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Super Deference and Heigtened Scrutiny (or When Super-Deference Is Not So Super)

Jonathan H. Adler

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Jonathan H. Adler
Johan Verheij Memorial Professor of Law
Director, Coleman P. Burke Center for Environmental Law
Case Western Reserve University School of Law

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Abstract

Judicial review of federal agency action is systematically deferential. Such deference is arguably at its peak where agencies address scientific and highly technical matters within their area of expertise. This is what some call "super deference." While there may be strong arguments for deferential review of agency scientific determinations as a general matter, there are reasons to question such deference when agency action implicates constitutional matters. In particular, where agency actions trigger heightened scrutiny, such as occurs when agency actions intrude upon expressly enumerated or otherwise recognized fundamental rights or adopt constitutionally suspect classifications, courts should not apply traditional levels of deference. This Article explains why the application of so-called "super deference" is inappropriate where federal agency action triggers heightened scrutiny, considers some of the potential implications of such a rule.

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JONATHAN H. ADLER*

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*Johan Verheij Memorial Professor of Law and Director, Center for Business Law and Regulation, Case Western Reserve University School of Law. This paper was prepared for the "Facts, Science, and Expertise in the Administrative State" Research Roundtable, sponsored by the C. Boyden Gray Center for the Study of the Administrative State at the George Mason University Antonin Scalia Law School, November 5-6, 2020. The author thanks David Bernstein, Mark Chenoweth, E. Donald Elliott, B. Jessie Hill, Tony Mills, Richard Pierce, and Christopher J. Walker for comments on various drafts of this paper, and Reagan Joy for her research assistance. All errors, omissions, and inanities are solely the fault of the author.

INTRODUCTION

Regulations and other measures adopted in response to he Covid-19 pandemic have highlighted the potential conflict between science-based regulatory measures and constitutionally protected liberties.[1] Throughout 2020, government agencies adopted policies to control the spread of novel coronavirus, often with a necessarily incomplete understanding of the emergent threat.[2] At times, these measures constrained the exercise of constitutionally protected rights, such as the free exercise of religion[3] or a woman's right to terminate a pregnancy.[4] In such cases, courts were forced to choose between deference to agency authority or protection of constitutional rights against government interference.

Judicial review of federal agency action is systematically deferential.[5] Some would argue that such deference is necessary for the viability of the modern administrative state.[6] Courts

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[1] *See* Lindsay F. Wiley & Stephen I. Vladeck, *Coronavirus, Civil Liberties, and the Courts: The Case against "Suspending" Judicial Review*, 133 HARV. L. REV. FORUM 179 (2020).

[2] *See*, *e.g.*, Ewen Callaway, Heidi Ledford, Giuliana Viglione, Traci Watson, & Alexandra Witz, *COVID and 2020: An Extraordinary Year for Science*, NATURE, Dc. 14, 2020, https://www.nature.com/immersive/d41586-020-03437-4/index.html (noting early uncertainties about COVID-19 transmission); Harry Rutter, Miranda Wolpert, & Trisha Greenhalgh, *Managing Uncertainty in the COVID-19 Era*, 370 BMJ 3349 (2020) (noting persistent scientific uncertainty); Warren Pearce, *Trouble in the Trough: How Uncertainties Were Downplayed in the UK's Science Advice on COVID-19,* 7 HUMANIT. SOC. SCI. COMMUN. 122 (2020) (noting uncertainty about the virus doubling rate).

[3] *See, e.g.*, South Bay United Pentecostal Church v. Newsom, 592 U.S. __ (2021) (partial grant of injunction against California limitations on religious services due to COVID-19)..

[4] *See* Food & Drug Administration v. Amer. College of Obstetricians & Gynecologists, 592 U.S. __ (2021) (staying preliminary injunction against FDA requirement mifepristone be dispensed in person during pandemic).

[5] As Daniel Solove observed, "It has become almost commonplace for the Court to declare that it will defer to the expert judgment' of a government official." Daniel J. Solove, *The Darkest Domain: Deference, Judicial Review, and the Bill of Rights*, 84 IOWA L. REV. 941, 947 (1995).

