and also responded affirmatively to the other special issues then in effect, and Smith was sentenced to death.\(^{78}\)

When the case reached the Supreme Court in 1981, all of the justices agreed that the psychiatric testimony derived from the court-ordered competency exam was improperly admitted at the trial’s penalty phase, requiring the invalidation of Smith’s death sentence.\(^{79}\) Chief Justice Burger’s majority opinion concluded that Smith’s 5th Amendment right against compelled self-incrimination had been violated because the competency exam was conducted absent \textit{Miranda} warnings and a waiver,\(^{80}\) and that Smith additionally had been denied his Sixth Amendment right to counsel because the exam was conducted without his attorney’s knowledge or presence during a critical (post-indictment) stage of the prosecution.\(^{81}\) Smith had not put his mental state at issue at the guilt phase of the trial nor had he offered psychiatric evidence at the trial’s penalty phase.\(^{82}\) Under those circumstances, admitting Dr. Grigson’s testimony stemming from the competency exam to help establish Smith’s likely future dangerousness allowed the prosecution to unconstitutionally exploit the mental health expert’s diagnosis and conclusions.

The American Psychiatric Association (“APA”) had filed an amicus curiae brief in \textit{Estelle v. Smith} asking the Supreme Court to flatly bar psychiatric testimony regarding future dangerousness in capital trials because of its unreliability.\(^{83}\) Acknowledging the brief, and that “some in the psychiatric community are of the view that clinical predictions as to whether a person would or would not commit violent acts in the future are ‘fundamentally of very low reliability,’”\(^{84}\) Chief

\(^{77}\) \textit{Id.} at 459–60 (citation omitted).

\(^{78}\) \textit{Id.} at 457–58 480 (citations omitted).

\(^{79}\) See \textit{id.} at 473–74; \textit{id.} at 474 (Marshall, J., concurring); \textit{id.} (Stewart & Powell, JJ., concurring) (citations omitted); \textit{id.} 474–75 (Rehnquist, J., concurring) (citation omitted). Three justices concurred in the judgment, relying exclusively on the Sixth Amendment basis for invalidating Smith’s sentence and not joining the portions of Chief Justice Burger’s majority opinion which concluded that Smith’s Fifth Amendment right against compelled self-incrimination had been violated. \textit{Id.} at 474 (Stewart & Powell, JJ., concurring) (citations omitted); \textit{id.}, at 474–76 (Rehnquist, J., concurring) (citation omitted). Justice Marshall concurred in all but a portion of the majority opinion, citing his belief that capital punishment per se violates the Eighth Amendment. \textit{Id.} at 474 (Marshall, J., concurring).

\(^{80}\) \textit{Id.} at 466–68 (quoting \textit{Miranda v. Arizona}, 384 U.S. 346, 444, 467–69 (1966)).

\(^{81}\) \textit{Smith}, 451 U.S. at 470–71 (citations omitted).

\(^{82}\) \textit{Id.} at 466.


\(^{84}\) See \textit{Smith}, 451 U.S. at 472 (citation omitted).
Justice Burger alluded to the argument in his opinion for the Court but did not directly respond to it. He observed that when the justices upheld Texas’s capital sentencing provisions in *Jurek*, they had rejected the proposition that the scheme was fatally flawed because “foretelling future behavior is impossible.” His carefully worded and conspicuously opaque opinion continued: “While in no sense disapproving the use of psychiatric testimony bearing on the issue of future dangerousness, the holding in *Jurek* was guided by recognition that the inquiry mandated by Texas law does not require resort to medical experts.” The Court did not have to address the more fundamental issue raised by the APA brief in *Estelle v. Smith*, and chose not to reach it. Two years later, the issue was met head-on.

**B. The Sentencing Decision: Expert Testimony and Future Dangerousness**

Lawmakers crafted Texas’s death penalty statute with its pivotal future dangerousness sentencing provision in 1973, and seven Supreme Court justices were quick to endorse the legislation three years later in *Jurek*. Both the legislative action and the judicial decision took place with surprisingly little planning or information. Indeed, the death penalty statute emerged as a last-minute compromise in the Texas Legislature and was enacted without meaningful debate or discussion. When the Supreme Court upheld the capital sentencing provisions in 1976, it appears to have only reviewed written statutes and had virtually no evidence concerning the law’s actual operation because the statute had only added the future dangerousness provision three years prior. Legislators and judges, in this hasty fashion, thus designed and approved of the state’s capital punishment system. When mental health professionals were enlisted in the law’s administration, perhaps it is not surprising that the same decision-makers responsible for the statute’s existence and endurance would be skeptical of challenges to the experts’ participation in death penalty cases.

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85 *Id. at 472–73* (citing *Jurek v. Texas*, 428 U.S. 262, 272–73 (1976) (plurality opinion)).

86 *Smith*, 451 U.S. at 473.

87 See *id.* at 469, 471 (citing *Miranda v. Arizona*, 384 U.S. 346, 444, 478 (1966)) (holding defendant’s Fifth and Sixth Amendment rights were violated and therefore did not reach the underlying issue of the use of psychiatrist testimony for evidence of future dangerousness).


90 See *Citron*, supra note 88, at 144.

91 See *Jurek*, 428 U.S. at 270, 276–77 (plurality opinion) (citations omitted).
The justices confronted the question they had sidestepped in *Estelle v. Smith*, whether the expert testimony of mental health professionals regarding offenders’ likely future dangerousness was admissible in Texas capital sentencing hearings, in *Barefoot v. Estelle*.

Dr. James Grigson, the same psychiatrist whose opinion evidence had tainted the defendant’s death sentence in *Estelle v. Smith*, again figured prominently.

Grigson was one of two psychiatrists who testified as expert witnesses for the prosecution at Thomas Barefoot’s capital sentencing hearing and expressed opinions about Barefoot’s likely future dangerousness. Neither psychiatrist had met with or personally interviewed Barefoot. Their opinions were elicited in response to hypothetical questions which paralleled the facts of Barefoot’s crime and included relevant background information.

After being qualified as an expert witness, Grigson, whose decisive and damning testimony in Texas capital cases would earn him the sobriquet of “Dr. Death,” explained to Barefoot’s sentencing jury that he could diagnose Barefoot “within reasonable psychiatric certainty” as an individual with “a fairly classical, typical, sociopathic personality disorder.” He placed Barefoot in the “most severe category” of sociopaths (on a scale of one to ten, Barefoot was “above ten”), and stated that there was no known cure for the condition. Finally, Doctor Grigson testified that whether Barefoot was in society at large or in a prison society there was a “one hundred percent and absolute” chance

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94 *Barefoot*, 463 U.S. at 884.
95 See id. The other psychiatrist was Dr. John Holbrook. See id.
97 See id. The Court rejected the argument that psychiatric opinion evidence was inadmissible if rendered in response to hypothetical questions and absent a personal examination. See *Barefoot*, 463 U.S. at 904. Barefoot had been convicted of murdering a Texas police officer who was investigating an apparent arson. See *Barefoot*, 596 S.W.2d at 878. Barefoot had previously escaped from a New Mexico jail, where he was being held following his arrest for statutory rape and unlawful restraint of a child with intent to commit sexual penetration against the child’s will. See *Barefoot*, 463 U.S. at 917 (Blackmun, J., dissenting). He had two prior drug offense convictions and two prior convictions for the unlawful possession of firearms. See id.
that Barefoot would commit future acts of criminal violence that would constitute a continuing threat to society.\textsuperscript{99}

The other psychiatrist called as a prosecution witness concurred in the diagnosis of Barefoot as a sociopath and that there was no known treatment for that condition.\textsuperscript{100} He further testified that “within reasonable psychiatric certainty,’ there was ‘a probability that . . . Barefoot . . . [would] commit criminal acts of violence in the future that would constitute a continuing threat to society.”\textsuperscript{101} Barefoot offered no expert testimony at his sentencing hearing.\textsuperscript{102} After an hour’s deliberation, the jury responded affirmatively to the future dangerousness special sentencing issue, and Barefoot was sentenced to death.\textsuperscript{103}

Justice White’s majority opinion for the Supreme Court rejected Barefoot’s claim that expert psychiatric opinion evidence on future dangerousness is insufficiently trustworthy to be admissible in capital sentencing hearings.\textsuperscript{104} In light of the Court’s previous approval of the Texas statute, Justice White maintained, the argument that psychiatrists should be prohibited from offering their opinions about an offender’s likely future dangerousness “is somewhat like asking us to disinvent the wheel.”\textsuperscript{105}

If the likelihood of a defendant’s committing further crimes is a constitutionally acceptable criterion for imposing the death penalty, which it is, and if it is not impossible for even a lay person sensibly to arrive at that conclusion, it makes little sense, if any, to submit that psychiatrists, out of the entire universe of persons who might have an opinion on the issue, would know so little about the subject that they should not be permitted to testify.\textsuperscript{106}

With this almost breathtakingly glib sentence as the cornerstone of the majority opinion, Barefoot’s argument was dismissed, his death sentence was upheld, and he was executed fifteen months later.\textsuperscript{107} The initial assertion in the quoted passage, that the

\textsuperscript{100} See id. at 918–19 (Blackmun, J., dissenting) (citations omitted).
\textsuperscript{101} Id. at 919 (Blackmun, J., dissenting) (citation omitted).
\textsuperscript{102} Id. at 899 n.5.
\textsuperscript{103} Id. at 919 (Blackmun, J., dissenting).
\textsuperscript{104} See id. at 905–06 (citations omitted).
\textsuperscript{105} Id. at 896.
\textsuperscript{106} Id. at 896–97 (internal citations omitted).
likelihood that a defendant will “commit[] further crimes is a constitutionally acceptable criterion for imposing the death penalty,”\textsuperscript{108} is a pure conclusion of law. Despite its sweeping breadth (surely, not all “further crimes”—e.g., shoplifting or income tax evasion—would qualify\textsuperscript{109}) and imprecise fit with the Texas special sentencing issue (requiring a finding that “there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society”\textsuperscript{110}), the statement finds substantial support in the Court’s 1976 capital punishment rulings.\textsuperscript{111}

Yet Barefoot’s quarrel did not take aim at this legal proposition, but rather at the ensuing fact-laden premises.\textsuperscript{112} Nor had he based his claim on the grounds Justice White had articulated.\textsuperscript{113} Whether it is “impossible” for laypersons to “sensibly” arrive at a conclusion about an offender’s likely future dangerousness is fairly disputable, but also beside the point that Barefoot was contesting. His concerns centered on the conclusions reached by expert witnesses.\textsuperscript{114} He had not maintained that expert testimony about future dangerousness should be excluded because “psychiatrists, out of the entire universe of persons who might have an opinion . . . would know so little about the subject.”\textsuperscript{115} His concern was squarely in the other direction: that “out of the entire universe of persons who might have an opinion” about an offender’s likely future dangerousness, lay jurors would be uncommonly swayed by the presumed expertise of psychiatrists and fail to critically evaluate the validity of their assessments.\textsuperscript{116}

As it had done in Estelle v. Smith, the American Psychiatric Association weighed in by filing an amicus curiae brief in Barefoot, in

\textsuperscript{108} Barefoot, 463 U.S. at 896.
\textsuperscript{109} See Tex. Code Crim. Proc. Ann. art. 37.071, § 2(b)(1) (“Whether there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society.”) (emphasis added).
\textsuperscript{110} Barefoot, 463 U.S. at 916 (Blackmun, J., dissenting) (quoting CODE CRIM. PROC. ANN. art. 37.071, § 2(b)(1)).
\textsuperscript{111} In addition to upholding the Texas legislation against constitutional challenge in Jurek, in Gregg v. Georgia, the justices recognized that “[t]he death penalty is said to serve two principal social purposes: retribution and deterrence of capital crimes by prospective offenders.” Gregg v. Georgia, 428 U.S. 153, 183 (1976). In a footnote accompanying that statement, the opinion acknowledged the justification most closely aligned with Texas’s future dangerousness sentencing issue: “Another purpose that has been discussed is the incapacitation of dangerous criminals and the consequent prevention of crimes that they may otherwise commit in the future.” Id. at 183 n.28 (citations omitted).
\textsuperscript{112} See Barefoot, 563 U.S. at 884–85 (citations omitted).
\textsuperscript{113} See id. at 884–85, 896–97 (citations omitted).
\textsuperscript{114} Id. at 896.
\textsuperscript{115} Id. at 897.
\textsuperscript{116} Id.
which it described the “unreliability of psychiatric predictions of long-term future dangerousness” as an “established fact within the profession.” 117 With an estimated error rate of two out of three, the brief asserted, 118 such predictions were significantly more likely to be wrong than right. 119 Justice White’s majority opinion refused to consider this detail as a drawback, insisting to the contrary that “[n]either petitioner nor the [American Psychiatric] Association suggests that psychiatrists are always wrong with respect to future dangerousness, only most of the time.” 120 The remedy to the problem, if there was a problem, was to rely on the standard tools of the adversarial process—cross-examination and the testimony of rebuttal witnesses—to expose weaknesses in the psychiatric testimony and thus allow the jury to reach a fully informed decision. 121

