

THE FUNDAMENTAL MEANING OF “MEDICAL UNCERTAINTY”: JUDICIAL DEFERENCE TO SELECTIVE SCIENCE IN *GONZALES V. CARHART*

*Ames Grawert**

Introduction	380
I. The Partial Birth Abortion Act of 2003: Scientific Fact-finding by Congress and the Lower Courts Leading Up to <i>Gonzales v. Carhart</i>	383
A. Congressional Findings on the Need for a Health Exception	383
B. Lower Court Doubts About Congress’s Findings Leading Up to <i>Gonzales</i>	385
II. Theories Used by the <i>Gonzales</i> Courts When Examining Scientific Facts Relating to the Constitutional Right to Choose	386
A. Theories Considered by the District Courts	387
B. The Supreme Court’s Majority Opinion in <i>Gonzales v. Carhart</i>	389
C. Doctrinal Flaws of the <i>Gonzales</i> Approach in Evaluating Scientific or Medical “Facts” Found by the Legislature	390
D. Systemic Dangers of <i>Gonzales</i> ’s Easy Deference..	393
III. New Standards for Court Evaluation of Legislative Scientific “Findings” to Ensure Responsible Use of Science in Fundamental Rights Jurisprudence	394
A. Closing the Loophole: The Judiciary Can and Should Monitor Scientific Findings of Fact More Closely	395
1. Courts Traditionally Review Scientific Testimony at a High Standard	395
2. Critical Review Is Justified Based on the Uniqueness of Science	396

*J.D., New York University School of Law, 2009; B.A., Rice University, Houston, Texas, 2006. *Festina lente.*

3. Courts Can Successfully Review Science Related to Legislation	398
B. Tailoring the Inquiry to Prevent Second-Guessing Policy and to Adequately Protect Unique Constitutional Rights	399
1. Careful Scientific Review Is Appropriate Where the Scientific or Medical Facts in Question Affect the Right, Rather than the Policy Behind Regulation	399
2. Importing Sliding Scrutiny: When a “Fundamental” Right is in Play, Review Should be More Careful	401
C. Applying Specialized Scientific Review Broadly: What Changes, and What Does Not	4036
D. Applying the Standard to <i>Gonzales v. Carhart</i> : Bad Science Makes Bad Law	405
Conclusion	407

INTRODUCTION

Science demands adherence to an outcome-blind process. When practiced purely, it remains objective and ignorant of politics.¹ Since science seeks to describe the root nature of the universe, stripped bare of biases, it is a necessary tool to not only understand our world, but to respond to the world through government. However, since science is not a natural companion to politics, when exposed to the rhetorical violence of modern democracy, science can be twisted in such a manner as to destroy the unique advantages its process creates. Because classifying an argument as “scientific” implicitly gives it an imprimatur of truth, politicians have an incentive to fabricate science to justify policy decisions;² in the process, the public is misled and science’s societal role is compromised. These temptations are real, and fears of

1. See THOMAS S. KUHN, *THE STRUCTURE OF SCIENTIFIC REVOLUTIONS* 42 (3d ed. 1996) (describing rigorous empiricism as a commitment, “without which no man is a scientist.”); *id.* at 168 (“One of the strongest, if still unwritten, rules of scientific life is the prohibition of appeals to heads of state or to the populace at large in matters scientific.”); see also *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 590 (1993) (noting that the guarantee of “scientific knowledge” is one of “more than subjective belief” based in “the methods and procedures of science.”).

2. See Daniel Smith, *Political Science*, N.Y. TIMES, Sep. 4, 2005, at 36 (discussing fears of some legislators that in 2005, due to the influence of the Bush administration, “scientific conclusions, reached either within agencies or by people outside of government, are being changed for political reasons by people who have not done the scientific work.”).

political encroachment upon science have only grown stronger in recent years.³

In response to science's potential for influencing opinion and policy, and the corresponding risk of deliberately erroneous usage, courts have taken to limiting the admissibility of scientific expert testimony unless it passes an initial "gatekeeping" test "designed not for the exhaustive search for cosmic understanding but for the particularized resolution of legal disputes."⁴ In *Gonzales v. Carhart*,⁵ however, the Supreme Court proved reluctant to apply the spirit of this trial level safeguard at the appellate level. Rather than require close examination of scientific statements when they form the predicate basis for the legislative restriction of a constitutional right, the Court chose instead to review factual disputes at only a cursory level.⁶

Examining *Gonzales v. Carhart*, this Note takes the position that the Supreme Court's latest decision on the controversial right to seek an abortion sets a lower bar than is prudent for the scrutiny of scientific and medical congressional "findings" that purport to justify limiting rights otherwise entitled to constitutional protection. In doing so, the Court invites collateral attacks on the same rights through the use and congressional adoption of slipshod, deliberately uninformed science ("sham science"). Part I explores the specific facts of *Gonzales*, which restricted the right to a "partial birth abortion" (dilation and extraction procedures or "D&X procedures")⁷ even when the alterna-

3. See Andrew C. Revkin, *White House Cuts to Climate Testimony Raise Questions*, N.Y. TIMES, Oct. 25, 2007, available at <http://www.nytimes.com/2007/10/25/science/earth/24cnd-climate.html> (noting political interference in testimony of scientists to Congress regarding the dangers of global warming); see also Gardiner Harris, *Surgeon General Sees 4-Year Term as Compromised*, N.Y. TIMES, Jul. 11, 2007, at A1 (reporting on former Surgeon General's belief that science was subordinated to politics during his term); Gardiner Harris, *Nominee for Surgeon General Testifies in Senate*, N.Y. TIMES, Jul. 13, 2007, at A15 (discussing the initial confirmation hearing of Dr. James Holsinger, Jr., who promised to prevent the politicization of medicine). Then-Senator Hillary Clinton (D-NY), in her bid for the White House in 2008, even made this concern a campaign issue. Patrick Healy & Cornelia Dean, *Clinton Says She Would Shield Science from Politics*, N.Y. TIMES, Oct. 5, 2007, at A22.

4. *Daubert*, 509 U.S. at 597.

5. *Gonzales v. Carhart*, 550 U.S. 124 (2007).

6. *Id.* at 166 (stating that congressional findings should be upheld "when the regulation is rational and in pursuit of legitimate ends"). For further analysis of the gap between the scrutiny the issue deserves and the scrutiny the Supreme Court eventually applied, see *infra* Part II.B.

7. "D&X" refers to "dilation and extraction," also called "intact D&E," the medical term for what is pejoratively called a "partial birth abortion." The distinction, while merely rhetorical, is vitally important. Kennedy's majority opinion in *Gonzales* seeks, through its careful use of rhetoric, to subconsciously if not factually undermine the heretofore constitutional right of a woman to choose. See *Gonzales*, 550 U.S. at

tive procedure creates a health risk.⁸ This Part will highlight previous problems with legislative attempts to ban partial birth abortion, discuss Congress's attempts to legislate away the constitutional defect by creating "medical uncertainty" as to the procedure's constitutional necessity, and evaluate the initial judicial reaction to Congress's actions.⁹ Part II explores the precedent upon which Justice Kennedy bases his reasoning in *Gonzales* and defines his approach to the ability of Congress to legislate towards medical uncertainty. Finally, Part III analyzes the singular importance of science and its relationship with the law before proposing an alternative method for evaluating congressional science.

The proposed method gives Congress the power to resolve scientific issues that become intertwined with moral and legal consequences while also drawing a line that is protective of fundamental rights.¹⁰ In short, I suggest that where scientific or medical questions relating directly to a fundamental constitutional right are in play, courts ought to look very closely at the proffered scientific "facts" and embrace the unique role of the judge and jury to ferret out and remove faulty reasoning. This proposed test, while exposing the logical flaws underlying the *Gonzales* decision, should also prevent sham science from becoming a method to restrict constitutional rights by turning "scientific fact-finding" into a Trojan horse for rational basis review.¹¹

186 ("The Court's hostility to the right *Roe* and *Casey* secured is not concealed.") (Ginsburg, J., dissenting). I deliberately choose to do the opposite.

8. *Id.* at 164 (majority opinion).

9. *See id.* at 162–63.

10. This Note makes repeated reference to the "tiers" of scrutiny under the Due Process Clause of the Fourteenth Amendment. U.S. CONST., amend. XIV, § 1. Traditional black-letter law sets out two basic tiers of scrutiny in the due process context: "rational basis" and "strict scrutiny." The level of review usually turns upon the right in question, or the status implicated. *See City of Cleburne v. Cleburne Living Ctr.*, 473 U.S. 432, 451–52 (1985) (Stevens, J., concurring) (explaining the decision-making framework's continuum, in the equal protection context, between rational basis and strict scrutiny, but criticizing the vague boundaries of these categories). Fundamental rights are normally understood to require "strict scrutiny," an exacting standard indeed. *See Washington v. Glucksberg*, 521 U.S. 702, 721 (1997), *citing Reno v. Flores*, 507 U.S. 292, 302 (1993) ("[T]he fourteenth amendment forbids the government to infringe fundamental liberty interests at all, no matter what process is provided, unless the infringement is narrowly tailored to serve a compelling state interest.").