[6] *See generally* Gillian E. Metzger, *The Supreme Court, 2016 Term—Foreword: 1930s Redux: The Administrative State Under Siege*, 131 HARV. L. REV. 1 (2017) (responding to "resurgence of the antiregulatory and antigovernment forces" arguing for less deferential judicial review of agency action); Jacob Gersen & Adrian Vermeule, *Thin Rationality Review*, 114 MICH. L. REV. 1355 (2016) (arguing for extremely thin "review of agency decision-making); ADRIAN VERMEULE. LAW'S ABNEGATION (2016). Some also argue that existing "hard look" review is not deferential enough. *See, e.g.*, Sydney A. Shapiro & Richard W.

defer to agency interpretations, policy judgments and factual findings. In many areas, agencies are tasked with assessing complex scientific questions in the course of promulgating rules and implementing federal programs. Judicial deference is arguably at its peak where agencies address scientific and highly technical matters within their area of expertise.[7] This is what some call "super deference."[8]

There are many sound reasons for applying a stronger form of deference where agencies are evaluating and applying scientific and technical information that relate to matters within their jurisdiction. Agencies have a comparative advantage over Article III courts in evaluating scientific information. Administrative agencies often have expert personnel who can be expected to have greater expertise than generalist judges. Agencies are often better positioned than courts or legislatures to assess new scientific information and incorporate evolving findings into their programs and the evaluation of scientific information is often intricately bound up in policy determinations for which agencies are responsible. Moreover, insofar as Congress has delegated responsibility to federal agencies over certain matters, deference to agency determinations within their delegated jurisdiction would seem to follow.

While there may be strong arguments for deferential review of agency scientific determinations as a general matter, there are reasons to question such deference when agency action implicates constitutional matters. In particular, where agency actions trigger heightened scrutiny, such as occurs when agency actions intrude upon expressly enumerated or otherwise recognized fundamental rights or adopt constitutionally suspect classifications, courts should not apply traditional levels of deference. In such contexts, super deference is not so super.

Deference to agency interpretations may well be perfectly appropriate where agencies are tasked with following legislative

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Murphy, *Arbitrariness Review Made Reasonable: Structural and Conceptual Reform of the "Hard Look,"* 92 NOTRE DAME L. REV. 331 (2016).

[7] *See* Balt. Gas & Elec. v. Natural Res. Def. Council, 462 U.S. 86, 103 (1983) ("a reviewing court must be at its most deferential" to an agency's scientific determinations).

[8] *See*, *e.g.*, Emily Hammond Meazell, *Super Deference, the Science Obsession, and Judicial Review as Translation of Agency Science*, 109 MICH. L. REV. 733 (2011). The first description of *Baltimore Gas* deference as "super deference" appears to be Thomas O. McGarity & Wendy E. Wagner, *Legal Aspects of the Regulatory Use of Environmental Modeling*, 33 ENVTL. L. REP. 10751, 10757 n.44 (2003).

instruction and implementing legislatively authorized programs. Applying the level of deference Congress anticipated, or even that to which Congress may have acquiesced, is consistent with the effective operation of the administrative state. If Congress wants courts to apply more or less stringent forms of judicial review, Congress is capable of enacting such preferences, and Courts would be obliged to follow. Where heightened scrutiny is triggered, however, the proper degree of deference is not a decision for Congress to make.