But there indeed were problems, and those problems were compounded by additional defects in the proposed remedy to them. For starters, the psychiatric opinion testimony bore the imprimatur of science and the mantle of expertise. Sensitive to the peculiar dangers of expert testimony, and in particular the risk that lay jurors will lack the ability to evaluate it on its merits, give undue deference to it, and thus yield uncritically to the accompanying “aura of

117 See id. at 920 (1983) (Blackmun, J., dissenting) (quoting Amicus Curiae Brief for the Am. Psychiatric Ass’n at 4, Barefoot, 463 U.S. 880 (No. 82-6080)).
118 Barefoot, 463 U.S. at 920 (citing Amicus Curiae Brief for the Am. Psychiatric Ass’n, supra note 117, at 3).
120 Barefoot, 463 U.S., at 901.
121 Id. at 898–99.
scientific infallibility,"122 traditional rules of evidence demand a threshold showing of reliability before such testimony is deemed admissible.123 In *Barefoot*, the Court leapt quickly over the admissibility threshold and focused instead on how the weight of the opinion evidence might be evaluated following its introduction, through cross-examination and the presentation of opposing witnesses.124 Yet in the context of *Barefoot*’s case, even these proposed countermeasures are manifestly inadequate. If, consistent with the APA’s assertions, accurate predictions of long-term future dangerousness are inherently unreliable, a defense expert faithful to that view would be little match for a prosecution expert like Dr. Grigson. An opinion that nobody can say for sure about predicting an offender’s future dangerousness can hardly be expected to negate an assertion that there is a “one hundred percent and absolute” chance that a defendant will commit future acts of criminal violence that would constitute a continuing threat to society.125 Nor is cross-examination likely to be effective in neutralizing or exposing weaknesses in the testimony of a witness such as Dr. Grigson, whose

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122 Id. at 926 (Blackmun, J., dissenting) (quoting Paul C. Giannelli, *The Admissibility of Novel Scientific Evidence: Frye v. United States, a Half-Century Later*, 80 COLUM. L. REV. 1197, 1237 (1980) (“[U]nreliable scientific evidence is widely acknowledged to be prejudicial. The reasons for this are manifest. ‘The major danger of scientific evidence is its potential to mislead the jury; an aura of scientific infallibility may shroud the evidence and thus lead the jury to accept it without critical scrutiny.’”); see Harvey Brown, *Eight Gates for Expert Witnesses*, 36 HOUSTON L. REV. 743, 811–12 (1999).

123 See *FED. R. EVID.* 702; *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589–90 (1993) (citations omitted). The Texas Court of Criminal Appeals had rejected *Barefoot*’s argument in the appeal of his conviction and death sentence that “psychiatrists, as a group, are not qualified by education or training to predict future behavior.” *Barefoot v. State*, 596 S.W.2d 875, 887 (Tex. Crim. App. 1980) (citations omitted) (“This Court is well aware that the ability of psychiatrists to predict future behavior is the subject of widespread debate. However, we are not inclined to alter our previously stated view that a trial court may admit for whatever value it may have to a jury psychiatric testimony concerning the defendant’s future behavior at the punishment stage of a capital murder trial.”).


125 See id. at 919, 934 (Blackmun J., dissenting) (footnotes omitted) (“Nor is the presentation of psychiatric witnesses on behalf of the defense likely to remove the prejudicial taint of misleading testimony by prosecution psychiatrists. No reputable expert would be able to predict with confidence that the defendant will not be violent; at best, the witness will be able to give his opinion that all predictions of dangerousness are unreliable. Consequently, the jury will not be presented with the traditional battle of experts with opposing views on the ultimate question. Given a choice between an expert who says that he can predict with certainty that the defendant, whether confined in prison or free in society, will kill again, and an expert who says merely that no such prediction can be made, members of the jury charged by law with making the prediction surely will be tempted to opt for the expert who claims he can help them in performing their duty, and who predicts dire consequences if the defendant is not put to death.”).
seductively self-confident and amiable demeanor invited jurors to allow emotion, rather than the dispassionate logic of science, to persuade them that a capital offender should be punished by death.126

If the question were at all close concerning whether expert opinion testimony about future dangerousness should be allowed in capital sentencing hearings, the Court’s long-standing insistence that the penalty of death is qualitatively different from other punishments, and thus demands correspondingly heightened standards of reliability when sentencing decisions are made,127 seemingly should have tipped the scales decisively against allowing jurors to consider such evidence. It did not suggest that the justices in the Court’s majority in Barefoot considered themselves painted into a corner by their earlier decision in Jurek, which had approved Texas’s death penalty provisions and their reliance on the future dangerousness special sentencing issue.128 There was no need for the Court to feel trapped by precedent, however, because an escape route clearly existed. The justices had only to remain cognizant of the important differences between matters of science and issues of law; to keep the admissibility of expert testimony about future dangerousness separate from the legal question of whether the Constitution prohibits conditioning death penalty decisions on predictions of future dangerousness.

The intermingling of scientific data and Texas’s capital sentencing law was reprised in a regrettable twenty-year sequence of cases involving race, ethnicity, and predictions of future dangerousness.129 The controversy prominently surfaced in connection with the death

126 Rosenbaum, supra note 98, at 210–11 (“[Dr. Grisgon’s] impact on a jury is more profound than the mere content of what he says. A death-penalty decision is far more emotionally unsettling to jurors than a mere guilt-or-innocence vote.... What makes the doctor so effective—both prosecution and defense lawyers will tell you this—is his bedside manner with the jury. His kindly, gregarious, country-doctor manner, his reassuring, beautifully modulated East Texas drawl, help jurors get over the hump, and do the deed. Says one bitter defense lawyer, ‘He’s kind of like a Marcus Welby who tells you it’s O.K. to kill.’”).
127 See Woodson v. North Carolina, 428 U.S. 280, 305 (1976) (“[T]he penalty of death is qualitatively different from a sentence of imprisonment, however long. Death, in its finality, differs more from life imprisonment than a 100-year prison term differs from one of only a year or two. Because of that qualitative difference, there is a corresponding difference in the need for reliability in the determination that death is the appropriate punishment in a specific case.”); Beck v. Alabama, 447 U.S. 625, 638 (1986) (citation omitted); Caldwell v. Mississippi, 472 U.S. 320, 323 (1980) (citations omitted).
128 See Barefoot, 463 U.S. at 896–97, 906 (citations omitted); Jurek v. Texas, 428 U.S. 262, 270 (1976) (plurality opinion).
sentence imposed on Victor Saldano in 1996.\textsuperscript{130} Appearing as an expert witness for the prosecution at Saldano’s capital sentencing hearing, Dr. Walter Quijano, a clinical psychologist, had explained to the jury about statistical “identifying markers” which help experts determine whether there is a probability that a defendant will present a future threat. One of the factors that, in his opinion, are associated with a defendant’s future dangerousness was his race or ethnicity. Dr. Quijano testified that: “This is one of those unfortunate realities also that blacks and Hispanics are over-represented in the criminal justice system. The race itself may not explain the over-representation, so there are other subrealities that may have to be considered. But, statistically speaking, 40 percent of inmates in the prison system are black, about 20 percent are - about 30 percent are white, and about 20 percent are Hispanics. So there’s much over-representation.”\textsuperscript{131}

When Saldano’s attorney failed to object to that testimony,\textsuperscript{132} the jury answered affirmatively to the future dangerousness issue. Saldano was sentenced to death and the Texas Court of Criminal Appeals affirmed his conviction and sentence on appeal.\textsuperscript{133} Saldano petitioned the U.S. Supreme Court for a writ of certiorari, presenting the question: “Whether a defendant’s race or ethnic background may ever be used as an aggravating circumstance in the punishment phase of a capital murder trial in which the State seeks the death penalty.”\textsuperscript{134} Responding to the cert. petition, the Texas Attorney General conceded that the expert testimony interjecting race and ethnicity into the sentencing hearing was constitutionally impermissible and confessed error.\textsuperscript{135} The Supreme Court granted Saldano’s cert. petition, vacated the judgment, and remanded the case “to the Court of Criminal Appeals of Texas for further consideration in light of the confession of error by the Solicitor General of Texas.”\textsuperscript{136}

On subjecting Saldano’s case to the mandated further

\textsuperscript{132} \textit{Id}.
\textsuperscript{134} \textit{Saldano}, 70 S.W.3d at 875 (citations omitted).
\textsuperscript{135} \textit{See} id. at 875, 890 (citations omitted).
\textsuperscript{136} Saldano v. Texas, 530 U.S. 1212, 1212 (2000).
consideration, the Texas Court of Criminal Appeals ruled that the Texas Attorney General’s Office had overstepped its authority in confessing error in the Supreme Court. Under Texas law, only the district attorney whose office had secured the conviction and death sentence was entitled to speak on behalf of the prosecution. Moreover, the trial attorney’s failure to object to Dr. Quijano’s expert testimony during the penalty hearing insulated the claimed error from review on appeal. Saldano’s death sentence accordingly was reinstated. But not for long. The U.S. District Court for the Eastern District of Texas granted Saldano’s habeas corpus petition after the Director of the Texas Department of Criminal Justice waived the defense that the claimed constitutional error was barred from review by a procedural default occasioned by his lawyer’s failure to object to the admission of the ethnicity-based expert testimony at the trial’s penalty phase. Saldano ultimately was re-sentenced to death following a new hearing conducted in late 2004, at which, somewhat ironically, evidence was admitted that he had engaged in significant misconduct while on death row, including assaulting and threatening to kill corrections officers.

In the immediate aftermath of the Supreme Court’s ruling in Saldano, the Texas Attorney General acknowledged the impropriety of considering race and ethnicity in sentencing decisions and identified six cases in which death sentences had similarly been imposed after Dr. Quijano referred to those factors while assessing offenders’ likely future dangerousness. The Attorney General later consented to having the death sentences vacated and new penalty hearings conducted in five of the six cases. The lone exception involved Duane Buck, an African-American who was convicted of murder and sentenced to death in a 1996 trial in which Dr. Quijano testified at the penalty phase that race (specifically, being “black”) was among the “statistical factors” known to help predict future dangerousness. Texas refused to confess error in Buck’s case.

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137 Saldano, 70 S.W.3d. at 875–76, 891.
139 See Saldano, 70 S.W.3d at 889, 891.
140 Saldano, 232 S.W.3d at 109; Saldano, 70 S.W.3d at 891.
142 Saldano, 232 S.W.3d at 82 n.2.
144 See id. at 769–70 (citation omitted).
145 See id. at 769–70, 778–79 (citations omitted).
146 See id. at 769.
because—astonishingly—Buck’s defense lawyer, and not the prosecution, had offered Dr. Quijano as an expert witness and had elicited his testimony that race helps predict future dangerousness. Dr. Quijano ultimately had concluded that Buck was unlikely to be dangerous if sentenced to life imprisonment, but the jury also heard his explanation about the “sad commentary . . . that minorities, Hispanics and black people, are over represented in the Criminal Justice System,” and on cross-examination the prosecutor confirmed with him “that the race factor, black, increases the future dangerousness [likelihood] for various complicated reasons.”