11. Compared to "strict scrutiny," to which limitations on the right to an abortion are usually subjected, *see infra* note 18, rational basis is a comparatively light standard. Subjective morality, for example, was until recently sufficient for a court to find a law "rational." *Compare Bowers v. Hardwick*, 478 U.S. 186, 196 (1986) (upholding a ban on sodomy for which the basis was essentially moral) *with Romer v. Evans*, 517 U.S. 620, 632–635 (1996) (limiting the reach of morality as a rational basis to exclude a "bare desire to harm" a group, in the equal protection context). Otherwise a

I.

THE PARTIAL BIRTH ABORTION ACT OF 2003: SCIENTIFIC
FACT-FINDING BY CONGRESS AND THE LOWER COURTS
LEADING UP TO *GONZALES v. CARHART*

A. *Congressional Findings on the Need for a Health Exception*

In 2003, Congress passed the Partial Birth Abortion Act of 2003 (“the 2003 Act”), which states that “any physician who . . . knowingly performs a partial-birth abortion and thereby kills a human fetus shall be fined under this title or imprisoned not more than 2 years, or both,” except in the case where the abortion is required to save the life of the mother.¹² The 2003 Act provides no exception allowing the procedure to be legally performed where it is necessary to preserve the health of the mother.¹³ Four years prior, the Court in *Stenberg v. Carhart* struck down a near-duplicate statute for failure to provide this exception.¹⁴ The 2003 Act was Congress’s attempt to legislate around the constitutional defect identified in *Stenberg* by “finding” that D&X procedures presented their own dangers, and so presented more dangers than the procedure’s legality avoided.¹⁵ If D&X procedures presented no health benefits, then the constitutional barrier erected by *Stenberg* and *Planned Parenthood v. Casey*,¹⁶ the 1992 decision that famously saved and reframed the *Roe v. Wade* “right to choose,”¹⁷

law is “presumed to be valid and will be sustained if the classification drawn by the statute is rationally related to a legitimate state interest.” *Cleburne*, 473 U.S. at 440.

12. Partial Birth Abortion Act of 2003, Pub. L. No.108-105, § 3, 117 Stat. 1201, 1206 (codified at 18 U.S.C. § 1531 (2007)). The 2003 Act defines a “partial birth abortion” as a procedure in which a physician “deliberately and intentionally vaginally delivers a living fetus until, in the case of a head-first presentation, the entire fetal head is outside the body of the mother, or, in the case of breech presentation, any part of the fetal trunk past the navel is outside the body of the mother, for the purpose of performing an overt act that the person knows will kill the partially delivered living fetus; and . . . performs the overt act, other than completion of delivery, that kills the partially delivered living fetus.” *Id.* at 1206–07.

13. *See generally id.*

14. *Stenberg v. Carhart*, 530 U.S. 914, 931–32 (2000) (“a State cannot subject women’s health to significant risks both in that context, [and also] where state regulations force women to use riskier methods of abortion. Our cases have repeatedly invalidated statutes that in the process of regulating the *methods* of abortion, imposed significant health risks.”).

15. Partial Birth Abortion Act § 2(2), (14)(O).

16. 505 U.S. 833 (1992).

17. 410 U.S. 113 (1973). *Roe*, the now-controversial decision that first enunciated a federal right to seek an abortion under certain, limited circumstances, grounded the right squarely in substantive due process notions of privacy. *See Roe*, 410 U.S. at 152–56. The case came under near-constant judicial assault by conservative groups, culminating in *Planned Parenthood v. Casey*, which preserved the right using additional justifications, even as it circumscribed it slightly. *See Casey*, 505 U.S. at

would disappear; Congress would therefore not “unduly burden”¹⁸ women’s health by banning the procedure, contrary medical opinions notwithstanding.

In concluding that D&X procedures were unhealthful, Congress relied upon skewed testimony. A select panel of physicians testified about the inherent health dangers and drawbacks of D&X procedures.¹⁹ Not only did ninety-one percent of the doctors with relevant experience in performing abortions actually oppose the ban, but also just one of the physicians who testified in favor of the ban had even performed the procedure in question.²⁰ Had these experts testified to a jury, cross-examination by opposing counsel would have revealed the defects, or procedural safeguards would have barred it entirely. When Congress gets its facts wrong, however, the degree of judicial reliance or skepticism depends on the complex question of the judiciary’s deference to the legislature: first, a court must ask to what degree Congress’s facts departed from reality; second, a court must assess the constitutionality of that departure.²¹ Therefore all courts reviewing the Partial Birth Abortion Act had to consider what degree of defer-

853–57 (arguing that reliance interests, in addition to sound due process analysis, compel the conclusion of *Roe*’s continuing validity).

18. Although *Roe* termed the right to seek an abortion “fundamental,” see *Roe*, 410 U.S. at 152–64, *Casey* is generally understood as having substituted the “undue burden” standard for the “strict scrutiny” standard usually applied to statutes that burden fundamental rights. *Casey*, 505 U.S. at 879. *Casey* held that no government, state or federal, can prevent a woman from seeking a specific abortion procedure “where it is necessary, in appropriate medical judgment for the preservation of the life or health of the mother,” without unduly burdening the right to choose. See *id.* at 879. The phrase is quoted and relied upon in *Stenberg*. *Stenberg*, 530 U.S. at 931.

19. Nat’l Abortion Fed’n v. Ashcroft, 330 F. Supp. 2d 436, 446–49 (S.D.N.Y. 2004). See also H.R. Rep. No. 108-58, at 147–54 (2003) (including the dissenting view of fourteen representatives that “[f]ifteen pages of ‘findings’ do nothing to remedy this constitutionally flawed bill.”).

20. *Carhart v. Ashcroft (Nebraska District)*, 331 F. Supp. 2d 805, 1010 (D. Neb. 2004) (“Of the eight doctors who presented information to Congress and who had actually used the banned procedure, or some variant of it, seven of them opposed the ban, finding the procedure to be either the best and safest in certain circumstances or possibly so.”); see also *Gonzales v. Carhart*, 550 U.S. 124, 175 (2007) (Ginsburg, J., dissenting), citing *Nebraska District*, 331 F. Supp. 2d at 1011 (“Congress arbitrarily relied upon the opinions of doctors who claimed to have no (or very little) recent and relevant experience with surgical abortions, and disregarded the views of doctors who had significant and relevant experience with those procedures”); *Planned Parenthood Fed’n v. Ashcroft (California District)*, 320 F. Supp. 2d 957, 1019 (N.D. Cal. 2004) (noting the same); *Gonzales*, 550 U.S. at 175 (Ginsburg, J., dissenting), citing *California District*, 320 F. Supp. 2d at 1019 (“None of the six physicians who testified before Congress had ever performed an intact D&E. Several did not provide abortion services at all; and one was not even an obgyn.”).

21. For an example of this type of analysis in questions of judicial deference, see *Turner Broadcasting System v. FCC*, 520 U.S. 180, 196 (1997).

ence to accord Congressional findings of the predicate scientific facts that would bear on a constitutional right, and more importantly, whether Congress had proved its scientific and medical point to a sufficiently reasonable degree to justify its exercise of hitherto forbidden power.

*B. Lower Court Doubts About Congress's Findings
Leading Up to Gonzales*

According to the six courts involved in the cases leading up to *Gonzales*—three trial and three appellate—Congress unconstitutionally departed from reality when it enacted the Partial Birth Abortion Act.²² In 2004, several women's rights organizations simultaneously brought suit in federal courts in California, New York, and Nebraska, alleging *inter alia* that Congress's findings were essentially sham science. In other words, they argued that the Congressional assault on *Stenberg* lacked a constitutionally strong factual foundation.²³ All three trial courts agreed that Congress's scientific "findings" misstated medical fact and did violence to the actual science behind the condemned procedure by misrepresenting the health benefits of D&X procedures in some rare cases.²⁴ Upon appeal, the Second, Eighth, and Ninth Circuits affirmed.²⁵ The only disagreement among the circuits was the degree to which Congressional judgment departed from scientific standards of wisdom and accuracy, and the degree of intellectual mendacity involved; while the New York district court found serious disagreement between experts and Congress,²⁶ the California court described Congressional findings of the medical "danger" of D&X as "not only unbalanced, but intentionally polemic."²⁷ These decisions—arrived at through the crucible of trial-level direct and cross-examination through which all scientific facts and positions could be

22. See *California District*, 320 F. Supp. 2d 957, 1033 (N.D. Cal. 2004), *aff'd* 435 F.3d 1163 (9th Cir. 2006); *Nebraska District*, 331 F. Supp. 2d 805, 1043–47 (D. Neb. 2004), *aff'd* 413 F.3d 791 (8th Cir. 2005); *Nat'l Abortion Fed'n v. Ashcroft (New York District)*, 330 F. Supp. 2d 436, 492–93 (S.D.N.Y. 2004) *aff'd* 437 F.3d 278 (2d Cir. 2006).

23. Susan Saulny et al, *Trials Open Across Nation on Abortion Procedure Ban*, N.Y. TIMES, Mar. 30, 2004, at A14.

24. *Nebraska District*, 331 F. Supp. 2d at 822–1002 (engaging in extensive fact-finding, and concluding against Congress' position); *New York District*, 330 F. Supp. 2d at 458–83 (reaching the same conclusion, albeit skeptically); *California District*, 320 F. Supp. 2d at 978–1032 (concluding similarly).

