

Laboratory of Justice: The Supreme Court's 200-Year Struggle to Integrate Science and the Law

by David L. Faigman

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A constitution states or ought to state not rules for the passing hour, but principles for an expanding future. In so far as it deviates from that standard, and descends into details and particulars, it loses its flexibility, the scope of interpretation contracts, the meaning hardens. While it is true to its functions it maintains its power of adaptation, its suppleness, its play.

– Benjamin N. Cardozo

Throughout its history, the United States Supreme Court has wrestled with the tension between the conservative nature of the law and the rapid evolution of scientific knowledge. Science and constitutional law have conventionally been thought of as two unrelated subjects. Constitutional lawyers and scholars have traditionally focused on history, legal analysis, and philosophy; while those lawyers interested in science have mainly focused on recent advancements in technology affecting the practice of law, such as DNA profiling. Even though contemporary scholars readily acknowledge that science is a component of modern constitutional law, they display little interest in studying how science has influenced and pervaded the reading of the Constitution since its conception. As a kind of enlightenment, David Faigman has masterfully put together a story of how science has contributed to the evolution of the Constitution throughout the history of its existence and interpretation.

David Faigman's passion for science stems from his graduate years at the University of Virginia's Psychology Department where he earned his master's degree in social psychology. Professor Faigman soon thereafter returned to the University of Virginia where he earned his law degree, and decided to remain in academia by accepting a faculty position at the University of

California, Hastings College of the Law. Besides teaching classes at the law school, Professor Faigman has found time to author several books including *Legal Alchemy: The Use and Abuse of Science in the Law*, as well as *Modern Scientific Evidence: The Law and Science of Expert Testimony*, a book which has been cited numerous times by the U.S. Supreme Court.

The principles of science and our understanding of it have evolved significantly over the past three centuries. Professor Faigman illustrates this point by tying the thinking of yesterday with what is acknowledged today. It was not long ago that doctors believed that the cause of illness was an imbalance in one of the body's four humours, the fluids that were believed to control the functioning of the body. This eighteenth century belief led doctors to recommend a procedure known as bloodletting in an attempt to relieve several types of physical illness. By that time, bloodletting was a centuries old therapeutic practice that had the virtue of both conforming to medicine's knowledge of human anatomy of the time and having passed the test of clinical observation and experience.¹ It was this mistaken belief that eventually led to the death of George Washington back in 1799. At the time of his death, President Washington was suffering from what many now believe to have been a simple cold or possibly pneumonia. In adhering to widely held beliefs, Washington's doctors placed leeches across his body in an attempt to balance the body's humours which was believed to be the cause of his ailment.² As modern medicine shows, it was this practice that had the effect of hastening the President's death by further weakening his body's immune system. In his first chapter, Professor Faigman demonstrates exactly how the widely held beliefs of today may not necessarily be given the same weight in the world of tomorrow. It is Faigman's belief that this same theory holds true for the Supreme Court and its interpretation of the Constitution.

¹ ROY PORTER, ed., *CAMBRIDGE ILLUSTRATED HISTORY OF MEDICINE* 58 (Oxford: Cambridge University Press, 1996).

² JOHN MARSHALL, *THE LIFE OF GEORGE WASHINGTON*, Vol. 2 (Walton Book Co., 1980).

In interpreting the meaning of the Constitution, the Court has repeatedly sought to identify with the constitutional fathers who drafted the document. In providing the reader a basis to understand that upon which the Court has so often relied, Professor Faigman presents an overview of the drafters of the Constitution and what competing political/societal values they embodied. At first, one might wonder what significance this background would have; however, this information is precisely what Chief Justice Roger Brooke Taney relied upon in drafting the Court's *Dred Scott* decision.³ Professor Faigman conducts a comprehensive character examination of Taney, concluding that the Chief Justice held strict constructionist views of constitutional interpretation and of state sovereignty. For Taney, therefore, the question of whether a black man could be a citizen depended upon whether those who had ratified the Constitution had intended such a purpose. From his vantage point in 1857, Taney found compelling evidence to suggest that the fathers of the Constitution had deemed blacks to be inferior. Furthermore, Taney uncovered the scientific research of physicians and professors, whose conclusions deemed that Dred Scott and other blacks were inferior to Caucasians. In the end, relying on scientific evidence that existed at the time of the drafting of the Constitution and society's view on slavery, Taney concluded that the Constitution guaranteed the right of property in a slave. While the Chief Justice would say that his goal regarding slavery was to maintain the status quo until slavery could come to a "gradual, graceful, and peaceful end," many believed that Taney played a significant role in igniting the Civil War, a proposition that Professor Faigman appears to agree with.