Following extensive procedural wrangling, Buck succeeded in pressing his claim before the Supreme Court that his trial attorney’s inviting Dr. Quijano to explain his views to the sentencing jury about the link between race and future dangerousness amounted to constitutionally ineffective assistance of counsel. Writing for the Court majority, Chief Justice Roberts had no trouble concluding that “[n]o competent defense attorney would introduce such evidence about his own client,” and that interjecting race into the sentencing proceeding had been prejudicial. Branding Dr. Quijano’s testimony as “potent evidence” which evoked the “powerful racial stereotype . . . of black men as ‘violence prone,’” the Chief Justice denounced reliance on race in sentencing as “‘poison[ing] public confidence’ in the judicial process,” injuring “not just the defendant, but ‘the law as an institution, . . . the community at large, and . . . the democratic ideal reflected in the processes of our courts.’” The testimony was all the more pernicious because of its provenance: an expert witness whose impressive credentials and

147 See id. at 770 (citations omitted); Buck v. Thaler, 565 U.S. 1022, 1022–23, 1024–25 (2011); id. at 1025–26 (Sotomayor, J., dissenting).
148 Buck, 137 S. Ct. at 769 (citation omitted).
149 Id. (citation omitted).
150 See id. at 775 (citations omitted).
151 Id. (citing Buck, 565 U.S. at 1022). Justice Thomas dissented in an opinion joined by Justice Alito. Buck, 137 S. Ct. at 780 (Thomas, J., dissenting).
152 Buck, 137 S. Ct. at 776–77 (citation omitted). To prevail on a claim of constitutionally ineffective assistance of trial counsel, the defendant in a criminal case must demonstrate both that the lawyer’s performance was deficient, with resulting prejudice, i.e., a reasonable probability that the outcome of the case (in this context, the sentencing decision) would have been different but for the substandard performance. See Strickland v. Washington, 466 U.S. 668, 687 (1984).
153 Buck, 137 S. Ct. at 776 (citation omitted).
154 Id. (quoting Turner v. Murray, 476 U.S. 28, 35 (1986)).
155 Buck, 137 S. Ct. at 778 (quoting Davis v. Ayala, 135 S. Ct. 2187, 2208 (2015)).
156 Buck, 137 S. Ct. at 778 (quoting Rose v. Mitchell, 443 U.S. 545, 556 (1979)).
disciplinary training imbued it with the air of scientific legitimacy. This effect [of the opinion evidence] was heightened due to the source of the testimony. Dr. Quijano took the stand as a medical expert bearing the court’s imprimatur. The jury learned at the outset of his testimony that he held a doctorate in clinical psychology, had conducted evaluations in some 70 capital murder cases, and had been appointed by the trial judge (at public expense) to evaluate Buck. Reasonable jurors might well have valued his opinion concerning the central question before them.

... [W]hen a jury hears expert testimony that expressly makes a defendant’s race directly pertinent on the question of life or death, the impact of that evidence cannot be measured simply by how much air time it received at trial or how many pages it occupies in the record. Some toxins can be deadly in small doses.  

Indeed. Where were these insights, one wonders, about the likelihood that the testimony of a well-credentialed and seasoned psychologist or psychiatrist will have superordinate influence on jurors, its importance disproportionately magnified despite its dubious claim to validity, when the justices first considered the admissibility of expert testimony about future dangerousness in Barefoot v. Estelle? As the Chief Justice’s opinion acknowledged in Buck v. Davis, predicting future dangerousness “inevitably entail[s] a degree of speculation,” just as it did when the Court decided Barefoot. Lay jurors at the time the Court decided Barefoot would surely have been every bit as hungry for guidance from a duly qualified expert as they were when Buck was sentenced to death.

Perhaps the justices in Buck v. Davis were simply intent on condemning the use of race as an explicit consideration in capital sentencing decisions. In doing so they could safely nibble at the

157 Buck, 137 S. Ct. at 777 (internal citations omitted) (citing Satterwhite v. Texas, 486 U.S. 249, 259 (1988)).
158 Id. at 776.
160 See Buck, 137 S. Ct. at 776 (internal citations omitted) (“Deciding the key issue of Buck’s dangerousness involved an unusual inquiry. The jurors were not asked to determine a historical fact concerning Buck’s conduct, but to render a predictive judgment ... [A]ccording to Dr. Quijano, [Buck’s race] carried with it an ‘increased probability’ of future violence. Here was hard statistical evidence—from an expert—to guide an otherwise speculative inquiry.”)
edg e of their holding in *Barefoot* without revisiting the admissibility of expert testimony on future dangerousness in all capital cases. Nevertheless, *Barefoot*’s logic and rationale rest on perilous footing if the full implications of the ruling in *Buck v. Davis* are embraced. This is true in part because racial biases often are not made explicit, and may not even be fully appreciated by individuals who harbor them. Accordingly, expert testimony about future dangerousness in capital cases involving black and Hispanic defendants may help unleash or reinforce fears harbored by predominantly white juries tip sentencing decisions more forcefully toward death even when race and ethnicity remain unmentioned.\(^{162}\)

More fundamentally, if expert testimony about future dangerousness undermines the reliability of capital sentencing decisions when race or ethnicity is referenced, it hardly follows that redacting those constitutionally offensive considerations elevates the expert’s predictions to acceptable levels of reliability. Granting that “[s]ome toxins can be deadly in small doses,”\(^ {163}\) it is not true that removing the more obvious contaminants will necessarily purify the remaining broth. For instance, both Thomas Barefoot and his victim were white.\(^ {164}\) The reliability of Dr. Grigson’s future dangerousness predictions, exclusively a clinical assessment\(^ {165}\) (albeit in response to hypothetical questions) rather than one partially grounded in statistical data as was Dr. Quijano’s testimony,\(^ {166}\) was neither enhanced nor diminished by the fact that Barefoot was not black or Hispanic. Nor does it seem likely that the esteem in which the jurors held Dr. Grigson or the deference they displayed to his apparent expertise were affected by the absence of racial or ethnic
considerations in Barefoot’s case.

The sanguine assumptions made in *Barefoot* about allowing jurors to consider expert testimony about future dangerousness in capital sentencing hearings grate not only against the logic of *Buck v. Davis* but also against the justices’ self-imposed demand for heightened reliability in death penalty decisions.\(^{167}\) Taken one step farther, the Court’s decision in *Jurek* which allowed capital sentencing decisions to be premised on predictions of future dangerousness—from any source—can fairly be called into question.\(^{168}\) If expert predictions about future dangerousness are generally unreliable, as research evidence suggests,\(^{169}\) it is hard to fathom why lay predictions should be considered sufficiently trustworthy to support a sentence of death. Contrary to the Court’s position in *Barefoot*, the time arguably arrived quite some time ago to “disinvent the wheel”\(^{170}\) that makes the death penalty go around in Texas.

Other problems that inhere in Texas’s capital sentencing statute compound and magnify those caused by the unreliability of future dangerousness predictions. Under the statute, a defendant found guilty of capital murder can only be sentenced to death if the jury first unanimously concludes beyond a reasonable doubt that the prosecution has proven the future dangerousness special sentencing issue.\(^{171}\) This appears to be a formidable threshold requirement, but

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168 The petitioner in *Jurek* had challenged Texas’s capital sentencing scheme, in part, by arguing “that it is impossible to predict future behavior and that the question is so vague as to be meaningless.” Jurek v. Texas, 428 U.S. 262, 274 (1976) (plurality opinion). Although acknowledging that “[i]t is, of course, not easy to predict future behavior,” the plurality opinion rejected the argument. Id. at 274–76 (“The fact that such a determination is difficult . . . does not mean that it cannot be made. Indeed, prediction of future criminal conduct is an essential element in many of the decisions rendered throughout our criminal justice system. . . . The task that a Texas jury must perform in answering the statutory question in issue is thus basically no different from the task performed countless times each day throughout the American system of criminal justice. What is essential is that the jury have before it all possible relevant information about the individual defendant whose fate it must determine.”).


170 See *Barefoot*, 463 U.S. at 896.

there is a catch. What must be established beyond a reasonable
doubt is not that the defendant will be dangerous in the future, but
rather that “there is a probability” that he will.\footnote{CODE CRIM. PRO. ANN. art. 37.071, §§ 2(b)(1) (West 2018) (emphasis added).} This qualification
not only further obscures the meaning of the already obscure special
issue but eviscerates the burden of proof as well. The resulting proof
requirement—that, beyond a reasonable doubt, there is a
probability—has been likened to a mandate to establish a “definite

Although the special sentencing issue is commonly described in
terms of forecasting the defendant’s future dangerousness, that
coloration is shorthand for the provision’s specific and more
nuanced wording: “whether there is a probability that the defendant
would commit criminal acts of violence that would constitute a
continuing threat to society.”\footnote{CODE CRIM. PRO. ANN. art. 37.071, § 2(b)(1).} Herein lies another layer of the
aforementioned problem of obscurity. “[C]riminal acts of violence”
are seemingly capable of embracing conduct ranging from
misdemeanor assault through a repeat murder, with offenses such as
burglary, arson, and even property crimes potentially in the mix as
well.\footnote{See Elizabeth S. Vartkessian, Dangerously Biased: How the Texas Capital Sentencing Statute Encourages Jurors to Be Unreceptive to Mitigation Evidence, 29 QUINNIPAC L. REV. 237, 251–52 (2011) (“[A Texas trial judge gave the following jury instruction in a capital
sentencing:] I cannot give you a definition of criminal acts of violence. You must decide. The
law is clear, though, it can be a criminal act of violence against a person. It need not be a
person; it could be a criminal act of violence against property. Arson, that’s a criminal act of
violence against property.”.)} Equally perplexing is the contemplated society that will be
put at risk. For defendants who are not sentenced to death, the
future holds long-term incarceration and, for crimes committed after
the sentencing statute was amended in 2005, life imprisonment
without possibility of parole.\footnote{TEX. PENAL CODE § 12.31(a); CODE CRIM. PROC. ANN. art. 37.071, §§ 1, 2(a)(1), (g); S.B. 1507, 79th Leg., 2005 Reg. Sess. (Tex. 2005).} Jurors might envision the insulated
prison complex as the society that may or may not be put at risk if
the defendant is not executed, they might imagine that their own
community is the frame of reference, or they might be concerned with
some variation of the two, particularly if they speculate about escape
attempts or the offender’s release via parole, executive clemency, or a change in the law.\textsuperscript{177}

It is impossible to know what jurors will understand the ill-defined statutory terms to mean, and this uncertainty comes with the full blessing of the Texas Court of Criminal Appeals. The state high court in criminal matters has consistently rebuffed efforts to require that capital sentencing juries be given clarifying instructions, stating:

This Court has repeatedly held that the terms... “probability,” “criminal acts of violence” and “continuing threat to society,”... require no special definitions. []Where terms used are words simple in themselves, and are used in their ordinary meaning, jurors are supposed to know such common meaning and terms and under such circumstances such common words are not necessarily to be defined in the charge to the jury.\textsuperscript{178}

The Supreme Court has occasionally invalidated statutory factors that were designed to help guide and channel capital sentencing discretion because their open-endedness failed to serve those functions.\textsuperscript{179} The justices nevertheless upheld Texas’s provisions against that essential claim in \textit{Jurek}, with Justice White confidently asserting that “the issues posed in the sentencing proceeding have a common-sense core of meaning and... criminal juries should be capable of understanding them.”\textsuperscript{180} He did not elaborate. The sentencing issues in Texas’s capital sentencing statute have also survived lower federal court scrutiny.\textsuperscript{181} Whether the terms embedded in the special sentencing question are simply mystifying or whether they have a common-sense core of meaning is perhaps debatable. But they are at best imprecise, and as lay jurors struggle to apply them, they may be all the more likely to rely on the opinions of expert witnesses for guidance about whether “there is a probability that [a] defendant [will] commit criminal acts of violence that [will]

\begin{footnotesize}
\textsuperscript{177} See Clary, \textit{supra} note 42, at 81–82; Shapiro, \textit{supra} note 14, at 149–50.


\end{footnotesize}
constitute a continuing serious threat to society.”\(^{182}\)

If jurors respond affirmatively to the future dangerousness sentencing issue, in compliance with the revisions made to the statute following *Penry*, their work is not yet finished. They then must determine whether “there is a sufficient mitigating circumstance or circumstances” to impose a sentence of imprisonment rather than death.\(^{183}\) The step-wise progression of this decisional process puts jurors confronting the mitigation question in a nettlesome bind. Having just concluded that there is a probability that society will be put at risk if the defendant is not executed, they now are asked whether society should nevertheless be required to incur that risk because something about “the circumstances of the offense, the defendant’s character and background, and... [his] personal moral culpability”\(^{184}\) warrants it. In light of the future dangerousness prediction, which is fundamentally an empirical assessment,\(^{185}\) the ensuing balance against moral culpability, which is fundamentally a metaphysical construct, appears to be weighted heavily in favor of death.\(^{186}\) In this way, expert opinion testimony supporting the offender’s likely future dangerousness again has the potential to indirectly, yet powerfully, influence the “reasoned moral response”\(^{187}\) jurors are expected to give to the evidence as they choose between punishment by imprisonment, or by death.