25. Julia Preston, *Partial Birth Abortion Act Ruled Unconstitutional by U.S. Courts*, N.Y. TIMES, Feb. 1, 2006, at A21.

26. *New York District*, 330 F. Supp. 2d at 479–92.

27. *California District*, 320 F. Supp. 2d at 1019.

examined in close detail—amount to a wholesale rejection of Congress’s scientific judgment in drafting the Act, potentially requiring the Act to founder on the same shoals as its statutory twin.²⁸

Erroneous findings of predicate facts by Congress, however, are not necessarily sufficient to render a public law invalid. Congress wields, and the judicial system generally respects, the power “to make predictive judgments when enacting nationwide regulatory policy.”²⁹ Despite this presumption, Congress may not stipulate its own facts without facing some scrutiny. As then-Judge Thomas stated while on the D.C. Circuit, “if a legislature could make a statute constitutional simply by ‘finding’ that black is white or freedom, slavery, judicial review would be an elaborate farce. At least since *Marbury v. Madison* . . . that has not been the law.”³⁰ Justice recognizes no congressional right to legislate away reality or the Constitution. The necessary question, and one unresolved prior to *Gonzales*,³¹ was what deference to congressional findings ought to be appropriate when a court reviews legislatively stipulated scientific facts touching on a woman’s right to choose—a right which was and nominally remains constitutionally vital.³² In brief, the second question asked by the trial courts was, if Congress got its science wrong, was it wrong enough to require the judiciary to abandon its deference to the elected legislature?

II.

THEORIES USED BY THE *GONZALES* COURTS WHEN EXAMINING SCIENTIFIC FACTS RELATING TO THE CONSTITUTIONAL RIGHT TO CHOOSE

District courts addressing the Partial Birth Abortion Act faced a difficult task in reconciling the disparity between testimony developed at trial regarding the medical value of D&X procedures and the null value attached by Congress. All seven courts that reviewed the facts

28. Trial records of this depth, precision, and *unanimity* did not escape Supreme Court notice. See *Gonzales v. Carhart*, 550 U.S. 124, 179–80 (2007) (Ginsburg, J., dissenting) (“The District Courts’ findings merit this Court’s respect. . . . In this insistence, the Court brushes under the rug the District Courts’ well-supported findings.”).

29. See *Turner Broad. Sys. v. FCC*, 520 U.S. 180, 196 (1997). The Court in *Turner* applied a reasonableness standard—“whether the legislative conclusion was reasonable and supported by substantial evidence in the record before Congress”—to uphold a content-neutral statute regulating national broadcasting. *Id.* at 211.

30. *Lamprecht v. FCC*, 958 F.2d 382, 392 (D.C. Cir. 1992).

31. *California District*, 320 F. Supp. 2d at 1013.

32. *Planned Parenthood v. Casey*, 505 U.S. 833, 852–53 (1991).

later consolidated (effectively or actually) into *Gonzales v. Carhart*³³ faced the question of whether, and how, to credit trial testimony above congressionally stipulated facts.³⁴ In resolving this question, the three district courts and Justice Kennedy, in his majority opinion for the Supreme Court, all applied a standard of “reasonableness,” but differed as to the central meaning of this standard.³⁵ While the three district courts embraced the ability to inquire deeply into facts, Justice Kennedy’s approach—best seen as something just short of “uncritical deference”³⁶—fell short of even a rational basis standard.

A. *Theories Considered by the District Courts*

The district courts in Nebraska, California, and New York flatly rejected a strongly deferential approach. The government in the *Gonzales* cases urged the trial courts to adopt the *Turner* standard for judging congressional fact-findings,³⁷ which upholds findings of fact provided that “the legislative conclusion was reasonable and supported by substantial evidence in the record before Congress.”³⁸ On the other hand, in *National Abortion Federation v. Ashcroft*, New York women’s rights organizations emphasized the extent to which Congress’s legislative findings diverged from the factual background that had, in *Stenberg*, compelled the conclusion of the challenged procedure’s legality.³⁹ These organizations relied upon the Rehnquist Court’s decision in *Boerne v. Flores*, in which the Supreme Court declined to allow congressional fact-finding to compel an expansion of the Fourteenth Amendment’s enforcement clause, to support the

33. *Gonzales v. Carhart* consolidated the cases arising from Nebraska and California. *Gonzales*, 550 U.S. at 133. The matter arising in New York was not consolidated, but was stayed pending resolution of the Supreme Court case. *Nat’l Abortion Fed’n v. Gonzales*, 224 Fed. Appx. 88, 88 (2d Cir. 2007). After the Court handed down its decision, the order enjoining the Act was vacated, and the matter remanded for judgment to be entered for the government. *Id.*

34. *See infra* notes 42–47 and accompanying text.

35. *See id.*

36. *Gonzales*, 550 U.S. at 166.

37. *California District*, 320 F. Supp. 2d 957, 1011 (N.D. Cal. 2004); *Nebraska District*, 331 F. Supp. 2d 805, 1005–06 (D. Neb. 2004); *New York District*, 330 F. Supp. 2d 436, 483 (S.D.N.Y. 2004).

38. *Turner Broad. Sys. v. FCC*, 520 U.S. 180, 211 (1997). For the government’s invocation of this standard at trial in the *Gonzales* cases, see, for example, *California District*, 320 F. Supp. 2d at 1010–11.

39. *See New York District*, 330 F. Supp. 2d at 486. The Court ultimately found this reasoning persuasive. *See id.* (“This case deals with factual findings rather than legal interpretation; however, it would also infringe upon the constitutional role of the judiciary if Congress could simply tell the federal courts that their findings are wrong and receive substantial deference in order to prove it.”).

argument that Congress could not “find” away constitutional limitations.⁴⁰ In California’s parallel case, similarly aligned parties sought to characterize the issue as one of “constitutional fact,” to accomplish the same goal of preventing Congress from “finding” away constitutional restrictions.⁴¹ The parties relied similarly on *Morrison v. United States*, in which the Supreme Court held a congressional finding of the commercial impact of violence against women to be insufficient to trigger Congress’s Commerce Clause powers, which was a necessary predicate condition for upholding the sweeping statutory scheme enacted by Congress in the Violence Against Women Act.⁴²

All three district courts declined to apply both the government’s deferential standard and the stricter standards urged by the plaintiffs. Instead, they settled on a middle ground that, nonetheless, still rendered the 2003 Act invalid. Two district courts distinguished *Turner* in *dicta* because *Turner* involved a right typically accorded intermediate scrutiny (the right to be free of content-neutral restrictions on free speech), whereas the challenged Act in the *Gonzales* cases would infringe upon a putatively more vital right.⁴³ While finding a higher-scrutiny appeal more doctrinally and intellectually appealing, two courts (California and New York) declined to apply elevated review.⁴⁴ Instead of conclusively resolving the vital constitutional issue, the same courts invalidated the Act because, even after according Congress’s findings substantial deference, its analysis of the factual record found those conclusions wanting.⁴⁵ The Nebraska court chose a roughly similar course; while nominally invoking the *Turner* standard, Nebraska construed *Turner* to require a fairly exacting review. As the judge in Nebraska’s *Carhart v. Ashcroft* explained, “the *Turner* cases require that I closely examine the congressional record to determine its adequacy to support the factual findings reached by Congress.”⁴⁶

40. 521 U.S. 507, 535 (1997); *see also, e.g., California District*, 320 F. Supp. 2d at 1013 (noting plaintiffs’ reliance on *Boerne*).

41. *California District*, 320 F. Supp. 2d at 1010.

42. *Morrison v. United States*, 529 U.S. 598, 615–17 (2000); *see also, e.g., California District*, 320 F. Supp. 2d at 1013 (noting plaintiffs’ reliance on *Morrison*).

43. *See California District*, 320 F. Supp. 2d at 1013; *see also New York District*, 330 F. Supp. 2d 436, 486 (S.D.N.Y. 2004) (distinguishing the *Turner* standard while continuing to apply it). *But see Nebraska District*, 331 F. Supp. 2d 805, 1006–08 (*D. Neb.* 2004) (applying the *Turner* standard, but construing it to require a hard look).

44. *See California District*, 320 F. Supp. 2d at 1012–14; *see also New York District*, 330 F. Supp. 2d at 486–87.

45. *See California District*, 320 F. Supp. 2d at 1013–35; *see also New York District*, 330 F. Supp. 2d at 486–92 (discussing the question of deference before comparing the government’s argument against trial testimony, and Congress’s own proffered factual evidence).

46. *Nebraska District*, 331 F. Supp. 2d at 1007.

The district courts chose to defer to Congress, but not without first glancing at the record and countervailing evidence—a glance that led them to ultimately reject Congress’s testimony as unreasonable under any level of deference.

Thus, the three district courts, even applying a standard of review falling short of “strict scrutiny,” invalidated the Act by relying on the premise that district courts are endowed with the power and duty to conduct independent fact-finding inquiries.⁴⁷ Each court engaged in a two-step inquiry. First, the courts reviewed the congressional record and findings for their accuracy. Second, once the first review was complete, the courts decided whether deference to congressional findings would be appropriate.⁴⁸ By bifurcating the inquiry in this manner, the district courts ensured that the deference applied was appropriate to both the degree of controversy surrounding the facts in issue and the gravity of the constitutional issue the facts bore upon.