While scholars have identified and evaluated arguments for granting deference to the scientific judgments and assessments made by federal agencies,[9] there has been no prolonged consideration of how such arguments fare when resulting agency action implicates constitutional concerns.[10] Scholars have questioned deferential judicial review of agency fact-finding, particularly concerning "constitutional facts,"[11] but have not evaluated the particular concerns that arise under heightened scrutiny. Scholarship has considered the deference

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[9] *See*, *e.g.*, Shannon Roesler, *Agency Reasons at the Intersection of Experience and Presidential Preferences*, 71 ADMIN. L. REV. 491 (2019); Meazell, *supra* note __; Gersen & Vermeule, *supra* note __; Shapiro & Murphy*, supra* note __; Mark Siedenfeld, *The Role of Politics in a Deliberative Model of the Administrative State*, 81 GEO. WASH. L. REV. 1397 (2013); Kathryn A. Watts, *Proposing a Place for Politics in Arbitrary and Capricious Review*, 119 Yale L.J. 2 (2009); Wendy E. Wagner, *the Science Charade in Toxic Risk Regulation*, 95 COLUM. L. REV. 1613 (1995); THOMAS O. MCGARITY, REINVENTING RATIONALITY: THE ROLE OF REGULATORY ANALYSIS IN THE FEDERAL BUREAUCRACY (1991). On standards of judicial review of agency action more generally, see Sidney A. Shapiro & Richard E. Levy, *Heightened Scrutiny of the Fourth Branch: Separation of Powers and the Requirement for Adequate Reasons for Agency Decisions*, 1987 DUKE L.J. 387 (1987).

[10] Lindsay Wiley and Stephen Vladeck have, however, considered how courts should consider conflicts between civil liberties and COVID-19-related public health measures. *See* Wiley & Vladeck, *supra* note __.

[11] The most significant work in this vein is likely DAVID L. FAIGMAN, CONSTITUTIONAL FICTIONS: A UNIFIED THEORY OF CONSTITUTIONAL FACTS (2008). *See also* Evan D. Bernick, *Is Judicial Deference to Agency Fact-Finding Unlawful?* 16 GEO. J.L. & PUB. POL'Y 27 (2018); Martin H. Redish & William D. Gohl, *The Wandering Doctrine of Constitutional Fact*, 59 ARIZ. L. REV. 290 (2017); Mila Sohoni, *Agency Adjudication and Judicial Nondelegation : An Article III Canon*, 107 NW. U. L. REV. 1569 (2013) (arguing for less deferential review of agency adjudication concerning private rights); Martin H. Redish, *Legislative Courts, Administrative Agencies and the* Northern Pipeline *Decision*, 1983 Duke L.J. 197, 205 (1983) (questioning substantial evidence review of agency factual determinations).

courts should, or should not, show to legislative findings,[12] including when constitutional values are at stake,[13] but have not examined these concerns when findings are made by agencies.

This Article explains why the application of so-called "super deference" is inappropriate where federal agency action triggers heightened deference, either by threatening to infringe upon constitutionally protected rights or adopting suspect classifications. Part I describes the doctrine of "super deference," identifying its roots in *Baltimore Gas & Electric v. Natural Resources Defense Council*,[14] describing its application in federal courts, and identifying several arguments in favor of such a rule of deference in the regular course. Part II briefly explains the origins and rationale of applying heightened judicial scrutiny in particular contexts, and Part III identifies particular risks from applying super deference where agency action intrudes upon constitutionally protected rights or implicates suspect classifications. Part IV identifies several reasons why heightened scrutiny should prevail over deference. Part V considers some questions of application and addresses some potential implications of the arguments made.

I. SUPER DEFERENCE

Federal courts generally defer to agency judgments about scientific and technical matters within their expertise. According to the Supreme Court, reviewing courts are to be "most deferential" about such scientific determinations,[15] and courts generally are. While giving a "hard look" to agency explanations so as to ensure they have engaged in reasoned decisionmaking, courts are reluctant to disturb an agency's conclusions about relevant scientific or technical matters. There are many good reasons for this general approach, including the comparative institutional competence of agencies over courts, the need to account for new information and understandings, the interconnectedness of scientific judgments with policy determinations, and Congress's delegation of the authority to make such determinations to federal agencies.

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[12] *See, e.g.*, Daniel A. Crane, *Enacted Legislative Findings and the Deference Problem*, 102 GEO. L.J. 637 (2014) (evaluating claims for judicial deference of legislative fact-finding)

[13] *See, e.g.*, DAVID FAIGMAN, CONSTITUTIONAL FICTIONS: A UNIFIED THEORY OF CONSTITUTIONAL FACTS (2008).