\(^{183}\) TEX. CODE CRIM. PROC. ANN. art. 37.071, § 2(e)(1) (West 2018)

\(^{184}\) Id.

\(^{185}\) However, the Supreme Court has rejected the argument that the future dangerousness special sentencing issue “call[s] for a narrow factual inquiry[, having] previously interpreted the Texas special issues system as requiring jurors to ‘exercise a range of judgment and discretion.’” Johnson v. Texas, 509 U.S. 350, 370 (1993) (quoting Adams v. Texas, 448 U.S. 38, 46 (1980)).


C. Intellectual Disability: Establishing the Bar for Death-Penalty Eligibility

In 1989, in *Penry v. Lynaugh*, Texas prevailed before the Supreme Court in asserting that a murderer’s intellectual disability—at the time, referred to as “mental retardation”\(^{188}\)—presented no insuperable constitutional barrier to his execution.\(^{189}\) The state ultimately was prevented from executing Johnny Paul Penry because under the sentencing provisions then in effect, the Court concluded, jurors lacked an effective vehicle for considering intellectual disability as a factor militating in favor of life imprisonment instead of death.\(^ {190}\) In 2002, *Atkins v. Virginia* abrogated *Penry*, as the justices revisited society’s continuously evolving standards of decency and concluded that the Eighth Amendment flatly forbids the capital punishment of intellectually disabled offenders.\(^ {191}\) Texas and other states consequently were required to abandon attempts to execute the intellectually disabled,\(^ {192}\) and instead were obliged to define the meaning of that term and adopt procedures to determine who is exempt from death penalty-eligibility because of that status. The

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\(^{188}\) See *Hall v. Florida*, 134 S. Ct. 1986, 1990 (2014) (citation omitted) (“Previous opinions of this Court have employed the term ‘mental retardation.’ This opinion uses the term ‘intellectual disability’ to describe the identical phenomenon.”); *Frequently Asked Questions on Intellectual Disability and the AAIID Definition*, Am. Ass’n on Intell. and Developmental Disabilities (2008), https://aaidd.org/docs/default-source/sis-docs/aaiddfaqonid_template.pdf?sfvrsn=2 (“Intellectual disability is the currently preferred term for the disability historically referred to as mental retardation. . . . The term intellectual disability covers the same population of individuals who were diagnosed previously with mental retardation.”).


\(^{190}\) See *id.* at 324. *Penry* was again sentenced to death in 1990 following his retrial after his case was remanded to the state courts. The Supreme Court again vacated his death sentence because the trial judge’s instructions to the jury were inadequate to provide jurors with a “vehicle for expressing the view that Penry did not deserve to be sentenced to death based upon his mitigating evidence.” *Penry v. Johnson*, 532 U.S. 782, 804 (2001) (quoting *Penry*, 402 U.S. at 326). Following yet another retrial in 2002, Penry once again was sentenced to death. *See Rachelann Ferris, Penry Sentenced to Die for Third Time*, HOUS. CHRON. (July 3, 2002), http://www.chron.com/neighborhood/article/Penry-sentenced-to-die-for-third-time-9902201.php. The Texas Court of Criminal Appeals vacated Penry’s death sentence in 2005 because the jury was given faulty instructions concerning mitigation evidence. *See Penry v. State*, 178 S.W.3d 782, 788–89 (Tex. Crim. App. 2005). Pursuant to plea negotiations, Penry tendered guilty pleas in 2008 to the murder that had resulted in his death sentences and related offenses, and was sentenced to three consecutive terms of life imprisonment. *See Andrew Kragie, After Supreme Court Sides with Texas Death Row Inmate Bobby Moore, What Happens Next?*, HOUS. CHRON. (Mar. 29, 2017), http://www.houstonchronicle.com/news/houston-texas/houston/article/After-Supreme-Court-sides-with-Texas-death-row-11037270.php.


\(^{192}\) The Texas Legislature had passed a bill exempting mentally retarded offenders from the death penalty in 2001, but the Governor vetoed it. *See Ex parte Briseno*, 135 S.W.3d 1, 6 (Tex. Crim. App. 2004).
Court in Atkins did not resolve either the definitional or the procedural issues, and instead gave the states latitude in making those determinations.\textsuperscript{193} Lamenting the state legislature’s failure to address the outstanding Atkins issues, the Texas Court of Criminal Appeals stepped into the breach in its 2004 ruling in Ex parte Briseno.\textsuperscript{194} It appropriated the definition of mental retardation adopted in 1992 by the American Association on Mental Retardation (“AAMR”),\textsuperscript{195} which in 2007 changed its name to the American Association on Intellectual and Developmental Disabilities (“AAIDD”).\textsuperscript{196} That essential definition previously had been codified in the Texas Health and Safety Code, to help regulate the provision of care and services for the intellectually disabled.\textsuperscript{197} As the Texas Court of Criminal Appeals subsequently elaborated:

\begin{quote}
[T]o demonstrate that he is intellectually disabled for Eighth Amendment purposes and therefore exempt from execution, an applicant must prove by a preponderance of the evidence that: (1) he suffers from significantly subaverage general intellectual functioning, generally shown by an intelligence quotient (IQ) of 70 or less; (2) his significantly sub-average general intellectual functioning is accompanied by related and significant limitations in adaptive functioning; and (3) the onset of the above two characteristics occurred before the age
\end{quote}

\textsuperscript{193} See id. at 5; Atkins, 536 U.S. at 317 (quoting Ford v. Wainwright, 477 U.S. 399, 416–17 (1986)) (“To the extent there is serious disagreement about the execution of mentally retarded offenders, it is in determining which offenders are in fact retarded. . . . As was our approach in Ford v. Wainwright, with regard to insanity, ‘we leave to the States the task of developing appropriate ways to enforce the constitutional restriction upon [their] execution of sentences.’”).

\textsuperscript{194} Briseno, 135 S.W.3d at 5 (“The Texas Legislature has not yet enacted legislation to carry out the Atkins mandate. Nonetheless, this Court must now deal with a significant number of pending habeas corpus applications claiming that the death row inmate suffers from mental retardation and thus is exempt from execution. Recognizing that ‘justice delayed is justice denied’ to the inmate, to the victims and their families, and to society at large, we must act during this legislative interregnum to provide the bench and bar with temporary judicial guidelines in addressing Atkins claims.”).

\textsuperscript{195} Id. at 7 (citations omitted) (“Under the AAMR definition, mental retardation is a disability characterized by: (1) ‘significantly subaverage’ general intellectual functioning; (2) accompanied by ‘related’ limitations in adaptive functioning; (3) the onset of which occurs prior to the age of 18.”).


\textsuperscript{197} Briseno, 135 S.W.3d at 6 (quoting TEX. HEALTH & SAFETY CODE ANN. § 591.003(13) (West 2004)) (“[M]ental retardation’ means significant subaverage general intellectual functioning that is concurrent with deficits in adaptive behavior and originates during the developmental period.”). The statute has since been amended and the term “Intellectual disability” has been substituted for “mental retardation,” with the definition remaining unchanged. See, e.g., TEX. HEALTH & SAFETY CODE ANN. §§ 591.003(7-a), (13) (West 2018).
of eighteen.\textsuperscript{198}

In what later would become its most memorable referent—to the slow-witted protagonist in John Steinbeck’s \textit{Of Mice and Men}—the 
Briseno court appended additional considerations it deemed relevant to defining mental retardation (intellectual disability) in the death penalty context:

“We... must define that level and degree of mental retardation at which a consensus of Texas citizens would agree that a person should be exempted from the death penalty. Most Texas citizens might agree that Steinbeck’s Lennie should, by virtue of his lack of reasoning ability and adaptive skills, be exempt. But, does a consensus of Texas citizens agree that all persons who might legitimately qualify for assistance under the social services definition of mental retardation be exempt from an otherwise constitutional penalty?”\textsuperscript{199}

Speculating that no such consensus existed, the court identified seven “evidentiary factors” pertaining to limitations in adaptive functioning, “which factfinders in the criminal trial context might also focus upon in weighing evidence as indicative of mental retardation.”\textsuperscript{200}

Bobby James Moore was among the offenders ruled eligible for execution under the 
Briseno test for intellectual disability.\textsuperscript{201} Moore originally was sentenced to death in 1980 for a murder committed in Houston.\textsuperscript{202} A federal court invalidated the sentence, and Moore was again sentenced to die in 2001 after being given a new penalty hearing.\textsuperscript{203} The Supreme Court decided \textit{Atkins} the next year,\textsuperscript{204}
prompting Moore to file a state habeas corpus petition seeking relief on that basis. Following a hearing conducted in January 2014, the habeas court issued proposed findings of fact and conclusions of law recommending that Moore be classified as intellectually disabled and exempt from capital punishment. The Texas Court of Criminal Appeals rejected the recommendation, which had relied on contemporary professional standards defining intellectual disability rather than the test the court had fashioned in *Briseno*.

In ruling on Moore’s petition, the habeas court had made use of the 2010 (eleventh edition) version of the American Association on Intellectual and Developmental Disabilities clinical manual (AAIDD-11). The Texas Court of Criminal Appeals repudiated reliance on the updated standard when it reviewed the state habeas court’s recommendations in 2015. In particular, the Texas high court observed, the newer AAIDD-11 definition of intellectual disability “notably omits” the earlier AAMR-9 provision that the required deficits in adaptive functioning “must be ‘related to’” deficits in intellectual functioning. The court also reaffirmed its allegiance to the seven *Briseno* factors for assessing the level of an offender’s adaptive functioning. And, departing from the lower court’s findings, it considered the results from only two of the seven IQ tests Moore had taken: scores of 78 and 74. After extended discussion and analysis, and over Justice Alcala’s dissent—which criticized the majority opinion for its continued reliance on the superseded 1992 AAMR definition of intellectual disability and adherence to the *Briseno* factors, and for “cherry pick[ing]” two of Moore’s higher IQ scores as measures of his intellectual functioning—the court

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205 See Moore, 470 S.W.3d at 484 (citations omitted).
206 Id. (citations omitted).
207 Id. at 489 (citations omitted).
208 See id. at 485, 485 n.3 (citations omitted). The state habeas court additionally had access to the 2013 (5th edition) version of the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders (“DSM-5”), while the *Briseno* court had the earlier version of the manual, DSM-IV (1994). Id. at 533.
209 Id. at 486 (citations omitted).
210 Id. (emphasis added).
211 Id. at 526.
212 Id. at 514, 519; see also Moore v. Texas, 137 S. Ct. 1039, 1047 (2017) (citing Moore, 470 S.W.3d at 518–19) (“Rejecting as unreliable five of the seven IQ tests the habeas court had considered, the CCA limited its appraisal to Moore’s scores of 78 in 1973 and 74 in 1989.”).
213 Moore, 470 S.W.3d at 531 (Alcala, J., dissenting) (citations omitted) (“I disagree with the majority opinion’s conclusions that this Court properly ‘continue[s] to follow the AAMR’s 1992 definition of intellectual disability’ and that the *Briseno* standard ‘remains adequately “informed by the medical community’s diagnostic framework.”’”).
214 Id. at 535 (Alcala, J., dissenting).
majority denied Moore relief on his Atkins claim. Justice Ginsburg’s opinion for the U.S. Supreme Court in Moore v. Texas found the Texas Court of Criminal Appeals’ resolution of the intellectual disability issues to be deeply flawed. The year prior to the state court’s ruling in Moore, the Supreme Court in Hall v. Florida had invalidated Florida’s practice of excluding any capital offender who scored higher than 70 on IQ tests from being classified as intellectually disabled. The inflexibility of that policy and its departure from the informed views of the medical community that IQ scores reflect a range of intellectual ability, rather than a precise benchmark, figured prominently in the Court’s conclusion that it was constitutionally unacceptable. Justice Ginsburg chided the Texas Court of Appeals in Moore for ignoring Hall’s admonition that “adjudications of intellectual disability should be ‘informed by the views of medical experts.’”

That instruction cannot sensibly be read to give courts leave to diminish the force of the medical community’s consensus. Moreover, the several factors Briseno set out as indicators of intellectual disability are an invention of the CCA [Texas Court of Criminal Appeals] untied to any acknowledged source. Not aligned with the medical community’s information, and drawing no strength from our precedent, the Briseno factors “creat[e] an unacceptable risk that persons with intellectual disability will be executed.”