B. The Supreme Court’s Majority Opinion in Gonzales v. Carhart

The diligence exhibited by the district courts was absent from the Supreme Court’s eventual holding. Indeed, the Court failed to answer the open question of what weight ought to be given Congressional scientific findings.⁴⁹ Instead, the Court’s majority opinion in *Gonzales* wholly departed from the framework and reasoning presented by the lower courts. At no point in the opinion did the Court engage in debate about the conflicting factual record, nor did it analyze the medical evidence other than to describe in value-laden terms the admittedly visceral D&X procedure.⁵⁰ Serious flaws in the government’s reasoning and Congress’s findings⁵¹ were summed up and stated as

47. *Id.* (citing *Lamprecht v. FCC*, 958 F.2d 382, 392 (D.C. Cir. 1992)).

48. *See California District*, 320 F. Supp. 2d at 1013 (opening the question of deference); *id.* at 1014–32 (canvassing the factual record); *id.* at 1032–35 (resolving the question of deference against the government, on the basis of the record’s substantial divergence from Congress’ conclusions); *New York District*, 330 F. Supp. 2d at 486–92 (engaging in a similar inquiry); *Nebraska District*, 331 F. Supp. 2d at 1007 (resolving the question of deference) (“Specifically, I conclude that the factual judgments of Congress when banning an abortion procedure are entitled to binding deference if ‘the legislative conclusion was reasonable and supported by substantial evidence. . . .’”); *id.* (“Nevertheless, simply because Congress has spoken does not mean that the court becomes a rubber stamp.”).

49. *See, e.g., California District*, 320 F. Supp. 2d at 1013–14 (bypassing the issue of the appropriate level of deference, and instead invalidating the Act after a basic reasonableness inquiry).

50. *See Gonzales v. Carhart*, 550 U.S. 124, 134–40 (2007). For a discussion of Justice Kennedy’s purposeful rhetoric, see *supra* note 7.

51. *Nebraska District*, 331 F. Supp. 2d at 822–1002; *New York District*, 330 F. Supp. 2d at 458–83; *California District*, 320 F. Supp. 2d at 978–1032.

mere “documented medical disagreement” or “medical uncertainty,”⁵² without regard to the degree of the departure from sound science.

Having found mere “uncertainty,” Justice Kennedy, for the Court, applied what is in essence a reasonableness inquiry closely resembling rational basis review. While noting that “uncritical deference to Congress’s factual findings in these cases is inappropriate,” Kennedy relied upon Congress’s apparent ability to regulate despite medical uncertainty, and regardless of the right in play, in stating that congressional findings should be upheld “when the regulation is rational and in pursuit of legitimate ends.”⁵³ As I will argue, this position erroneously lets Congress manufacture a scientific controversy and then take its own side in the ensuing farcical debate.

C. *Doctrinal Flaws of the Gonzales Approach in Evaluating Scientific or Medical “Facts” Found by the Legislature*

The effect of the *Gonzales* approach was to completely bypass a tiered scrutiny approach to substantive due process whenever Congress reflects upon, or bases legislation on, alleged science.⁵⁴ The approach laid down by the Court does not so much overrule *Stenberg*, which reasoned that the vitality of the abortion right requires the law to err on the side of caution,⁵⁵ as it does create a detour around due process review, provided “uncertainty” in science is found. This conflation of science with policy is fundamentally flawed and allows Congress to vitiate, where it is “reasonable” to find scientific “uncertainty,” any constitutional right that rests on a scientific fact as the predicate for its protection.

Justice Kennedy cites a vast amount of case law for the critical argument that Congress faces only a “reasonableness” inquiry when legislating in the face of medical uncertainty.⁵⁶ However, the cases he cited are entirely off-topic: while they purport to govern the standard of review that ought to be accorded Congress when reviewing scientific issues, not one case deals with deference to congressional findings of scientific or medical fact pertaining to an elevated due process

52. *Gonzales*, 550 U.S. at 162–63.

53. *Id.* at 166.

54. For example, “rational basis” review, as compared with “strict scrutiny,” the traditional tiers for evaluating the constitutionality of laws challenged under the Equal Protection and Due Process clauses of the Fourteenth Amendment. For a discussion of tiers of scrutiny doctrine, see *supra* note 10.

55. *Stenberg v. Carhart*, 530 U.S. 914, 931–32 (2000).

56. *Gonzales*, 550 U.S. at 162 (citing five prior court cases, including Kennedy’s own dissent in *Stenberg v. Carhart*, 530 U.S. at 970 (Kennedy, J., dissenting)).

right in the modern era.⁵⁷ In fact, many cases deal with the issue of deference to policy judgments, not objective facts.⁵⁸ Predictive policy analysis is emphatically not similar to science. The popular mandate that entitles Congress's policy judgments to deference does not apply to scientific judgments. Scientific facts are indifferent to the democratic consensus of what they ought to be:⁵⁹ science, like the law, ought to be "deaf, deaf as an adder, to the clamors of the populace."⁶⁰

In support of this highly deferential standard, Kennedy notes that the alternative theory urged by the *Gonzales* plaintiffs, in reliance on *Stenberg*, would leave Congress "no margin of error" when engaging in scientific or medical fact-finding.⁶¹ He finds that the plaintiffs would implement a zero tolerance policy that would "strike down legitimate abortion regulations, like the present one."⁶² Such circular argumentation—that the current Act is reasonable, that a higher standard would strike down this reasonable Act, and that therefore the Act is reasonable—is an attempt to apologize for unprecedented deference to congressional cherry-picking of the scientific record. Kennedy's position amounts to a false choice in assuming that deference to congressional findings is an all or nothing affair.

57. See *Kansas v. Hendricks*, 521 U.S. 346, 360 n.3 (1997) (allowing Congress to define pedophilia as a mental disorder, despite conflicting medical accounts); *Jones v. United States*, 463 U.S. 354, 364 n.13 (1983) (deferring to "reasonable" congressional judgment that the insanity defense should result in involuntary committal rather than acquittal, "in the face of uncertainty" as to whether insanity plus a prior felony conviction is a predictor for re-offense); *Marshall v. United States*, 414 U.S. 417, 428 (1974) (allowing Congress to adopt uncertain experimental drug addiction rehabilitation programs, where the "classification selected by Congress is not one which is directed 'against' any individual or category of persons, but . . . rather represents a policy choice"); *Lambert v. Yellowley*, 272 U.S. 581, 599–600 (1926) (permitting Congress to ban distribution of large amounts of alcohol, even for medicinal purposes, during Prohibition, in deference to Congress' findings in the run-up to the prohibition amendment); *Collins v. Texas*, 223 U.S. 288, 297–98 (1912) (disposing quickly of the question of whether Congress can regulate osteopaths as doctors, despite scientific/medical uncertainty as to their rightful classification); *Jacobson v. Massachusetts*, 197 U.S. 11, 29 (1905) (upholding Massachusetts' mandatory vaccination program based on the reasoning that, prior to the due process revolution of the 1970s, the state may make a reasoned policy choice between alternate medical solutions where "the power of the public to guard itself against imminent danger," as in, disease, is implicated).

58. See *Jacobson*, 197 U.S. at 29 (deferring to a policy judgment on government's ability to "guard itself against imminent danger").

59. KUHN, *supra* note 1, at 168 (explaining the danger of framing science as a partisan issue).

60. This phrase is attributed to President John Adams. JOHN ADAMS, *THE WORKS OF JOHN ADAMS, SECOND PRESIDENT OF THE UNITED STATES, III* (Charles Francis Adams ed., Little, Brown and Co. 1856), available at <http://oll.libertyfund.org/title/2099/159540>.

61. *Gonzales*, 505 U.S. at 166.

62. *Id.*

A high degree of congressional deference transforms the test into something far less than a “reasonableness” inquiry. Kennedy’s “reasonableness” standard neglects to perform the basic fact-checking duty of not deferring to empty authority; although the lower courts felt free to examine the caliber of Congressional scientists in order to ensure that science was reasonably being stated as science,⁶³ the *Gonzales* test ignores the use of “selective science.” By granting the same deference traditionally given to subjective policy judgments to matters of objective fact, regardless of what rights depend upon the science, the analysis conflates science with policy. This light standard comes close to vesting Congress with a heckler’s veto: should one voice in a scientific crowd agree with Congress, over the entire scientific academy’s vigorous dissent, *Gonzales* would view Congress as justified in siding with the scientific minority. Under the *Gonzales* test, while Congress may not be able to find that black is white, it may be able to find that grey is white. This is the inevitable result if the Court can brand an overwhelming medical consensus against Congress’s position as mere “uncertainty.”⁶⁴

Gonzales v. Carhart sets out in its majority opinion a presumption in favor of congressional scientific findings.⁶⁵ Even when the findings are potentially erroneous, courts ought to (1) categorize them as merely “uncertain,” and (2) defer to congressional judgment.⁶⁶ What is lacking in this analysis is almost as telling as the eventual conclusion itself. No escalated review applies to facts relating to constitutional rights as recognized by all lower courts.⁶⁷ While the opinion professes to turn upon the fact that Congress’s findings are “scientific” or “medical,” it makes no attempt to analyze why Congress’s scientific judgment is uniquely owed deference and instead cites to case law suggesting that Congress is owed respect when making policy judgments, implying that scientific fact is a matter of policy.⁶⁸ In a modern society, where an increasing number of rights turn upon an assessment of their scientific validity, unchallenged deference to congressional scientific findings is both untenable and unwise.