[14] 462 U.S. 87 (1983).

[15] *Baltimore Gas*, 462 U.S. at 103.

A. Super Deference in the Courts

Section 706 of the Administrative Procedure Act instructs reviewing courts to "hold unlawful and set aside agency action" that is found to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."[16] As interpreted by the courts, Section 706 requires courts to subject agency actions to a "searching and careful" inquiry – a "hard look" – so as to ensure they were the product of reasoned decisionmaking.[17] This review is "narrow" and provides no warrant for the reviewing court to substitute its view for that of the agency.[18] Its focus is ensuring that the agency "examine[d] the relevant data", "articulate[d] a satisfactory explanation for its action", and identified a "rational connection between the facts found and the choice made."[19] Under this standard, an agency's decision to ignore relevant scientific evidence or disregard relevant arguments presented in the rulemaking are grounds for reversal, but reaching a different conclusion than what the reviewing court or others would prefer is not.[20]

The hard look review described in *State Farm* and its progeny focuses on the agency's decisionmaking and its explanation, not on the substance of the agency's conclusions. Although such scrutiny can be searching, and inevitably results in some agency decisions being overturned, it leaves agencies with the ability to render judgments about how to interpret incomplete data, how to account for scientific uncertainty, which scientific arguments or technical analyses to credit, and which to reject. Thus it

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[16] 5 U.S.C. § 706. It further provides that agency actions are to be set aside if "unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute." *Id.*

[17] *See* Citizens to Protect Overton Park v. Volpe, 401, U.S. 402 (1971); *see also* Motor Vehicle Mfrs. Assn v. State Farmm Mutual Insur. Co., 463 U.S. 29 (1983).

[18] *See* Motor Veh. Mfrs. Assn v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).

[19] *Id.* (quoting Burlington Truck Lines v. United States, 371 U.S. 156, 168 (1962)).

[20] *See, e.g.*, Dept. of Homeland Security v. Regents of the Univ. of Calif., 140 S.Ct. 1891, 1910 (2020) (concluding the Department of Homeland Security's decision to rescind the Deferred Action for Childhood Arrivals policy was arbitrary and capricious because the Acting Secretary "'failed to consider . . .important aspects of the problem' before her." (quoting Motor Veh. Mfrs. Assn v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983)); Michigan v. EPA, __ U.S. __ (20).

should be no surprise that *State Farm* and *Baltimore Gas & Electric Co. v. Natural Resources Defense Council*[21] were decided by the same Court, in the same year.[22]

Under *Baltimore Gas* agencies receive what is often termed "super deference."[23] As Justice Sandra Day O'Connor explained for a unanimous Court, when considering a challenge to an agency's scientific judgment "within its area of special expertise, at the frontiers of science . . . a reviewing court must generally be at its most deferential.[24] Such deference is to be even greater than that provided an agency's "simple findings of fact,"[25] and such deference is not to be diminished by the existence of scientific uncertainty.[26]

The central issue in *Baltimore Gas* was the "reasonableness" of the Nuclear Regulatory Commission's assumption that, in the long run, there would be a nuclear waste repository capable of preventing any environmental contamination from the waste stored therein.[27] The Court understood that the soundness of this assumption was "surrounded with uncertainty."[28] It nonetheless concluded that the Commission, to which Congress had entrusted responsibility for addressing such matters, could assume that "the Nation is likely to develop methods to stores the wastes with no leakage to the environment."[29] Further, the Court observed, making this sort of assumption entailed a "policy judgment" that was "within the bounds of reasoned decisionmaking."[30] As the Court had noted in prior cases, agencies were "free" to make assumptions in line with their

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[21] 462 U.S. 87 (1983).