The mercurial nature of the Texas Court of Criminal Appeals’ willingness to embrace the opinions of mental health professionals in the realm of capital sentencing decisions is difficult to overlook. Despite the position of the American Psychiatric Association that psychiatrists are unable to reliably forecast offenders’ long-term future dangerousness, the CCA has permitted mental health

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215 See id. at 527–28 (citations omitted).
216 Moore, 137 S. Ct. at 1044 (Ginsburg, J., dissenting) (citations omitted).
217 See Hall v. Florida, 134 S. Ct. 1986, 2001 (2014) (“Intellectual disability is a condition, not a number.”). Justice Kennedy’s majority opinion relied heavily on the long-standing consensus of “[t]he professionals who design, administer, and interpret IQ tests have agreed that IQ test scores should be read not as a single fixed number but as a range. . . . Each IQ test has a ‘standard error of measurement,’ or SEM, which accounts for the likelihood that an individual’s obtained test score might be artificially higher or lower than the individual’s true level of intellectual functioning. Id. at 1995 (citations omitted).
218 Id. at 2001.
219 Moore, 137 S. Ct. at 1044 (quoting Hall, 134 S. Ct. at 2000).
220 Moore, 137 S. Ct. at 1044 (quoting Hall, 134 S. Ct. at 1990).
221 See Barefoot v. Estelle, 463 U.S. 880, 920 (1983) (Blackmun, J., dissenting) (citation omitted) (“The American Psychiatric Association (APA) participating in this case as amicus
professionals to make such predictions at capital sentencing hearings since the state adopted its post-*Furman* legislation.\textsuperscript{222} Texas staunchly defended the propriety of capital punishment for intellectually disabled offenders until it was required by *Atkins* to desist,\textsuperscript{223} and the CCA thereafter again eschewed the informed views of mental health experts in favor of its unique, unscientific norms for assessing capital offenders’ intellectual disability.\textsuperscript{224} Notably, defendants charged with capital crimes prevailed on *Atkins* claims in Texas while the *Briseno* standards were in use at roughly half the rate of defendants in other death penalty jurisdictions throughout the nation.\textsuperscript{225} The court’s differential willingness to rely on the expertise of mental health professionals\textsuperscript{226} is perplexing. It is disturbingly akin

\textsuperscript{222} See, e.g., *id.* at 884.


\textsuperscript{224} See *Moore v. Texas*, 137 S. Ct. 1039, 1044 (2017) (“[T]he several factors *Briseno* set out as indicators of intellectual disability are an invention of the CCA untied to any acknowledged source.”); *Ex parte Moore*, 470 S.W.3d 481, 529 (Tex. Crim. App. 2015) (Alcala, J., dissenting) (citations omitted) (“[T]he *Briseno* Court created a novel test for assessing claims of intellectual disability that has been widely criticized as applying an unscientific standard.”); *vacated*, *Moore v. Texas*, 137 S. Ct. 1039 (2017); see also Brief of Amici Curiae the Am. Ass’n on Intellectual & Developmental Disabilities (AAIDD), and the Arc of the United States, in Support of Petitioner, *Moore*, 137 S. Ct. 1039 (No. 15-797), 2016 WL 4151447, at *32–33 (“Texas’ invention and adoption of a list of unscientific criteria for adaptive functioning has the effect (and, apparently, the purpose) of limiting the protection of *Atkins* to a sub-set of those defendants who satisfy the clinical definition of intellectual disability.”); Brief of Amici Curiae the Am. Psychological Ass’n, et al. in Support of Petitioner, *Moore*, 137 S. Ct. 1039 (No. 15-797), 2016 WL 4151451, at *14–15 (citation omitted) (“Notwithstanding the advances in understanding and diagnosing intellectual disability, Texas continues to rely on an outdated diagnostic manual from 1992 . . . This reliance is not justified by scientific or medical practice and risks the misdiagnosis of persons with intellectual disability.”).


\textsuperscript{226} Judges make varying use of empirical research, at times employing it selectively, when it can be construed to favor results they seek to achieve, much like when they invoke legal authority. See, e.g., Rachel F. Moran, *What Counts as Knowledge? A Reflection on Race, Social
to “the way a drunk uses a lamp post: for support rather than illumination.”227 Whether fortuitously or owing in part to the culture of support for the death penalty within the state,228 the court’s inconsistent practices have resulted in tipping the balance in favor of death in Texas capital prosecutions.229

D. Competency for Execution

In 1986, in Ford v. Wainwright, the Supreme Court affirmed that the Eighth Amendment’s cruel and unusual punishments clause perpetuated the centuries-old common law prohibition against executing offenders who had lost their “sanity”—a practice Blackstone called “savage and inhuman,”230 and Coke deemed “a miserable spectacle . . . of extream [sic] inhumanity and cruelty.”231 The Court did not deign to offer a precise definition of the condition rendering a condemned prisoner “insane,” or incompetent for execution, in Ford. The justices ruled only that the procedures

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227 Wallace D. Loh, Perspectives on Psychology and Law, 11 J. Applied Soc. Psychol. 314, 340 (1981). See also James R. P. Ogloff, Two Steps Forward and One Step Backward: The Law and Psychology Movement(s) in the 20th Century, 24 L. & Hum. Behav. 457, 477 (2000) (“[L]awyers, judges, and policy makers typically have not embraced psychological findings, especially those findings that are critical of legal assumptions, unless the findings support their particular argument or position.”).


229 Following the Supreme Court’s invalidation of Bobby Moore’s death sentence, and the remand of his case to the Texas courts, Houston prosecutors asked the Texas Court of Criminal Appeals to accept that Moore is intellectually disabled and thus recommended that he be rendered ineligible for the death penalty and sentenced to life imprisonment. See Keri Blakinger, Prosecutors Ask for Life Sentence for Texas Death Row Inmate Bobby Moore, HOUS. CHRON. (Nov. 1, 2017), http://www.chron.com/news/houston-texas/article/Prosecutors-ask-judge-to-resentence-death-row-12324475.php.


231 Ford, 477 U.S. at 407 (quoting 3 Edward Coke, Institutes of the Laws of England 6 (6th ed. 1680)).
Florida used for determining whether an offender fell within its statutory exemption were constitutionally deficient.\textsuperscript{232} Under Florida law, an offender was considered ineligible for execution if he lacked “the mental capacity to understand the nature of the death penalty and the reasons why it was imposed on him.”\textsuperscript{233} Justice Powell’s opinion in \textit{Ford}, concurring in part and in the judgment, suggested that this essential standard satisfied the constitutional threshold defining competency to be executed.\textsuperscript{234}

In September 1992, Scott Panetti shaved his head, donned camouflage combat fatigues, entered the home of his estranged wife’s parents in Fredericksburg, Texas, and shot them to death in front of his wife and his daughter.\textsuperscript{235} Panetti had a lengthy history of serious mental illness.\textsuperscript{236} He had been hospitalized more than a dozen times over the prior decade, having been diagnosed as suffering from schizophrenia, bipolar disorder, auditory hallucinations, and delusions of persecution and grandeur, among other maladies.\textsuperscript{237} At

\textsuperscript{232} \textit{Ford}, 477 U.S. at 416. A prisoner challenging his competency for execution under Florida law then in effect was evaluated by a panel of three psychiatrists appointed by the Governor. \textit{Id.} at 412 (citation omitted). Their report was forwarded to the Governor, who had the ultimate authority to make the competency determination. \textit{Id.} (citation omitted). Alvin Ford’s attorneys were excluded from participating in Ford’s competency evaluation. \textit{Id.} The psychiatrists’ report was transmitted to the Governor. \textit{Id.} at 413. Ford’s attorneys submitted additional written materials to the Governor, including the evaluations completed by two additional psychiatrists, but the Governor had no obligation to consider the submitted information and there was no indication that he had. \textit{Id.} The Governor then issued a death warrant authorizing Ford’s execution, without explaining the basis for his decision that Ford was competent. \textit{Id.} Justice Marshall’s opinion for the Court found these procedures to be inadequate because they denied the prisoner the opportunity to submit evidence, to challenge the evidence relied on by the panel of psychiatrists, and because the Governor, as the “commander of the State’s corps of prosecutors cannot be said to have the neutrality that is necessary for reliability in the factfinding proceeding.” \textit{Id.} at 413–16. On remand, pursuant to revised procedures, Alvin Ford was again found competent to be executed, although he died in prison before his execution could be carried out. \textit{See} \textsc{Kent S. Miller \\& Michael L. Radelet, Executing the Mentally Ill: The Criminal Justice System and the Case of Alvin Ford} 155, 158 (1993).

\textsuperscript{233} \textit{Ford}, 477 U.S. at 412 (Powell, J., concurring) (“If the defendant perceives the connection between his crime and his punishment, the retributive goal of the criminal law is satisfied. And only if the defendant is aware that his death is approaching can he prepare himself for his passing. Accordingly, I would hold that the Eighth Amendment forbids the execution only of those who are unaware of the punishment they are about to suffer and why they are to suffer it.”). In arriving at this conclusion, Justice Powell found “no sound basis for constitutionalizing the broader definition of insanity, with its requirement that the defendant be able to assist in his own defense,” adding that, “States are obviously free to adopt a more expansive view of sanity in this context than the one the Eighth Amendment imposes as a constitutional minimum.” \textit{Id.} at 422 n.3.

\textsuperscript{234} \textsc{Ralph Blumenthal, Supreme Court Blocks Execution of Delusional Killer}, \textsc{N.Y. Times} (June 29, 2007), \url{http://www.nytimes.com/2007/06/29/washington/29execution.html}.


\textsuperscript{236} \textit{Id.} at 7.
the time of the killings he had stopped taking his prescribed antipsychotic medicine on a regular basis.\textsuperscript{238} Despite continuing to suffer from mental illness, characterized in part by delusional religious beliefs, he not only was deemed competent to stand trial for capital murder, but he was allowed to represent himself at his 1995 trial.\textsuperscript{239} In support of his plea of not guilty by reason of insanity, Panetti attempted to call John F. Kennedy, the Pope, and Jesus, among other witnesses.\textsuperscript{240} His courtroom garb was as unorthodox as his behavior. Serving as his own lawyer, he wore a purple western shirt, a bandana, and cowboy boots.\textsuperscript{241} A cowboy hat hung by a string down his back.\textsuperscript{242} His questions to witnesses were often bizarre and irrelevant, and his arguments were incoherent.\textsuperscript{243} The jury found him guilty of the murders.\textsuperscript{244} Following a one-day penalty trial, at which Dr. James Grigson testified that Panetti would pose a risk of future dangerousness to society even if he took his prescribed antipsychotic medication, Panetti was sentenced to death.\textsuperscript{245}

With Panetti’s execution scheduled for February 2004, his attorneys filed a motion in state court in December 2003 asking that Panetti be found incompetent to be executed pursuant to Texas law, which provided that: “A defendant is incompetent to be executed if the defendant does not understand: (1) that he or she is to be executed and that the execution is imminent; and (2) the reason he or she is being executed.”\textsuperscript{246} After the state court denied the motion without a hearing, the federal district court sitting in Austin conducted an evidentiary hearing on Panetti’s habeas corpus petition.\textsuperscript{247} After considering the testimony of both expert and lay witnesses, U.S. District Court Judge Sam Sparks concluded that Panetti was competent.\textsuperscript{248} He rejected Panetti’s argument that an execution could not go forward if the condemned prisoner failed to grasp the true reason he had been sentenced to death.\textsuperscript{249} Panetti’s lawyers had

\begin{footnotes}
\item[238] Id.
\item[239] Panetti, 551 U.S. at 936 (citations omitted).
\item[241] Brief for Petitioner, supra note 236, at 11 n.9; Blumenthal, supra note 235.
\item[242] Blumenthal, supra note 235.
\item[243] See Brief for Petitioner, supra note 236, at 11.
\item[244] Panetti, 551 U.S. at 937.
\item[245] Brief for Petitioner, supra note 236, at 15.
\item[246] TEX. CODE CRIM. PROC. ANN. art. 46.05(d) (West 2018).
\item[248] Dretke, 401 F. Supp.2d at 712.
\item[249] See id. at 709, 711.
\end{footnotes}
contended that Panetti believed that the stated reason for his execution—that he had committed murder—was a pretense and the real reason was that the State was “in league with the forces of evil to prevent him from preaching the Gospel.” Applying the competency for execution standard articulated by the Fifth Circuit Court of Appeals, which required that “the petitioner [must] know no more than the fact of his impending execution and the factual predicate for the execution[,]” the district court explained: 

Under the precedent of the Fifth Circuit, a petitioner’s delusional beliefs—even those which may result in a fundamental failure to appreciate the connection between the petitioner’s crime and his execution—do not bear on the question of whether the petitioner “knows the reason for his execution” for the purposes of the Eighth Amendment. Because the Court finds that Panetti knows he committed two murders, he knows he is to be executed, and he knows the reason the State has given for his execution is his commission of those murders, he is competent to be executed.