63. See *supra* note 20 and accompanying text.

64. See *Gonzales*, 550 U.S. at 163.

65. See *id.* (“The Court has given state and federal legislatures wide discretion to pass legislation in areas where there is medical and scientific uncertainty.”).

66. See *id.* at 162–63.

67. Justice Kennedy referenced rational basis review as the appropriate standard for evaluating congressional findings. See *id.* at 166 (approving of laws backed by congressional scientific findings “when the regulation is rational and in pursuit of legitimate ends.”).

68. See *supra* notes 56–60 and accompanying text.

D. Systemic Dangers of Gonzales’s Easy Deference

Characterizing a policy-motivated attack on a constitutional right as legislation to correct a “scientific” or “medical” problem should not allow the legislature to avoid judicial review. The fact that *Gonzales v. Carhart* accords no higher review to congressional “facts” which profess to limit a constitutional right can be seen as the opening of a back-door to surprise attacks on vital civil rights. Taken to its extreme, the Court’s opinion suggests that Congress can abridge a disfavored constitutional right whenever it can reasonably cite medical or scientific “facts” that undermine that right, even if the truth of those facts is controversial or unquestionably false. This possibility should trouble any witness of American political culture in the twenty-first century, where science and medicine have become the latest battlefields in “the culture wars.”⁶⁹

Increasingly, legislatures have used sham science to justify predetermined policy positions; courts should not be powerless to stop this bastardization of the discipline. For example, several states have required doctors, pursuant to “informed consent” laws, to inform patients about to undergo an abortion of an alleged link between abortion and increased risk of breast cancer.⁷⁰ Of course, the scientific consensus is that there is no such link.⁷¹ While most such states provide the caveat that the breast cancer “link” should be discussed only when “medically accurate,”⁷² under the *Gonzales* framework, such a caveat may even be unnecessary. Informed consent laws could theoretically include such objectively false information, so long as the law’s proponents could parade a small number of fringe scientists or doctors before the legislature, transforming the informed consent colloquy into an abusive diversion into agenda-driven pseudoscience. Due to the presence of some ostensibly “medical” advocacy groups, it would not be difficult to persuade a scientifically unsophisticated legislature,

69. See, e.g., Amy E. Schwartz, *Crossing Over in the Culture War*, WASH. POST, Oct. 26, 2008, at BW11 (framing the perennial “battle” between evolution and creationism—the idea that the Bible describes a literal, 6,000-year old creation—as a culture war conflict).

70. MINN. STAT. § 145.4242(a)(1)(i) (2007) (requiring notification of the link between abortion and breast cancer “when medically accurate”); MISS. CODE ANN. § 41-41-33(1)(a)(ii) (2007) (same); MONT. CODE ANN. § 50-20-104(5)(a)(i) (2007) (same); TEX. HEALTH & SAFETY CODE ANN. § 171.012(a)(1)(B)(iii) (Vernon 2007) (same).

71. All major scientific groups have reached this conclusion. See, e.g., American Cancer Society, *Can Having an Abortion Cause or Contribute to Breast Cancer?*, http://www.cancer.org/docroot/CRI/content/CRI_2_6x_Can_Having_an_Abortion_Cause_or_Contribute_to_Breast_Cancer.asp (last visited Sep. 12, 2009).

72. See, e.g., TEX. HEALTH & SAFETY CODE ANN. § 171.012(a)(1)(B)(iii).

were it pre-disposed to accept the testimony given it, that such a fortunate medical “controversy” exists, thus triggering *Gonzales’s* deference to the legislature on matters of “medical uncertainty,” real or imagined.⁷³ Majority scientific opinion ought not be so capable of circumvention, nor should the invocation of science be able to hide a blatantly policy-motivated decision from scrutiny.

Invoking the name of science to justify this cursory level of deference causes additional problems that only emerge when this light form of review allows legislatures to “find” scientific facts. The word “science” evokes the idea of a certain degree of objectivity and authority. Using the word “science”—without scrutinizing it first—in forming a basis for lawmaking will allow legislatures and politicians to take advantage of the general public’s respect for any form of expertise, even when the cited “science” is suspect. Light scrutiny of legislative statements of science will encourage this fallacious appearance of authority, while creating a disrespect for science and encouraging a highly negative form of factual relativism. Simply put, taken to its extreme, the term “science” will lose all meaning, and objective scientific reality will suddenly become debatable. We can expect this problem to increase, not decrease, as society becomes increasingly technological and reliant on science.

III.

NEW STANDARDS FOR COURT EVALUATION OF LEGISLATIVE SCIENTIFIC “FINDINGS” TO ENSURE RESPONSIBLE USE OF SCIENCE IN FUNDAMENTAL RIGHTS JURISPRUDENCE

While Congress deserves significant deference in matters of policy, science is emphatically not policy and is therefore far beyond Congress’s area of competence. In fact, science becomes less, not more, reliable when subjected to competing policy considerations.⁷⁴ These unique problems require unique solutions, and courts should respond accordingly.

73. For examples of such fringe groups, see, for example, Coalition on Abortion/Breast Cancer, <http://www.abortionbreastcancer.com/abc.html> (last visited Sep. 12, 2009) (including frequent reference to medical “cover-ups,” suggestive of fringe status). See also American Association of Physicians and Surgeons, Inc., *New Study Supports Abortion/Breast Cancer Link*, <http://www.aapsonline.org/nod/new-sofday471.php> (last visited Sep. 12, 2009). These societies amount to “political interest groups,” hardly bastions of medical knowledge.

74. See *infra* Part III. A.2.

A. *Closing the Loophole: The Judiciary Can and Should Monitor Scientific Findings of Fact More Closely*

Viewed in light of the majority opinion's doctrinal and systemic problems with regards to science, the *Gonzales* majority articulates an unreasonable standard for judicial evaluation of legislative scientific "findings." First, the Court failed to adequately evaluate scientific testimony. Second, the Court undervalued the unique fact-finding role that courts can play in determining what is, and what is not, good science. This deficiency was rooted, in part, in a misunderstanding of the institutional competencies in play. Finally, the Court failed to consider the increased importance of the above errors when a vital right is involved. In so doing, it misapprehended the distinction behind legislative facts consisting of pure science as a predicate basis for law, and legislative facts consisting of predictive policy judgments.

Because of the unique dangers presented by blind deference to legislatively stipulated science, a unique solution tailored to meet these challenges and problems is required. The following section will show that these failings can be rectified if courts embrace the judiciary's traditional fact-finding role when reviewing legislative science. This goal could be accomplished by applying established doctrines in traditional areas of judicial competency in a manner that squares with notions of federalism, thereby preserving the policy-centered institutional competence of the legislatures, and the fact-finding abilities of the courts.

1. *Courts Traditionally Review Scientific Testimony at a High Standard*

Even if scientific justifications for laws of dubious constitutionality are new to American law, science has long had a bearing on the resolution of individual disputes; for as long as tort liability has turned upon an expert evaluation of causation, science has been a critical issue for trial courts to consider.⁷⁵ Under the *Daubert* doctrine, courts are empowered to undertake a "gatekeeping" test to exclude sham science from the jury and prevent the prejudicial effect that classifying biased assertions as "science" can produce.⁷⁶ In assessing admissibility, courts determine whether proffered expert testimony is "good science." In so doing, courts routinely evaluate a number of factors,

75. See *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 597 (1993) (explaining that good scientific information can be essential to legal decision-making).

76. See *id.* at 595 (noting that fears of prejudice are especially pronounced with "expert" testimony).

including: (1) whether the proposition has been tested, (2) whether it has been subjected to peer review, (3) the likelihood of error in a finding or technique, and (4) the general acceptance of the proposition in the scientific community.⁷⁷ The test demands that an expert apply in the courtroom the same level of diligence associated with fieldwork in his profession.⁷⁸ Conclusory opinions of an “expert”—i.e., statements unsupported by a transparent and accurate inferential process—are inadmissible because they are likely to cause more prejudice than their evidentiary value.⁷⁹ Admissibility depends not on an expert’s conclusions so much as the methodology and pertinent experience of the expert.⁸⁰ This doctrine has become foundational in modern evidence law.⁸¹

2. *Critical Review Is Justified Based on the Uniqueness of Science*

Judicial caution when dealing with science, as typified by the *Daubert* inquiry, is justified by a momentary reflection on the nature of science itself. Thomas Kuhn, the famous historian and philosopher of science, sought to define the nature of scientific progress.⁸² He explained that the unique nature of the scientific community, consisting of a group of experts dedicated to a rigorous methodology based on special knowledge, is alone capable of generating scientific progress.⁸³ Absent adherence to this methodology, science stagnates.

In defining the requisite methodology, Kuhn sets out the key community rules: peer review, empiricism, and expressly disclaiming external political influence.⁸⁴ By Kuhn’s reasoning, without these procedural safeguards in a scientist’s fact-finding process, a “scientific assertion” is questionable, its predictive and explanatory value is non-existent, and it is better treated as a prejudicial opinion.⁸⁵ Science without these procedural safeguards is bereft of its power, unfit for

77. *Id.* at 593–95.

78. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999).

79. *See Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) (observing that courts are not required to accept all expert opinion testimony “if there is simply too great an analytical gap between the data and the opinion proffered.”); *see also Daubert*, 509 U.S. at 597 (reaffirming that courts may exclude evidence that is more prejudicial than it is probative under Rule 403 of the Federal Rules of Evidence).

80. *Daubert*, 509 U.S. at 595.

81. *See generally* FED. R. EVID. 702.

82. *See* KUHN, *supra* note 1, at 1–6 (setting out and explaining his theory of the historiography of science).

83. *See id.* at 162–68.

84. *Id.* at 168 (“[T]he solutions that satisfy [a scientist] may not be merely personal but must instead be accepted as solutions by many.”).

85. *See id.*

application to explaining or resolving the problems of the natural world. The *Daubert* criteria track Kuhn's definitions of the scientific process, and rightfully so; if science lacks value without proper methodology, and if a person's rights depend on scientific facts, then an adjudicative body must rely upon proper science in making factual findings. As the *Daubert* Court recognized, to produce just results, "evidentiary reliability will be based upon scientific validity,"⁸⁶ which Kuhn reminds us must never turn on partisan political analysis.⁸⁷ In this sense, science is clearly unique from the "legislative facts" doctrine relied upon by the *Gonzales* majority to justify easy deference.

Although the *Daubert* doctrine bears solely on the usage of science in the resolution of particularized disputes,⁸⁸ its standards are instructive of the positive role that courts must play in fact-checking scientific judgments. Bad science, and the conclusions affecting individual rights that may emanate from its practice, poses the same risk whether relied upon in adjudicative or legislative determinations. To correct these flaws, *Daubert* suggests that courts are not powerless to inquire into areas of dubious medical or scientific judgment, but instead can conduct a robust inquiry into scientific methodology, deciding when and if proffered justifications are credible.⁸⁹

As the *Daubert* factors relate to the extrinsic value of science, keeping the *Daubert* factors in mind would allow courts to examine scientific or medical testimony relied upon by a legislature in a policy-denuded and objective manner. Similarly, since the *Daubert* analysis is familiar to all courts, conducting this analysis would comprise neither surprise nor departure from standard judicial norms. The standards suggested, and the depth of review entailed in examining the *Daubert* factors, could—and should—form the backbone of judicial review of legislatively stipulated scientific facts when such review is necessary. Courts would ideally be vested with the ability to call as witnesses and cross-examine scientists or doctors with relevant knowledge on the matter at hand, subjecting science to an adversarial process resembling a judicial form of peer review.⁹⁰ At a bare minimum, a factor-based inquiry, targeting the scientific facts at issue for particular attention, ensures that policy considerations and court biases will

86. *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 590 n.9 (1993).

87. KUHN, *supra* note 1, at 168.

88. *Daubert*, 509 U.S. at 597.

89. *Id.* at 589–90.

90. The similarity between scientific peer review and judicial cross examination did not escape the notice of the *Daubert* Court. *See id.* at 597 n.13 ("This is not to say that judicial interpretation, as opposed to adjudicative fact-finding, does not share basic characteristics of the scientific endeavor. . .").

play a minimal role in the proceedings and allows different perspectives on scientific issues to be heard in a neutral setting.

3. *Courts Can Successfully Review Science Related to Legislation*

History shows that courts can function as successful scientific fact-finders when reviewing legislation and can successfully ferret out sham science where presented as a predicate for a legislative decision. In one particularly newsworthy example from 2005, *Kitzmilller v. Dover Area School District*,⁹¹ a federal district court in Pennsylvania permanently enjoined a school district from teaching “intelligent design” to school-children as a valid scientific theory.⁹² By means of background, in *Edwards v. Aguillard*,⁹³ the Supreme Court held that teaching the biblical creation story as science—even and especially when characterized as “creation science”—in a public school violated the First Amendment provision against government endorsement of religion.⁹⁴ In *Kitzmilller*, the defendant school board effectively sought to work around the *Edwards* decision by characterizing a revamped form of creation science (“intelligent design”) as valid science with the backing of the nominally scientific Discovery Institute.⁹⁵ The district court saw past the veil, and concluded that intelligent design as proposed by the Dover Area School District was not a “scientific” the-

91. 400 F. Supp. 2d 707 (M.D. Pa. 2005).

92. *Id.* at 766. “Intelligent design” (ID) posits that some elements of life and biology are “irreducibly complex,” meaning that natural processes, like natural selection, cannot explain their complexity. *Id.* 400 F. Supp. 2d at 739. ID therefore concludes that, if a biological process appears irreducibly complex, it must have been created as-is by an intelligent being—usually God. *Id.* at 718. As such, ID starts out by pointing out a putatively scientific problem (irreducible complexity), but then refuses to solve it, turning instead to supernaturalism in complete derogation of the time-tested tenets of the scientific method. Furthermore, as pointed out in the *Kitzmilller* opinion, irreducible complexity is an argument against evolution, not an independent, positive scientific theory capable of generating conclusions, and a bad argument at that. *Id.* at 738–39 (“Professor Behe’s concept of irreducible complexity depends on ignoring ways in which evolution is known to occur.”).

93. 482 U.S. 578 (1987).

94. *Id.* at 578. Creationism allows and encourages its adherents to find supernatural cause to the universe, an element that brings it into direct conflict with the scientific method. See generally Anne Marie Lofaso, *Does Changing the Definition of Science Solve the Establishment Clause Problem for Teaching Intelligent Design as Science in Public Schools? Doing an End-Run Around the Constitution*, 4 PIERCE L. REV. 219, 227–29 (2006) (explaining, briefly, the reasons for rejecting supernatural causation in the sciences). The study of evolution, on the other hand, fits neatly within the scientific method. See generally *id.* at 223–40.

95. See *Kitzmilller*, 400 F. Supp. 2d at 719–22 (evaluating and eventually adopting the conclusions of plaintiff’s expert witnesses regarding the religious foundations, motivations, and goals of the “intelligent design movement”).

ory.⁹⁶ The court reached this conclusion after hearing from expert witnesses on both sides of the debate—both mainstream scientists and intelligent design advocates—on *Daubert*-like factors, such as general scientific acceptance, and the quality of peer review.⁹⁷

Kitzmiller proves that the *Daubert* factors can be useful guides when analyzing science relied upon by the legislature. Indeed, *Kitzmiller* may be roughly analogized to *Gonzales*, and the solution reached by the court demonstrates the effectiveness of the one proposed by this Note. In *Kitzmiller*, an elected body sought to sidestep a constitutional injunction by dressing dogma in the clothes of science. The reviewing court, after taking extensive review of scientific testimony and applying relevant criteria for determining scientific credibility, was able to arrive at a scientifically and judicially sound conclusion. Although the gap between the legislative position on “science” and actual reality was wider in this case than in *Gonzales*, similar tactics of judicial review—the use of factors roughly resembling a *Daubert* analysis—were successfully employed to uncover flawed majoritarian determinations of scientific consensus.

B. Tailoring the Inquiry to Prevent Second-Guessing Policy and to Adequately Protect Unique Constitutional Rights

Any solution providing for more careful review of legislatively-defined science should only be exacting enough to protect the underlying right. It should therefore be carefully limited to prevent only those situations in which a misstatement of objective science threatens the vitality of an existing right. Further, this manner of review need not apply to every instance in which Congress invokes or declares a scientific consensus, and in fact should be limited to avoid encroaching upon Congress’s freedom to explore policy options.

1. Careful Scientific Review Is Appropriate Where the Scientific or Medical Facts in Question Affect the Right, Rather than the Policy Behind Regulation

The risk of encroaching upon valid legislative policy judgments is avoided so long as the factor-based inquiry is cabined only to the problem of correcting bad science, rather than correcting bad policy.

96. *Kitzmiller*, 400 F. Supp. 2d at 735–46.

97. *See id.*, 400 F. Supp. 2d at 735 (“As we will discuss in more detail below, it is additionally important to note that ID has failed to gain acceptance in the scientific community, it has not generated peer-reviewed publications, nor has it been the subject of testing and research”); *see also id.* at 742–45 (examining the dearth of peer-reviewed research on “intelligent design”).

An elevated review of scientific facts should be applied only where the scientific or medical fact alleged underlies or justifies, in a necessary manner, the right restricted or set forth by a legislative body. The proposed elevated scrutiny of scientific or medical legislative determinations should apply where the science goes to the nature of the right, rather than the policy surrounding the right. In short, the form of careful review advocated in this Note should only apply where the scientific question is outcome-determinative of the existence of a constitutional right.