Even with social science playing a key role in the decisions of the Court with regards to slavery, it was not until the twentieth century that the issue of biological determinism made its way to the Court. Faigman's chapter entitled "The Roots of Modernity" examines the Court's

³ Scott v. Sanford, 60 U.S. 393 (1857).

decision in *Buck v. Bell*, a 1927 case questioning the validity of a Virginia law that provided for the sterilization of mental defectives. The author of the opinion, Justice Oliver Wendell Holmes Jr., was devoted to science and empiricism and imbued the law with modern notions of the scientific method. The case came during the eugenics movement when sterilization was considered an enlightened way to remove the feeble-minded and mentally ill. Holmes wholeheartedly believed that psychological traits were inheritable and relied heavily on statistical predispositions in upholding the Virginia statute, writing infamously that, “three generations of imbeciles are enough.”⁴ Only fifteen years later the Court would reconsider the constitutionality of forced sterilization in *Skinner v. Oklahoma*.⁵ The Oklahoma statute in question was premised on the belief that criminal tendencies were inheritable and that sterilization would help stop the flow of criminal traits to subsequent generations.

Unfortunately, the Court managed to avoid the consideration of whether scientific evidence was available to support such a proposition regarding biological determinacy by invalidating the law on separate grounds. This decision marked the end of an era in the way that the Supreme Court viewed the biological component of human behavior. While the Court did not actually rely on science in deciding *Skinner*, sterilization was a societal solution that was premised on the belief of biology playing a role in one’s behavior. It was not long after *Skinner* that the eugenics movement was abandoned, due in part to the Nazi practice of sterilization in their hopes of preserving racial purity.

The controversy over social science would reveal itself again just a decade later in the landmark case of *Brown v. Board of Education*.⁶ Faigman limited his analysis to the scientific evidence presented by both sides of the issue, which were at opposite ends of the spectrum. The

⁴ *Buck v. Bell*, 274 U.S. 200, 207 (1927).

⁵ *Skinner v. Oklahoma*, 316 U.S. 535 (1945).

⁶ *Brown v. Board of Education*, 347 U.S. 483 (1954).

NAACP presented all sorts of social scientists including psychologists, education specialists, and economists to show that discrimination and segregation had detrimental effects on the personality development of black children. It was based on this evidence that the trial court explicitly found that segregation caused psychological injury. The City of Topeka countered these claims by employing the research and work of a prominent psychologist named Dr. Henry Garrett. Through his research Dr. Garrett concluded that blacks were inferior intellectually, culturally, and physiologically. He presented evidence which suggested that disparities between the races were due to biological factors, thereby attributing only ten percent of the difference to the environment. This biological evidence included studies showing that blacks' brains were far less complex and not as fully developed in the frontal lobes where abstract reasoning was shown to take place. Fortunately enough, the Warren Court gave no credence to Garrett's scientific evidence, and decided to end segregation. As Faigman remarks, *Brown* was just another instance in American constitutional history where the people of the time may have been skeptical of the Court's decision, but history would later prove the High Court correct.

In "The Right to Be Let Alone" Faigman examines the highly controversial decision of the Court in *Roe v. Wade*.⁷ To author the opinion, Chief Justice Burger selected Justice Harry Blackmun, considered by many to be the most scientifically curious justice to ever sit on the bench. Blackmun's first draft of the opinion struck down the Texas statute outlawing abortion on the grounds that the law was too vague, which Justices Brennan and Douglas objected to. They informed Blackmun that they had intended to strike down the law squarely on the constitutional merits. Considering Justice Blackmun's interest in science, it is not surprising that he decided to spend the summer of 1972 at the Mayo Clinic studying the science of pregnancy and history of abortion. Blackmun wanted to immerse himself in understanding the science of

⁷ *Roe v. Wade*, 410 U.S. 113 (1973).

gestation in order to properly articulate whatever doctrine the Court would choose to adopt. He intended to familiarize himself with the medical science in order to determine whether it would be at all relevant to the law the Court applied. As it turned out, Blackmun determined that the science was not just relevant, but determinative. Even Chief Justice Burger was hesitant with Blackmun's reliance on science, writing in his concurrence, "I am somewhat troubled that the Court has taken notice of various scientific and medical data in reaching its conclusion, however, I do not believe that the Court has exceeded the scope of judicial notice accepted in other contexts."⁸ Additionally, many practical questions surrounded the Court's decision to attach a constitutional rule to medical science. What would happen if viability, the point at which the fetus could survive outside the woman's body, changed as technology improved?