The Fifth Circuit Court of Appeals affirmed. It rejected the claim that competency for execution “requires a rational understanding of the reason for the execution.” Panetti was aware of why he was being punished in the sense contemplated by Ford, the court held, because he understood that the murders he had committed were the stated reason for his scheduled execution. Panetti’s petition for a writ of certiorari asked the Supreme Court to consider the question:

Does the Eighth Amendment permit the execution of a death row inmate who has a factual awareness of the reason for his execution but who, because of severe mental illness, has a delusional belief as to why the state is executing him, and thus does not appreciate that his execution is intended to seek retribution for his capital crime?

250 Id. at 709, 712.
251 Id. at 711.
252 Id. at 712.
254 Id. at 821.
255 Id. at 817, 821 (citing Barnard v. Collins, 13 F.3d 871, 877 (5th Cir. 1994)) (“[W]e hold that ‘awareness,’ as that term is used in Ford, is not necessarily synonymous with ‘rational understanding,’ as argued by Panetti.”).
256 Petition for Writ of Certiorari, Panetti, 551 U.S. 930 (No. 06-6407), 2006 WL 3880284, at *i.
The justices granted certiorari in January 2007.\textsuperscript{257} Before the Supreme Court, the Texas Attorney General vigorously defended the competency test applied by the lower courts in order to go forward with Panetti’s execution.\textsuperscript{258} In doing so the State once again bucked the considered views of major mental health professional organizations and advocacy groups including the American Psychological Association, the American Psychiatric Association, the National Alliance on Mental Illness,\textsuperscript{259} and the National Alliance for the Mentally Ill.\textsuperscript{260} Supporting Panetti’s position, those organizations argued that the competency for execution standard used by the Fifth Circuit was constitutionally inadequate because it “draws medically arbitrary distinctions between severely mentally ill persons,”\textsuperscript{261} in that it fails to exclude seriously mentally ill persons who lack “all rational understanding about ‘why’ [they are] to be executed. In such a circumstance, proceeding with the execution would not further the purposes of the death penalty.”\textsuperscript{262}

Justice Kennedy’s majority opinion for the Supreme Court in \textit{Panetti v. Quarterman} rejected the standard for competency for execution adopted by the Fifth Circuit and pressed by Texas because that test was too restrictive to satisfy the Eighth Amendment and the rationale of \textit{Ford v. Wainwright}.\textsuperscript{263} While conceding that “a concept like rational understanding [of the reasons for an imposed punishment] is difficult to define,”\textsuperscript{264} and declining to announce a definitive constitutional test governing competency for execution,\textsuperscript{265} the Court majority nevertheless concluded that the standard employed in Panetti’s case was flawed.\textsuperscript{266} Allowing Panetti to be

\begin{footnotes}
\item[259] See Brief for Amici Curiae American Psychological Ass’n, American Psychiatric Ass’n, and National Alliance on Mental Illness in Support of Petitioner at 1, \textit{Panetti}, 551 U.S. 930 (No. 06-6407), 2007 WL 579235.
\item[261] Id. at *4.
\item[262] Brief for Amici Curiae American Psychological Ass’n, American Psychiatric Ass’n, and National Alliance on Mental Illness in Support of Petitioner, \textit{supra} note 259, at 4. See also Brief of Amicus Curiae in Support of Petitioner on Behalf of National Alliance for the Mentally Ill (NAMI), \textit{supra} note 260, at *4 (“[T]he Fifth Circuit’s competency to be executed standard [fails] to comport with the retributive rationale . . . espoused in \textit{Ford}.”).
\item[263] See \textit{Panetti}, 551 U.S. at 956–57.
\item[264] Id. at 959.
\item[265] Id. at 960–61.
\item[266] Id. at 960.
\end{footnotes}
executed on finding that he simply understood Texas’s *announced* reason for putting him to death, even if he instead genuinely believed that the stated reason was a sham and that he truly was being punished for preaching the Gospel or a related delusional belief not connected to the commission of his murders, would rob his death sentence of its retributive significance and hence violate *Ford’s* essential rationale.\(^{267}\)

The restrictive test for competency for execution defended by Texas made irrelevant the potentially critical input of mental health experts. It did so by foreclosing Panetti’s argument that “he suffers from a severe, documented mental illness that is the source of gross delusions preventing him from comprehending the meaning and purpose of the punishment to which he has been sentenced.”\(^{268}\) The narrow standard’s inhospitality to the testimony of mental health professionals in this context was not lost on the justices. Citing the *amici curiae* brief filed by the American Psychological Association and other mental health professional organizations, Justice Kennedy’s opinion pointedly instructed the district court that when it evaluated Panetti’s claimed incompetency on remand: “The conclusions of physicians, psychiatrists, and other experts in the field will bear upon the proper analysis. Expert evidence may clarify the extent to which severe delusions may render a subject’s perception of reality so distorted that he should be deemed incompetent.”\(^{269}\)

On remand, the district court in 2008 again found Panetti competent to be executed.\(^{270}\) Panetti’s subsequent claim that he had impermissibly been allowed to represent himself at his murder trial

\(^{267}\) *Id.* at 958–59 (“Considering the last—whether retribution is served—it might be said that capital punishment is imposed because it has the potential to make the offender recognize at last the gravity of his crime and to allow the community as a whole, including the surviving family and friends of the victim, to affirm its own judgment that the culpability of the prisoner is so serious that the ultimate penalty must be sought and imposed. The potential for a prisoner’s recognition of the severity of the offense and the objective of community vindication are called in question, however, if the prisoner’s mental state is so distorted by a mental illness that his awareness of the crime and punishment has little or no relation to the understanding of those concepts shared by the community as a whole.”).

\(^{268}\) *Id.* at 960.

\(^{269}\) *Id.* at 962 (citing Brief for Amici Curiae American Psychological Ass’n, American Psychiatric Ass’n, and National Alliance on Mental Illness in Support of Petitioner, *supra* note 259, at 17–19).

also was rejected. In 2017, the Fifth Circuit Court of Appeals ruled that the district court had erroneously denied Panetti’s request for appointed counsel and funds to hire a mental health expert and investigator to assist him to substantiate his incompetency for execution claim. It consequently again interrupted, at least temporarily, Texas’s unrelenting quest to execute Panetti. With apparent weariness, the court observed that its remand to the district court represented yet “another chapter in this judicial plunge into the dark forest of insanity and death directed by the flickering and inevitably elusive guides.”

E. Executive Clemency

The final step in death penalty regimes before an execution takes place, other than last-ditch applications for a judicial stay, is the clemency decision entrusted to the executive branch of government. When bestowed in capital cases, clemency usually comes in the form of a commutation of a death sentence to life imprisonment, although the power also extends to full pardons and to reprieves, or temporary delays in carrying out a scheduled execution. The President has clemency authority in federal criminal cases. The states have adopted different policies. The governor has exclusive or ultimate clemency authority in most death-penalty states, although he or she must sometimes consider a nonbinding recommendation made by a board or commission before acting. In other states the governor’s authority to grant clemency is conditioned on the prior favorable recommendation of a board or commission, and in a few states a board of pardon and parole (or

271 Panetti, 727 F.3d at 413, 415.
272 Panetti v. Davis, 863 F.3d 366, 368, 375 (5th Cir. 2017).
273 Id. at 368.
274 Id.
277 U.S. CONST. art. II, § 2, cl. 1.
279 Acker & Lanier, supra note 276, at 217; Clemency, supra note 278.
280 Id.
281 Id.
similarly named body), and not the governor, has clemency powers.\footnote{Id.} 

In Texas, the Governor has the unconditional authority to grant a single thirty-day reprieve in capital cases, but can only commute a death sentence or pardon an offender if a majority of the state Board of Pardons and Paroles first makes a positive recommendation.\footnote{tex. Const. art. IV, § 11(b); tex. code crim. proc. Ann. art. 48.01(a) (West 2017). Texas’s capital clemency process is described in some detail in a 2001 article, although various statutory amendments have been made regarding the process since the article’s publication. See Woods, supra note 61, at 1146–47.} The seven members of the Board are appointed by the Governor subject to confirmation by the state senate.\footnote{tex. Gov’t. code Ann. § 508.031(a) (West 2017). The Board of Pardons and Paroles apparently has had varying sizes over time, being as small as three members in 1929, and as large as eighteen members until a 2004 amendment to the statute fixed the size at seven. See tex. Const. art. IV, § 11, interpretive cmt. (Vernon’s 2007); Gov’t. code Ann. § 508.031(a); Woods, supra note 61, at 1161.} Clemency was not uncommon in Texas capital cases historically. Between 1923 and 1972, 100 offenders sentenced to death in Texas had their capital sentences commuted to terms of imprisonment, while 361 were executed.\footnote{Searchable Execution Database, supra note 24 (select individual boxes for the years 1982–2017; then select “Texas”; then select “apply filters”).} Modern era practices have been starkly different. Between 1982 and November 2017, Texas executed 545 prisoners,\footnote{In 1998, Gov. George W. Bush commuted the death sentence of Henry Lee Lucas based on concerns of possible innocence for the crime resulting in his death sentence. see Allen R. Myerson, Citing Facts, Bush Sparing Texas Inmate on Death Row, N.Y. Times (June 27, 1998), http://www.nytimes.com/1998/06/27/us/citing-facts-bush-sparing-texas-inmate-on-death-row.html. In 2007, Gov. Rick Perry commuted the death sentence of Kenneth Foster, whose co-defendant, who also had been sentenced to death, was directly responsible for killing the murder victim. see Clemency, supra note 278; Ralph Blumenthal, Governor Commutes Sentence in Texas, N.Y. Times (Aug. 31, 2007), http://www.nytimes.com/2007/08/31/us/31execute.html; see generally Michael L. Radelet & Barbara A. Zsembik, Executive Clemency in Post-Furman Capital Cases, 27 Univ. Rich. L. Rev. 289, 292–93 (1993) (distinguishing between capital case commutations granted for reasons of “judicial expediency” and those granted for “humanitarian” reasons).} while the sentences of just two persons under sentence of death were commuted to life imprisonment for “humanitarian” reasons (in contrast to commutations stemming from legal rulings such as those invalidating previously issued death sentences or exempting juvenile murderers from execution).\footnote{Herrera v. Collins, 506 U.S. 390 (1993).} 

Chief Justice Rehnquist’s majority opinion in Herrera v. Collins,\footnote{Herrera v. Collins, 506 U.S. 390 (1993).} a Texas death penalty case in which the U.S. Supreme Court considered whether a federal court is authorized to grant habeas corpus relief to a state prisoner based on his claimed innocence,
absent procedural or other grounds for relief.\footnote{289} extolled the rich history of executive clemency.\footnote{290} This encomium was perhaps ironic in light of the modern-day Texas commutation practices. The opinion identified executive clemency as “the ‘fail safe’ in our criminal justice system”\footnote{291} and “the traditional remedy for claims of innocence based on new evidence.”\footnote{292} Despite this proclamation, and notwithstanding the fact-dependent nature of actual innocence claims, the Court has ruled that only the most minimal Due Process safeguards attach to clemency decisions.\footnote{293} This is certainly true in Texas, where by statute the members of the Board of Pardons and Paroles “are not

\textit{Id. at 417; see also id. at 427–28 (Scalia, J., concurring) (“There is no basis in text, tradition, or even in contemporary practice (if that were enough) for finding in the Constitution a right to demand judicial consideration of newly discovered evidence of innocence brought forward after conviction.”). In In re Davis, the Court ordered that a federal district court hold an evidentiary hearing to entertain a death-sentenced state prisoner’s claim of actual innocence after the prisoner filed an original petition for writ of habeas corpus in the Supreme Court. In re Davis, 557 U.S. 952, 952 (2009). The district court conducted the evidentiary hearing but denied relief. See In re Davis, No. CV409-130, 2010 U.S. Dist. LEXIS 87340, at *1 (S.D. Ga. Aug. 24, 2010), aff’d sub nom. Davis v. Terry, 625 F.3d 716, 719 (11th Cir. 2010), cert. denied, 131 S. Ct. 1787, 1788 (2011). The prisoner, Troy Davis, subsequently was executed by the State of Georgia. Troy Davis, DEATH PENALTY INFO. CTR., https://deathpenaltyinfo.org/troy-davis (last visited Mar. 25, 2018).}

\textit{Herrera}, 506 U.S. at 411–12.