The distinction may be opaque, but it is critical. True, the facts in *Gonzales* and the above cases are all “legislative facts” in the sense that they are all stipulated by the legislature. However, the facts stipulated by Congress in the 2003 Act were necessary to support Congress’s power to regulate in the first place: if the regulated D&X procedure was “medically necessary,” Congress could not constitutionally limit it.⁹⁸ On the other hand, the questions posed in *Boerne* and *Morrison* went to a subjective policy determination pertaining to the need to regulate a particular problem: in the case of *Morrison*, the government argued that the epidemic of violence against women, and its deleterious effects on interstate commerce allowed (but did not require) it to regulate acts of violence against women.⁹⁹ To avoid infringing upon legislative judgments of policy, where a scientific fact relied upon by Congress purely “represents a policy choice” to solve or ignore a problem, a specific form of scientific review should not apply.¹⁰⁰ To summarize, if the existence of a scientific fact constitutionally compels some conclusion regarding the validity of a right, that scientific fact deserves elevated review; otherwise, the scientific finding should escape specialized judicial scrutiny.¹⁰¹

98. *Stenberg v. Carhart*, 530 U.S. 914, 931 (2000) (“Consequently, the governing standard requires an exception ‘where it is necessary, in appropriate medical judgment for the preservation of the life or health of the mother,’ for this Court has made clear that a State may promote but not endanger a woman’s health when it regulates the methods of abortion.”) (quoting *Planned Parenthood v. Casey*, 505 U.S. 833, 879 (1992)). The *Gonzales* Court did not disturb this conclusion.

99. See *Morrison v. United States*, 529 U.S. 598, 612–17 (2000). By way of hypothetical, the legislative findings in the statement “teaching creationism in public schools would lead to children receiving a better education, having a significant impact on interstate commerce” are findings of policy, subject to their own review, and (in this example) particularized constitutional tests. The legislative finding “creationism is science” is an artful dodge of the policy issue by invocation of science, which should not evade scrutiny by this classification, but instead ought to be subject to a particularized, scientific inquiry at trial.

100. *Marshall v. United States*, 414 U.S. 417, 428 (1974).

101. For examples of this difference, along with examples of the test in action, see *infra* Section III.D.

Limiting judicial scrutiny of scientific facts in this way carries several benefits. First, while courts uniquely enjoy the ability to examine facts in great detail, their ability to balance policy interests with similar expertise is doubtful, and often virulently opposed.¹⁰² Constrained in the manner proposed, a court reviewing scientific or medical facts would never be acting in countermajoritarian fashion, by acting against legitimate democratic action, save to correct the majority when it misstates an objective fact. The doctrine thus avoids becoming unnecessarily contentious and goes only so far as necessary to solve the problem identified, capitalizing upon the prime institutional competence of the judiciary without usurping the legislative role. Second, by limiting deep scientific review of legislative judgments to issues of objective fact, the doctrine deliberately side-steps the complicated doctrine of “constitutional facts” set forth in cases such as *Boerne* and *Morrison*. Reevaluation of these controversial decisions would entail reconsideration of much more complicated issues of constitutional law, and if courts can avoid the larger questions of deference to “legislative facts” and policy, they should.¹⁰³ Finally, by bifurcating the standards of review of objective science from those of policy, courts would appropriately signal the difference between the two disciplines. This approach would forbid Congress from invoking principles of deference to legislative policy judgments to justify adoption of bad science, emphasizing that while Congress may respond to science with policy, it cannot redefine science to justify policy.

2. *Importing Sliding Scrutiny: When a “Fundamental” Right is in Play, Review Should be More Careful*

The closer look at science suggested by the guidelines described above should function as a clarification of, rather than a replacement

102. See, e.g., *Lawrence v. Texas*, 539 U.S. 558, 603–04 (Scalia, J., dissenting) (“[i]t is the premise of our system that [policy] judgments are to be made by the people, and not imposed by a governing caste that knows best.”). The power of a countermajoritarian force in society—namely the judicial system—is not to be invoked lightly. If Justice Scalia’s forceful dissent in *Lawrence* stands for one thing, it is that the benefits of countermajoritarianism are not universally credited, and often a source of contention. Where the theory of countermajoritarianism *can* be avoided while still doing justice—as it can be here—it is best to do so. For a much lengthier and academic treatment of this problem, from the skeptic’s perspective, see Jeremy Waldron, *The Core of the Case Against Judicial Review*, 115 *YALE L.J.* 1346 (2006).

103. Two of the district courts to consider the facts of *Gonzales* thought the doctrine of “legislative facts,” and the appropriate level of deference, too difficult to resolve if it could possibly be avoided. See *California District*, 320 F. Supp. 2d 957, 1013 (N.D. Cal. 2004); see also *New York District*, 330 F. Supp. 2d 436, 486 (S.D.N.Y. 2004).

for, traditional substantive due process review. Whenever science affects a right, the *Daubert*-related factor test ought not supplant the constitutional structure as much as it should inform it. Since this test is meant to build on the existing due process review framework, and since legislative policy judgments are evaluated traditionally on a sliding scale, ranging from “rational basis” to “strict scrutiny,”¹⁰⁴ judicial review of scientific facts should also be keyed to the magnitude of the constitutional issue in controversy. The depth of the scientific inquiry into a scientific “fact”—specifically, the degree of acceptable uncertainty or dissent in the scientific community that can be tolerated—ought to track the scrutiny applied to the underlying policy judgment. Since a court looks closer at the “fit” between state interest and regulation when a fundamental right is in play,¹⁰⁵ judicial review of science relied upon by the legislature ought to be especially close when it impacts a right viewed as “fundamental” in traditional due process jurisprudence. Similarly, where no fundamental right is in play, i.e., where the right being restricted requires only rational basis review, separation of powers suggests that the legislature should have greater freedom to experiment. Use of this sliding scale would allow Congress to choose sides in a legitimate scientific or medical debate when the constitutional stakes are low, but when a more important constitutional right is in play, the sliding scale would force Congress to choose sides cautiously and only when the controversy is genuine.

Anything less would compel nonsensical results and suggest that an otherwise “fundamental” right could be vitiated by legislatively-invented science which received only a cursory and favorable glance at trial. Only a scale of scientific scrutiny sliding in lockstep with other standards of review adequately preserves constitutional rights from collateral attack. Further, a sliding approach ensures that elevated scientific scrutiny does not eviscerate existing constitutional doctrine; although the scientific evaluation would not require a standard lower than current constitutional evaluation of legislative policies, it would also not hold such policies to a higher standard. This

104. *City of Cleburne v. Cleburne Living Ctr.*, 473 U.S. 432, 451–52 (1985) (Stevens, J., concurring) (explaining the usage of the terms “strict scrutiny” and “rational basis” when reviewing the constitutionality of laws under the Equal Protection or Due Process clauses of the Fourteenth Amendment); *see also Webster v. Reprod. Health Servs.*, 492 U.S. 490, 548 (1989) (Blackmun, J., dissenting) (explaining the terms “rational basis” and “strict scrutiny” as not constitutional commandments, but “judge-made methods for evaluating and measuring the strength and scope of constitutional rights or for balancing the constitutional rights of individuals against the competing interests of government.”).

105. *Wash. v. Glucksberg*, 521 U.S. 702, 721 (1997).

process thus ensures that the doctrine does not create new rights by endangering extant, heretofore valid legislative limitations. It merely secures old rights from collateral attack.

*C. Applying Specialized Scientific Review Broadly:
What Changes, and What Does Not*

Where a legislative body rests a decision as to the value or existence of a right upon objective scientific or medical facts—a predicate for the application of the test described above—those facts should first be evaluated using particularized criteria drawn from the *Daubert* factors to determine reliability. Second, having reached a conclusion on the reliability of the scientific evidence proffered, courts should tolerate some error in legislative science where they would also tolerate some arbitrariness in policy judgments—as in, where due process review merely inquires into the “rational basis” of the law¹⁰⁶—but should tolerate less error, where a right entitled to heightened review is in play.¹⁰⁷

Review of this manner does not amount to a monumental departure from judicial deference to congressional findings. Rather, it suggests only that, where a medical or scientific finding is required to justify a legislative scheme of action, courts should use traditional areas of judicial competency to conduct a guided review of the science relied upon. Critics of judicial review could content themselves with the knowledge that, because investigating science does not allow judges to impose their own viewpoints, this form of review does not present the same countermajoritarian fears that emerge when courts review policy.

Before turning to the implications of this new standard on *Gonzales*, a few additional examples may be instructive to illustrate the applicability of this proposed rule to issues that mix policy and science. To begin, the federal government would not face the review proposed in this Note when making policy determinations about global warming—no matter how poor or biased the science invoked may seem. This result follows because whether or not man-made global warming exists has no legal consequence in and of itself; the government could

106. An example of such a situation would be commercial regulation. *See, e.g., United States v. Carolene Prods. Co.*, 304 U.S. 144, 152–53 (1938).

107. Some such elevated due process rights include, as settled constitutional fact, the right to vote, and any right explicitly enumerated by other constitutional amendments. *See id.* at 152 n.4. Abortion remains a right entitled to some elevated form of protection, which the Court defines as protection against regulation that presents an “undue burden.” *Planned Parenthood v. Casey*, 505 U.S.833, 846, 853 (1992).

still draw a proper policy conclusion either way. If the existence of global warming constitutionally compelled a course of action, however, the government could not duck its responsibility through selective science. On the contrary, revisiting *Kitzmiller*, a public school's ability to teach "intelligent design" depends upon the scientific validity of the theory: schools can teach science, but not religion masquerading as science.¹⁰⁸ Because the question of scientific validity is determinative of the policy issue, this form of review would apply to future iterations of *Kitzmiller*, and, consequentially, most likely lead to the same outcome.