[22] Jacob Gersen and Adrian Vermeule argue that *Baltimore Gas* is more representative of the Supreme Court's approach to reviewing agency action than is *State Farm*. *See* Jacob Gersen & Adrian Vermeule, *Thin Rationality Review*, 114 MICH. L. REV. 1355 (2016). This may be so, but Supreme Court cases are unlikely to be representative of judicial review of agency actions generally, and this hypothesis does not appear to apply to the behavior of the circuit courts of appeals where most challenges to agency actions are heard, and the U.S. Court of Appeals for the D.C. Circuit in particular.

[23] See Emily Hammond Meazell, *Super Deference, the Science Obsession and Judicial Review as Translation of Agency Science*, 109 MICH. L. REV. 733 (2011).

[24] *Baltimore Gas*, 462 U.S. at 103.

[25] Id.

[26] *Id.* at 97.

[27] *Baltimore Gas*, 462 U.S. at 92 (noting "the reasonableness of [the 'zero-release'] assumption is at the core of the present controversy").

[28] *Id.* at 96.

[29] *Id.* at 98.

[30] *Id.* at 105.

policy orientation.[31]

Predicting what technical capabilities would or would not be developed was not a simple question of fact. Rather, it required making a judgment "within the special expertise" of the agency "at the frontiers of science."[32] This sort of "scientific determination" should be entitled to even greater deference than "simple findings of fact" because of the agency's particular expertise and delegated responsibility to make these sorts of judgments.[33] Provided the agency engaged in reasoned decision making, here by acknowledging and detailing relevant "areas of uncertainty" and their relevance for the agency's ultimate determination, the resulting assumption could not be deemed arbitrary and capricious.[34]

Baltimore Gas reaffirmed that courts should review agency actions deferentially. Even before *Baltimore Gas* though, it was understood that agencies were not required to substantiate their findings "with anything approaching scientific certainty."[35] Yet the broad language of *Baltimore Gas* made clear that judicial review was not to be an opportunity for interest groups to relitigate scientific matters on which they had not prevailed before the agency. As one early commentator noted, the "broad and powerful deference language" of Justice O'Connor's opinion for the Court, embodied a "heightened notion of deference," greater than had traditionally been applied.[36]

Lower courts have generally heeded the Court's *Baltimore Gas* counsel, even if not always with reference to the decision.[37] The idea that an agency's scientific judgments receive

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[31] *See* Indus. Union Dept. v. American Petroleum Inst., 448 U.S. 607, 657 (1980) ("the agency is free to use conservative assumptions in interpreting the data with respect to carcinogens, risking error on the side of overprotection rather than under protection.").

[32] Balt. Gas, 462 U.S. at 103.

[33] *Id.*

[34] *Id.* at 104-105.

[35] *See* Indus. Union Dept. v. American Petroleum Inst., 448 U.S. 607, 657 (1980).

[36] *See* Andrew D. Siegel, *The Aftermath of* Baltimore Gas & Electric Co. v. NRDC*: A Broader Notion of Judicial Deference to Agency Expertise*, 11 HARV. ENVTL L. REV. 331, 331-32 (1987). Some even characterized the Court's approach in *Baltimore Gas* as "no look" review, *see* Donald W. Stever, Jr., *Deference to Administrative Agencies in Federal Environmental Health and Safety Litigation: Thought son Varying Judicial Application of the Rule*, 6 W. N. Eng. L. Rev. 35, 59 (1983), though that is certainly an overstatement. *See* Siegel, *supra*, at 359.

[37] *See, e.g.*, Nat'l Ass'n for Surface Finishing v. EPA, 795 F.3d 1, 7 (D.C. Cir. 2015)("We afford special deference where the agency's decision rests on an evaluation of complex scientific data within the agency's technical expertise."