\textit{Id. at 415 (quoting Moore, supra note 276, at 131).}

\textit{Herrera}, 506 U.S. at 417.

\textit{Ohio Adult Parole Auth. v. Woodard, 523 U.S. 272, 278 (1998); id. at 289 (O’Connor, J., concurring) (“I believe that the Court of Appeals correctly concluded that some minimal procedural safeguards apply to clemency proceedings. Judicial intervention might, for example, be warranted in the face of a scheme whereby a state official flipped a coin to determine whether to grant clemency, or in a case where the State arbitrarily denied a prisoner any access to its clemency process.”). See also Daniel T. Kobil, The Evolving Role of Clemency in Capital Cases, in America’s Experiment with Capital Punishment: Reflections on the Past, Present, and Future of the Ultimate Penal Sanction 687, 688 (James R. Acker et al. eds., 3d ed. 2014) [hereinafter America’s Experiment] (“So long as jurisdictions provide ‘minimal’ process, the courts are willing to tolerate vastly different—some would say even unfair—methods of dispensing clemency.”); Andrew Novak, Transparency and Comparative Executive Clemency: Global Lessons for Pardon Reform in the United States, 49 U. Mich. J.L. Reform 817, 818 (2016) (“Although the usual federal clemency process is governed by Article II of the Constitution and by federal regulations, the President and his administrative counterparts in the Department of Justice have no obligation to provide reasons for a denial of clemency, to seek the views of other stakeholders, including victims, or to reveal aspects of the deliberative process.”).}
required to meet as a body... in clemency matters.” Board members typically have not met or held hearings when considering clemency applications, relying instead on submitted papers and telephone communications. The memoranda prepared by counsel to Governor George W. Bush summarizing the Board’s capital case clemency recommendations and submitted to Bush in advance of scheduled executions frequently omitted critical information.

In 2004, the Texas Board of Pardons and Paroles’ unwillingness to act when scientific evidence cast doubt on the reliability of Cameron Todd Willingham’s capital murder conviction may have contributed to the execution of an innocent person. At a minimum, it has reinforced serious doubts about the adequacy of the clemency process to serve as a “fail safe” in the justice process. Willingham was home in December 1991 in Corsicana, Texas with his one-year-old twins and two-year-old daughter when the house caught fire. His children died in the blaze and Willingham was charged with their murder. He was convicted the following year, based in substantial part on expert testimony from fire scene investigators that the fire had been intentionally set. Although he protested his innocence, Willingham was sentenced to death.

294 TEX. GOV’T CODE ANN. § 508.047(b) (West 2017).
295 See Steiker & Steiker, supra note 11, at 1908; see also Woods, supra note 61, at 1162–63 (describing procedures in effect at the time of the article’s 2001 publication).
298 See Giannelli, supra note 297, at 221.
299 See id.
300 See Willingham v. State, 897 S.W.2d 351, 354 (Tex. Crim. App. 1995). The conviction also was supported by the testimony of a jailhouse informant, Johnny Webb, who claimed that Willingham “explained in detail how he poured lighter fluid throughout the house, purposely burned one of the children, set the house on fire, fled, and refused to go back into the house to rescue the children.” Id. at 358. Webb later recanted his testimony, but subsequently reasserted that his trial testimony had been truthful. See David Grann, Trial by Fire: Did Texas Execute an Innocent Man?, NEW YORKER (Sept. 7, 2009), https://www.newyorker.com/magazine/2009/09/07/trial-by-fire.
301 Willingham had been offered the chance to plead guilty in exchange for a sentence of life imprisonment, but he rejected the offer, reportedly saying, “I ain’t gonna plead to something I didn’t do, especially killing my own kids.” See Grann, supra note 300.
302 Willingham, 897 S.W.2d at 354. Dr. James Grigson, testified during the penalty phase of Willingham’s trial that Willingham “fits the profile of an extremely severe sociopath whose conduct becomes more violent over time, and who lacks a conscience as to his behavior. Grigson explained that a person with this degree of sociopathy commonly has no regard for other people’s property or for other human beings. He expressed his opinion that an individual
Over the twelve years separating Willingham’s trial and execution, advances in understanding of the interpretation of fire scene evidence seriously undermined the testimony of the two expert witnesses who opined at the 1992 trial that the house fire resulting in the children’s death had been intentionally set.\textsuperscript{303} Paul Giannelli, a nationally prominent forensics scholar, bluntly labeled the expert testimony “junk science.”\textsuperscript{304} After reviewing analyses of the evidence supporting Willingham’s murder convictions Giannelli noted that “[e]very independent expert, including the top experts in the country, has concluded that there was no evidence of arson.”\textsuperscript{305} Four days prior to Willingham’s February 17, 2004 execution, the Texas Board of Pardons and Paroles was presented with a report prepared by Dr. Gerald Hurst, an internationally renowned arson expert, which identified “critical errors” in the fire investigators’ trial testimony and concluded that their opinions were invalid to support the inference that the fire was intentionally set.\textsuperscript{306} Willingham asked the Board and Governor Rick Perry for a reprieve to allow for a fuller investigation of the scientific evidence.\textsuperscript{307} The request was denied.\textsuperscript{308} Willingham was executed as scheduled.\textsuperscript{309} His last words were: “I am an innocent man convicted of a crime I did not commit. I have been persecuted for twelve years for something I did not do.”\textsuperscript{310}

Later in 2004, Dr. Hurst and three other experts thoroughly reviewed the evidence supporting Willingham’s conviction at the request of the Chicago Tribune.\textsuperscript{311} They concluded that the original fire scene investigation was flawed and that the fire could have started accidentally.\textsuperscript{312} In 2005, in the wake of serious problems demonstrating this type of behavior can not be rehabilitated in any manner, and that such a person certainly poses a continuing threat to society.” Willingham, 897 S.W.2d at 355.

\textsuperscript{303} See Grann, supra note 300.
\textsuperscript{304} See Giannelli, supra note 297, at 221–22.
\textsuperscript{305} Id. at 250.
\textsuperscript{306} See id. at 239–40; see also Jessica Dwyer-Moss, Flawed Forensics and the Death Penalty: Junk Science and Potentially Wrongful Executions, 11 SEATTLE J. SOC. JUST. 757, 785 (2013) (“Dr. Hurst . . . insisted that Willingham was likely innocent, stating: ‘There’s nothing to suggest to any reasonable arson investigator that this was an arson fire.’”); Grann, supra note 300 (“Hurst concluded that there was no evidence of arson, and that a man who had already lost his three children and spent twelve years in jail was about to be executed based on ‘junk science.’”).
\textsuperscript{307} See Dioso-Villa, supra note 297, at 840.
\textsuperscript{308} See id.
\textsuperscript{309} See id.
\textsuperscript{310} Grann, supra note 300.
\textsuperscript{312} See id.
plaguing the Houston Police Department Crime Laboratory and questions surrounding Willingham’s execution, Texas lawmakers created the Texas Forensic Science Commission to oversee forensic science within the state, granting the Commission authority to investigate forensic negligence and misconduct.313 The following year, the Innocence Project formally requested the Commission to investigate the fire scene evidence in Willingham’s case.314 The Commission agreed to do so in 2008 and retained Dr. Craig Beyler, a recognized authority on arson, to review the evidence.315 Beyler submitted his report to the Commission in 2009.316 Beyler's report also analyzed the case of another Texas man convicted of murder and sentenced to death based on fire scene evidence, Ernest Ray Willis.317 The report concluded:

The investigations of the Willis and Willingham fires did not comport with either the modern standard of care expressed by NFPA 921 [the National Fire Protection Association *Guide for Fire and Explosion Investigations*], or the standard of care expressed by fire investigation texts and papers in the period 1980–1992. The investigators had poor understandings of fire science and failed to acknowledge or apply the contemporaneous understanding of the limitations of fire indicators. Their methodologies did not comport with the scientific method or the process of elimination. A finding of arson could not be sustained based upon the standard of care expressed by NFPA 921, or the standard of care expressed by fire investigation texts and papers in the period 1980–1992.318

The Texas Forensic Science Commission scheduled an October 2009 hearing to consider Dr. Beyler’s report.319 Two days before the hearing was to take place, Governor Rick Perry abruptly removed the


315 Id.

316 Id.

317 Giannelli, supra note 297 at 244–45; The Texas Forensic Science Commission and the Willingham Case, supra note 314. Willis ultimately was exonerated after spending seventeen years on Texas’s death row. See Giannelli, supra note 297, at 243–44.


319 The Texas Forensic Science Commission and the Willingham Case, supra note 314.
Commission chairman and two other Commission members.\(^{320}\) Facing re-election in 2010, Perry defended his action as being a routine administrative matter.\(^{321}\) In the process, he branded Willingham a “monster” and a “heinous individual who murdered his kids.”\(^{322}\) The Governor subsequently appointed a prosecutor as the new Commission chair, “who then effectively scuttled the investigation into the Willingham case.”\(^{323}\) Other members of the Commission refused to endorse the new chairman’s conclusion that the fire scene investigators had not been negligent in Willingham’s case.\(^{324}\) In January 2011 the full Commission heard from Dr. Beyler and other experts, who offered conflicting opinions about the reliability of the testimony presented at Willingham’s trial.\(^{325}\) The Commission issued its report in April 2011.\(^{326}\) The report declined to offer an opinion about the evidence supporting Willingham’s conviction,\(^{327}\) although it cited numerous advances concerning the reliability of fire scene investigations that had developed since the techniques relied on in connection with Willingham’s 1992 trial.\(^{328}\)

In March 2014, the Texas Board of Pardons and Paroles unanimously denied a request made by Cameron Todd Willingham’s family and the Innocence Project to grant Willingham a posthumous

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320 James C. McKinley, Texas Governor Fires Chairman of Forensic Science Committee, N.Y. TIMES (Sept. 30, 2009), http://www.nytimes.com/2009/10/01/us/01brfs-GOVERNORFIRE_BR F.html. Barry Scheck, the co-director of the Innocence Project, complained that this action “is like the Saturday night massacre . . . . It’s like Nixon firing Archibald Cox to avoid turning over the Watergate tapes.” Id. However, a spokesperson for Governor Perry stated that the Governor’s action was “business as usual . . . . Some people’s terms expired . . . and we reappointed new people.” Id.


322 Montgomery, supra note 321.


324 See Giannelli, supra note 297 at 246.

325 See id. at 247–48.


327 See id. at 8 (“No finding contained herein constitutes a comment upon the guilt or innocence of any individual.”). The Commission requested an opinion clarifying its jurisdiction from the Texas Attorney General. Id. at 6. Attorney General Greg Abbott’s opinion concluded that the Commission lacked jurisdiction to investigate claims involving alleged forensic negligence or misconduct that related to incidents prior to September 1, 2005, thus exempting the fire scene investigation in Willingham’s case from review. See Giannelli, supra note 297, at 248 n.115; Goldstein, supra note 323, at 244–45, 245 n.166.

328 See TEX. FORENSIC SCI. COMM’N, supra note 326, at 19–21; Giannelli, supra note 297, at 250.
pardon. The request was made after a previously undisclosed file note surfaced which cast additional doubt on the integrity of Willingham’s conviction and execution. The note, which had not been made available to Willingham’s defense counsel, suggested that a prosecutor involved with Willingham’s trial had promised Johnny Webb, the jailhouse informant who testified against Willingham, consideration in exchange for his testimony. Barry Scheck, the co-director of the Innocence Project, charged that the Board’s most recent decision in Willingham’s case “illustrates that the clemency system is completely broken in Texas.” He was not alone in leveling this criticism. Well before the Board had acted to deny the posthumous pardon application filed on Willingham’s behalf, a Texas Court of Criminal Appeals judge, lamenting the absence of procedural regularity in the state’s clemency procedures in another case, had opined that “clemency law in Texas is a legal fiction at best.”