Justice Sandra Day O'Connor criticized the trimester framework set out by Blackmun in the first abortion case she heard, *Akron v. Akron Center for Reproductive Health*.⁹ In her dissent, she warned that, due to the advancement of medical technology, linking the framework set forth in *Roe* to medical technology had set it on a collision course with itself.¹⁰ She feared that viability would continue to creep forward toward conception. However, O'Connor would not allow history to record her as the deciding vote to invalidate a woman's constitutional right to reproductive choice. In her concurring opinion in *Webster v. Reproductive Health Services*, she interpreted the Missouri statute under review so that it would not directly implicate the *Roe* holding.¹¹ O'Connor insisted that it was not gestational age that was important under *Roe*, but rather viability. Faigman's chapter goes on to summarize the position of the Court since *Webster*, with their latest decision in *Planned Parenthood v. Casey* claiming to uphold the

⁸ *Id.* at 207 (Burger, C.J., concurring).

⁹ *Akron v. Akron Center for Reproductive Health*, 462 U.S. 416 (1983).

¹⁰ *Id.* at 452 (O'Connor, J., dissenting).

¹¹ *Webster v. Reproductive Health Services*, 492 U.S. 490, 522 (1989) (O'Connor, J., concurring).

“central holding” of *Roe* but in fact abandoning most of the details with what the Court has termed an “undue burden test.”¹²

The remaining chapters of *Laboratory of Justice* examine issues surrounding freedom of speech, freedom of religion, and the Equal Protection Clause. A myriad of cases are presented, ranging from affirmative action decisions of the Court and the constitutionality of school prayer to the sacrifice of animals as the practice of one’s religion. The chapters that devote themselves to these questions reflect that the Court of today continues to evaluate constitutional questions on the grounds of social science. For instance, in the cases of *Gratz v. Bollinger* and *Grutter v. Bollinger*, the Court resorted to statistical analysis and empirical data to prove and disprove the existence of discrimination with regards to admission to undergraduate colleges and law schools.¹³ Similarly, the Court struck down gender classification at a Virginia military institute on the grounds that women, as a historically disadvantaged group, should be afforded an equal opportunity to participate and to redress existing inequalities. Justice Ginsburg arrived at this decision by weighing evidence supporting the contention that women, although biologically different, had the ability to perform at the level of men in a physically rigorous environment.¹⁴

Faigman’s assessment of the role of science in constitutional interpretation concludes with the prediction of what possible issues may come before the Court in the near future. Certainly, there will be the question concerning one’s right to privacy with regards to future surveillance technology, particularly with reference to one’s privacy in the sanctity of his home. Furthermore, there has been debate surrounding the issue of gene profiling, the using of one’s genetic information to predict behavioral predispositions, and in what ways the law should take into account a person’s propensity for violence. While the Court has upheld challenges to civil

¹² *Planned Parenthood of Southeastern Pennsylvania v. Casey*, 505 U.S. 833 (1992).

¹³ *Gratz v. Bollinger*, 539 U.S. 244 (2003); *Grutter v. Bollinger*, 539 U.S. 306 (2003).

¹⁴ *United States v. Virginia*, 518 U.S. 515 (1996).

commitment statutes, the question remains just how far the government may go to punish future conduct, in that one can hardly be held responsible for something that has not even happened. It is these types of questions involving the science of today and the discoveries of tomorrow that the Supreme Court must be prepared to balance in the future.

Laboratory of Justice is a work that provides powerful insight into how science has pervaded the history of constitutional law, while presenting issues concerning advancements in science and technology that the Court will be faced with in the future. Professor Faigman's comprehensive and compelling analysis of constitutional history provides the reader with a thorough understanding of the issues of the past and how science has contributed to their resolution. More importantly, this book is not only easily comprehensible but enjoyable as well. Therefore, even those who felt overwhelmed or were hesitant to study constitutional law can purchase this book and actually take pleasure in learning about the history that has shaped our country's jurisprudence. This book is a perfect complement to any Constitutional Law course and is useful for anyone who wishes to understand how science has shaped the law, and what future challenges advancements in science and technology pose to our liberties.