Second, consider the controversy over whether same-sex couples ought to be able to adopt children. This issue is often argued in the negative, by citation to "scientific studies" alleging that the adoptive children of gay couples are damaged by exposure to the parents' lifestyle.¹⁰⁹ A justification of this sort would certainly trigger the proposed *Daubert* legislative scrutiny standard, and to the extent that social science rejects the idea that the fact of gay parents' sexuality "harms" their children, the justification would be rejected since the scientific justification would bear directly upon the right. If nothing else, this justification would be subject to an elevated scrutiny level, namely, the standard that would be applied to classification on the basis of sexuality in the wake of *Romer v. Evans*.¹¹⁰ This analysis would likely foreclose a scientific justification for discrimination; however, it would not prevent legislatures from forbidding gay couples from adopting based on other policy justifications, to the extent that those other justifications are constitutional. Therefore, where the justifications for policies are otherwise constitutional, the analysis proposed in this Note would not overturn federal case law upholding such policies.¹¹¹

108. See *Kitzmiller v. Dover Area Sch. Dist.*, 400 F. Supp. 2d 707, 734–35 (M.D. Pa. 2005).

109. See, e.g., Lynn D. Wardle, *The Potential Impact of Homosexual Parenting on Children*, 1997 U. ILL. L. REV. 833. For a statute banning gay adoption, see, for example, Fla. Stat. Ann. § 63.042(3) (2005). Citation to this work is illustrative and in no way implies an acceptance of its methods or conclusions.

110. *Romer v. Evans*, 517 U.S. 620, 632 (1996) (defining an elevated level of rational basis as applicable to sexuality-based distinctions: legislative judgments cannot rest on mere "animus toward the class it affects."). Certainly the level of scrutiny applied to distinctions on the basis of sexuality is unclear; however, this topic, ably argued by other commentators, is not within the scope of this paper. For the sake of argument, it is merely assumed to be "elevated."

111. See *Lofton v. Sec'y of the Dep't of Children & Family Servs.*, 358 F.3d 804, 824–26 (11th Cir. 2004), cert. denied, 543 U.S. 1081 (2005) (holding that social science, proving gay couples to be good parents, did not foreclose the Florida legislature

Elevated, factor-based review of legislative scientific determinations will not solve all the problems of selective science in a democracy, but neither will it circumscribe Congress's legitimate ability to make policy judgments. Recall that the purpose of stricter scrutiny of scientific fact determinations is not to foreclose legislative policy judgments; rather, its goal is merely to prevent reliance on "scientific facts" to circumvent an otherwise unconstitutional policy choice. Thus, so long as policy determinations as to a right are constitutional, a law which may be justified or attacked on the basis of science remains tolerable. The analysis proposed here would not open new avenues for attack on policy determinations; it simply closes off the legislative detour employed by the *Gonzales* Court.

*D. Applying the Standard to Gonzales v. Carhart:
Bad Science Makes Bad Law*

Applying this particularized inquiry to the facts of *Gonzales v. Carhart* and the Partial Birth Abortion Act, it should be no surprise that closer scientific review compels a contrary result from that which actually occurred. Having set out an expanded conception of due process review above, complete with its limitations, a step-by-step application of the proposed process proves instructive.

In evaluating whether to apply specific scientific review to the case, a court would first ask whether Congress invoked science in defining the 2003 Act, and whether the science invoked amounts to a policy statement or a necessary condition for the limitation of the right in question. In crafting the 2003 Act, a medical "finding" that the D&X procedure carried no health benefit directly triggered Congress's ability to ban it.¹¹² Congress's scientific judgments in the Partial Birth Abortion Act therefore went to the right—and not the policy—surrounding the decision to ban D&X, since if D&X presents health benefits, prior precedent automatically compels the conclusion of its constitutionality.¹¹³

from prohibiting gay adoption, since the Florida legislature was only subject to "rational basis" review on this determination).

112. See *supra* Part II.A. The fact that the science presented in the Partial Birth Abortion Act compels a constitutional conclusion differentiates *Gonzales* from the hypothetical I posed about global warming. See *supra* Part III.C. When the existence of a scientific fact "triggers" a right is the most obvious example of when courts should step closely around the legislature's scientific judgment, a case which *Gonzales* squarely presents.

113. Recall that *Gonzales* does not overrule the point from *Stenberg* that the healthful value of a procedure compels its constitutional protection; it merely states that if the value is "uncertain," *Stenberg* is inapposite. See *Gonzales v. Carhart*, 550 U.S.

Since the scientific data underlying the 2003 Act goes to the right, a reviewing court should test the proffered evidence against standards of reliability paralleling those to evaluate expert testimony under *Daubert*. In this case, many of the objections to the scientific “facts” proposed by Congress go to the most basic values set forth by a *Daubert*-style inquiry: the experience of, and the methodology used by, testifying experts. Much of the testimony that led Congress to conclude that D&X lacked any health benefits was given by experts lacking requisite knowledge.¹¹⁴ Those experts who actually did possess applicable knowledge concluded that D&X procedures in fact were in many cases safer, and avoided significant risks.¹¹⁵ Problems of this gravity would clearly require extensive inquiry as to actual scientific or medical reality.¹¹⁶ The inquiry would not conclude by finding “uncertainty,” but would have to evaluate the degree of difference between proposed scientific findings and Congress’s conclusion, an inquiry that, based on the trial court record, would almost certainly have found the government’s proffered scientific findings wanting.¹¹⁷ It is interesting to note that all the lower courts came to the conclusion that Congress’s scientific data were insufficient to justify banning D&X, without having to rely explicitly upon the *Daubert*-style criteria I have set out.¹¹⁸ To that extent, the test that this paper proposes—focusing on the very criteria that science itself relies upon—merely spells out what any court should already be doing.

Having found that there is some divergence between the actual scientific consensus and the one adopted by Congress, the reviewing court would then have to determine whether the divergence was within constitutionally acceptable parameters. As I have argued above, the appropriate level of divergence turns upon the magnitude of the right in question.¹¹⁹ The *Casey* right to choose arguably occupies a constitutional middle-ground between “fundamental” rights and rights entitled merely to rational basis review; while the right to choose has not been “fundamental” since *Casey*, neither is it set at naught.¹²⁰ The level of divergence between scientific fact and Con-

124, 166 (2007). The precise point of this paper is that the “uncertainty” was improperly evaluated, amounting to a constitutional loophole.

114. See *supra* note 20 and accompanying text.

115. See *supra* note 20 and accompanying text.

116. See *supra* Part III.A(1).

117. See *supra* Part III.B.

118. See *supra* notes 22–25 and accompanying text.

119. See *supra* Part III.B.2.

120. Erin Daly, *Reconsidering Abortion Law: Liberty, Equality, and the New Rhetoric of Planned Parenthood v. Casey*, 45 AM. U.L. REV. 77, 145 (1995) (“Thus, the

gress's own findings would thus have to be smaller than normal, although some tolerance for error would surely exist. At the least, Congress's findings would lack the presumption of acceptability that exists under rational basis review,¹²¹ and they would therefore most likely be found intolerably erroneous.¹²²

Accordingly, the Partial Birth Abortion Act would be without a scientific basis in asserting that D&X lacked health benefits, and a court reviewing it would be forced to reach the same conclusion as the *Stenberg* Court. In reviewing *Gonzales* under this framework the Supreme Court would have sustained the district courts and invalidated the 2003 Act.

While some may argue this analysis impermissibly negates a democratic consensus, it does not burden a truly legitimate value of the majority, because it does not foreclose the majority from acting in a way that it normally *could* act. My framework, in striking the Act, would be no more countermajoritarian than any of substantive due process jurisprudence. Further, the analysis reaches a constitutionally sound result by addressing only a narrow point of case law, thus creating a minimum of contention surrounding any potential decision.

CONCLUSION

Courts reviewing legislative judgments on science, where the "discovered" science relates to an important right, should feel free to engage in a particularized and in-depth inquiry into the science put forth by the legislature. This type of approach, by tapping into the special institutional competency of courts as fact-finders and utilizing familiar doctrines of scientific review, would prevent legislators from turning science into a shortcut around constitutional freedoms. Particularized judicial inquiry into science also has the fringe benefit of discouraging bad science, ensuring a strong wall of separation between subjective and objective judgments, and thereby avoiding infringement upon areas of legislative competency. Further justified by the

undue burden test represents an amorphous middle tier in the due process context. . .").

121. See *United States v. Carolene Prods. Co.*, 304 U.S. 144, 152 (1938).

122. The Supreme Court and the district courts differed as to whether Congress's science was "reasonable"; likely a test more exacting than simple "reasonableness" would fail Congress' findings utterly. Compare *Nebraska District*, 331 F. Supp. 2d 805, 808 (D. Neb. 2004) (deciding that the government's proffered scientific findings failed even a "reasonableness" inquiry, after evaluating extensively the scientific record) with *Gonzales v. Carhart*, 550 U.S. 124, 165–67 (2007) (deciding that congressional scientific findings were "reasonable," as a policy choice).

unique nature of science in human affairs, this approach prevents the legislative abuse of science, which might otherwise cause or abet a constitutional backslide.