IV. THE CORRUPTING INFLUENCE OF CAPITAL PUNISHMENT

From the beginning to the end of capital prosecutions in Texas—encompassing decisions about defendants’ competency to stand trial, conditioning life and death sentences on predictions about offenders’ future dangerousness, defining intellectual disability, evaluating prisoners’ competency for execution, and considering petitions for executive clemency—scientific and expert opinion evidence has too
often been coopted, distorted, ignored, or otherwise made subservient to the pursuit of executions. Objective scientific inquiry has proven to be sorely mismatched against the overpowering influence of the politics of capital punishment.334 Notably, Texas has not exhibited such disinterest or disdain for science in other contexts.335 Indeed, absent the distracting influence of the death penalty, the state has been among national leaders in adopting reforms based on or related to the sciences to promote fairness and reliability in the administration of justice.

For example, Texas has been at the forefront of adopting safeguards against wrongful convictions.336 In the wake of crime laboratory scandals, the state legislature created the Texas Forensic Science Commission in 2005, empowering it with important oversight functions with respect to crime labs and their use of the forensic sciences.337 With the passage of the Michael Morton Act, the state implemented liberal discovery policies in criminal cases,338 lawmakers created the Timothy Cole Advisory Panel on Wrongful Convictions,339 which recommended a host of justice system reforms.340 The legislature enacted measures in 2011 to improve the

334 See, e.g., Steve Benen, The Lengths Rick Perry Will Go, WASH. MONTHLY (Oct. 13, 2009), https://washingtonmonthly.com/2009/10/13/the-lengths-rick-perry-will-go (describing the Governor of Texas’s sway over a commission investigating the execution of a man who was potentially wrongly convicted).


336 Id.

337 TEX. CODE CRIM. PROC. ANN. art. 38.01, §§ 1, 4(a) (West 2017); see Thompson & Cásarez, supra note 313, at 717–19; Danielle Badeaux, Comment, The DNA’s Over There . . . Right Next to the Jelly: The Problems with the Preservation of Evidence in Texas, 11 TEX. TECH. ADMIN. L.J. 333, 338 (2010); Goldstein, supra note 323, at 244.


reliability of eyewitness identification procedures used in photo arrays and line-ups.341 Texas tops the country in providing monetary compensation and various forms of assistance for wrongfully convicted individuals.342 And with the adoption of pioneering legislation343 in 2013, known colloquially as “the Junk Science Writ,”344 the state has demonstrated a bold willingness to re-examine criminal convictions that rest on uncertain scientific foundations.

This novel statute authorizes a state court to grant habeas corpus relief to persons convicted of crimes in cases in which scientific evidence, that was unavailable at the time of the trial, has become available and the court finds that, “had the scientific evidence been presented at trial, on the preponderance of the evidence the person would not have been convicted.”345 The Texas Court of Criminal Appeals applied the law in 2014 to upset the capital murder conviction of Neal Hampton Robbins for killing his girlfriend’s seventeen-month-old daughter.346 Robbins was convicted at a 1999 trial and sentenced to life in prison347 after the medical examiner who conducted the autopsy on the child ruled out the administration of CPR as an explanation for injuries the girl had sustained.348 She also excluded sudden infant death syndrome as a possible cause of death.

545 Crim. Proc. art. 11.073(b)(2). The statute “applies to relevant scientific evidence that: (1) was not available to be offered by a convicted person at the convicted person’s trial; or (2) contradicts scientific evidence relied on by the state at trial.” Id. art. 11.073(a). To grant habeas corpus relief, the court must find that: “relevant scientific evidence is currently available and was not available at the time of the convicted person’s trial because the evidence was not ascertainable through the exercise of reasonable diligence by the convicted person before the date of or during the convicted person’s trial; and . . . the scientific evidence would be admissible under the Texas Rules of Evidence at a trial held on the date of the application.” Id. art. 11.073(b)(1). See also id. art. 11.073(d) (“In making a finding as to whether relevant scientific evidence was not ascertainable through the exercise of reasonable diligence on or before a specific date, the court shall consider whether the field of scientific knowledge, a testifying expert’s scientific knowledge, or a scientific method on which the relevant scientific evidence is based has changed since: (1) the applicable trial date or dates, for a determination made with respect to an original application; or (2) the date on which the original application or a previously considered application, as applicable, was filed, for a determination made with respect to a subsequent application.”).
547 Id. The prosecution did not seek the death penalty. Id.
548 Id. at 682–83.
and offered the opinion that the death was a homicide. In 2007, after her autopsy conclusions were called into question by other physicians, the medical examiner notified the district attorney’s office responsible for prosecuting Robbins that she had considered additional information and gained more experience since the trial, and had come to the conclusion that the child’s death could have been caused by aggressive CPR or other efforts to help the child. She consequently had formed the opinion that the child’s death should not be classified as a homicide, but rather as having an “undetermined” cause.

Relying on the 2013 legislation, the Court of Criminal Appeals, by vote of 5–4, granted Robbins a new trial based on the medical examiner’s reconsideration of her trial testimony concerning the cause of the child’s death. Of critical importance, the majority opinion noted, the statute allowed convictions to be re-examined in light of new understandings or developments in scientific evidence absent a threshold showing of the convicted person’s actual innocence or that false testimony had been presented, as previously had been required. A disciplinary breakthrough was not a prerequisite for the statute’s application; as in Robbins’ case, a scientific expert’s changed opinion about a matter of significance could serve as a basis for relief. As Justice Cochran observed in her concurring opinion, “the Texas Legislature . . . chose accuracy over finality by enacting Article 11.073.”

Regardless of whether a conviction is based on an unreliable field of science or unreliable scientific testimony, the result is the same: an unreliable verdict that cannot stand the test of time. It is built upon the shifting sands of “junk” science or a “junk” scientist, and it is the purpose of Article 11.073 to

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349 Id.
350 Id. at 685.
351 Id.
352 Id. at 680 (citations omitted).
353 Id. at 689–90 (first citing Ex Parte Binder, 660 S.W.2d 103, 106 (Tex. Crim. App. 1983), then citing Ex Parte Elizondo, 947 S.W.2d 202, 205 (Tex. Crim. App. 1996), and then citing Ex Parte Ghahremani, 332 S.W.3d 470, 478 (Tex. Crim. App. 2011)) (“Prior to the enactment of article 11.073, newly available scientific evidence per se generally was not recognized as a basis for habeas corpus relief and could not have been reasonably formulated from a final decision of this Court or the United States Supreme Court, unless it supported a claim of ‘actual innocence’ or ‘false testimony.’ . . . Article 11.073 provides a new legal basis for habeas relief in the small number of cases where the applicant can show by the preponderance of the evidence that he or she would not have been convicted if the newly available scientific evidence had been presented at trial.”).
354 See id. at 695 (Johnson, J., concurring).
355 Id. at 704 (Cochran, J., concurring).
provide a statutory mechanism for relief and a retrial based upon “good” science and “good” scientific testimony.\(^356\)

The several measures adopted in Texas to help guard against and respond to miscarriages of justice, including taking account of science and important advances in scientific knowledge, stand in stark contrast to the recalcitrance evidenced in the death penalty context. Why this is so requires explanation. In science, the “Occam’s razor” principle commends choosing parsimonious or simpler explanatory models over more complicated competing ones.\(^357\) The simplest explanation for the dramatically different reception given science in Texas’s administration of justice within and outside of the death penalty context boils down to a single word: politics. Although otherwise mired in controversy, one attribute of capital punishment, particularly in a state such as Texas, is undeniable. It has extraordinary symbolic and political significance. The death penalty’s seductive expressive value and its political salience can easily overwhelm and eclipse the cold logic of science.

Support for the death penalty has long been associated with being tough on crime, symbolizing the triumph of law and order over criminal wrongdoing.\(^358\) Executions demonstrate the power of organized government, and its efficacy in responding to threats to the social order.\(^359\) Because the states have primary responsibility for the

\(^{356}\) Id. at 706.


\(^{358}\) See Stephen B. Bright, The Politics of Capital Punishment: The Sacrifice of Fairness for Executions, in AMERICA’S EXPERIMENT, supra note 293, at 127; David Garland, Peculiar Institution: America’s Death Penalty in an Age of Abolition 244–45 (2010); Steiker, supra note 9, at 111.

\(^{359}\) See Emile Durkheim, The Division of Labor in Society 60–63 (W.D. Halls trans., 1893/1984) (recognizing the important contributions that imposing criminal punishment makes to social solidarity). With respect to capital punishment in this regard, see also Austin Sarat, Capital Punishment as a Legal, Political, and Cultural Fact: An Introduction, in THE KILLING STATE: CAPITAL PUNISHMENT IN LAW, POLITICS, AND CULTURE 3, 3 (Austin Sarat ed., 1999); Austin Sarat, When the State Kills: Capital Punishment and the American Condition
administration of justice, maintaining a system of capital punishment also has been championed as a hallmark of state and local sovereignty to be preserved against encroachment by asserted federal constitutional authority. Butressing the symbolic power of capital punishment is its regrettable legacy of racial discrimination, particularly in the Southern states, which have been the nation’s traditional strongholds for the death penalty.

With scientific contributions regularly acknowledged in other facets of the administration of justice in Texas, the most straightforward explanation for officials’ willful blindness in the capital punishment context to scientific evidence and advances is “the corrosive effect of death-penalty politics.” Facts can recede quickly to relative insignificance in resolving disagreements which are laden with emotion and dominated by normative considerations. Examples abound in which ideological beliefs dwarf attention to scientific findings on controversial social issues. Galileo was found guilty of heresy for contravening the Catholic Church’s orthodoxy by positing that the earth revolves around the sun, instead of the sun orbiting earth. Clarence Darrow’s client in the famed “Monkey trial,” John Scopes, was prosecuted by William Jennings Bryan and convicted for teaching evolution in a public school, in contravention of Tennessee law and prevailing beliefs in creationism. We need look no farther than current debates about climate change to see this tendency once


360 See GARLAND, supra note 358, at 249; ZIMRING & HAWKINS, supra note 359, at 44; see also MICHAEL MELTSNER, CRUEL AND UNUSUAL: THE SUPREME COURT AND CAPITAL PUNISHMENT 290–91 (1973) (describing reaction of various state politicians to the Supreme Court’s invalidation of capital punishment as administered under laws then in effect, in Furman v. Georgia, 408 U.S. 238 (1972)).


362 Giannelli, supra note 297, at 224.


364 See Scopes v. State, 289 S.W. 363, 363–64 (Tenn. 1926); EDWARD J. LARSON, SUMMER FOR THE GODS: THE SCOPES TRIAL AND AMERICA’S CONTINUING DEBATE OVER SCIENCE AND RELIGION 73, 246 (1997). Scopes’s conviction was overturned by the Tennessee Supreme Court on procedural grounds. Id. at 220–21.
again at work. Capital punishment represents a quintessential example of a policy issue where value judgments reign as primary over empirical facts. The death penalty in Texas, imbued with powerful symbolism and political significance, has succeeded not only in condemning offenders, but also the principled teachings of science.

V. CONCLUSION

Texas’s current death penalty statute, with its peculiar and largely idiosyncratic fixation on predicting offenders’ future dangerousness, was hastily drafted and enacted after the Supreme Court invalidated the state’s prior capital punishment legislation in 1972. State officials have aggressively used and staunchly defended all phases of the replacement law’s implementation since its adoption. Texas has executed well over 500 offenders in the modern death penalty era, while only two other states have carried out more than 100 executions. The state has clearly distinguished itself as the nation’s preeminent capital punishment jurisdiction. In the process, it has alternatively coopted, disregarded, and subverted science and prevailing disciplinary norms of the mental health professions.

It may not be surprising that politically charged death penalty legislation which is premised on the prediction of future dangerousness is largely immune to discreditation by research findings that belie the reliability of forecasting violent behavior. Objective scrutiny of offenders’ claimed intellectual disability or


367 See Citron, supra note 88, at 158, 173.

368 See supra notes 20–21 and accompanying text. Branch v. Texas was decided as a companion case to Furman v. Georgia, 408 U.S. 238 (1972) (per curiam).

369 See Number of Executions by State and Region Since 1976, supra note 1 (indicating that through November 9, 2017, Texas had carried out 545 executions during the modern capital punishment era, followed by Virginia with 113, and Oklahoma with 112); supra notes 1–6 and accompanying text.

370 See Number of Executions by State and Region Since 1976, supra note 1.
incompetency for execution may quickly be clouded by the heinous character of a murder or public opinion strongly supportive of the capital sanction. Elected judges charged with interpreting and assessing the constitutionality of death penalty laws, and executive branch officials possessed of clemency authority, may confront political backlashes by derailing the enforcement of capital sentences. As oil mixes with water, science meshes poorly with death penalty laws and practices in Texas. Science and politics are a deadly mixture, in the nature of snake oil with a bite.