broad deference is deeply ingrained in judicial review of agency action. Particularly in the D.C. Circuit, courts are loathe to second-guess the scientific assumptions, judgments and conclusions of regulatory agencies.[38] Where an agency's decision is "based upon highly complex and technical matters," they are "entitled to great deference."[39] Consistent with the understanding that the purpose of judicial review under the APA (and equivalent provisions in other statutes[40]) is to ensure "that the choices made" by the agency are "reasonable and supported by the record," where a regulation concerns highly technical or complex scientific questions, judges routinely insist on an agency explanation that details what choices were made and why, but courts rarely overturn scientific determinations themselves.[41] Review in such cases does not entail evaluating "the merits of competing expert views."[42] As the U.S. Court of Appeals for the D.C. Circuit observed in 1987: "Our only role is to determine whether the agency has exercised a reasoned discretion, with reasons that do not deviate from or ignore the ascertainable legislative intent."[43]

Baltimore Gas deference is of particular importance where agencies are addressing matters where science is contested or uncertain – as is often the case where science is to be incorporated into agency rulemaking – or where agencies are required to make predictions or projections about the future.

(internal quotation omitted)); Troy Corp. v. Browner, 120 F.3d 277, 283 (D.C.Cir.1997) (same).

[38] *See*, e.g., Am. Lung Ass'n v. EPA, 134 F.3d 388, 391 (D.C. Cir. 1998) "Generally speaking, we will not second-guess EPA in its area of special expertise."); Envtl Def. Fund v. EPA, 598 F.2d 62, 83-84 (D.C. Cir. 1978)("EPA, not the court, has the technical expertise to decide what inferences may be drawn from the characteristics of . . . substances . . .).

[39] Appalachian Power Co. v. EPA, 249 F.3d 1032, 1051–52 (D.C. Cir. 2001) (quoting Public Citizen Health Research Group v. Brock, 823 F.2d 626, 628 (D.C.Cir.1987)); *see also* Huls Am., Inc. v. Browner, 83 F.3d 445, 452 (D.C.Cir.1996) ("[W]e will give an extreme degree of deference to the agency when it 'is evaluating scientific data within its technical expertise.' " (citation omitted)); International Fabricare Inst. v. USEPA, 972 F.2d 384, 389 (D.C.Cir.1992) (same).

[40] *See, e.g.*, 42 U.S.C. §7607.

[41] Lead Indus. Assn. v. EPA, 647 F. 2d 1130, 1160 (1980).

[42] Lead Indus. Assn. v. EPA, 647 F. 2d 1130, 1160 (1980); *see also* Am. Trucking Associations, Inc. v. USEPA, 175 F.3d 1027, 1054 (D.C. Cir. 1999) (same); Nat. Res. Def. Council, Inc. v. USEPA, 16 F.3d 1395, 1404 (4th Cir. 1993) (" the court concludes that the best course of action is to leave this debate to the world of science to ultimately be resolved by those with specialized training in this field").

[43] Nat. Res. Def. Council, Inc. v. USEPA, 824 F.2d 1146, 1163 (D.C. Cir. 1987) (cleaned up).

While the design of agency models and accuracy of agency projections can be contested, they represent the sorts of judgments agencies are entitled to make, provided they offer adequate explanation for the choices they make. As the D.C. Circuit explained in one illustrative case, courts will uphold agency models "as long as the agency explains the assumptions and methodology used in preparing the model and provides a complete analytic defense should the model be challenged."[44] It is not enough for those challenging a model's accuracy or design to show that it is "limited or imperfect."[45] Rather petitioners must show the model "bears no rational relationship to the characteristics of the data to which it is applied" for a court to conclude its use was arbitrary and capricious.[46] Likewise, unless there is a specific statutory mandate dictating otherwise, agencies are entrusted with the authority to determine when "imperfect scientific information" is sufficient for the task at hand.[47]

Requiring reviewing courts to be particular deferential to an agency's assessment of relevant scientific research and its implications for those matters within the agency's regulatory purview does not mean that anything goes. Such deference need not be abdication. Courts are still responsible for ensuring that an agency has engaged in reasoned decisionmaking, and has articulated a connection between any particular policy outcome or conclusion and the facts found or scientific conclusions reached. Super deference does not excuse an agency from its obligation to engage in reason giving. Nor does super deference empower an agency to deny readily established scientific facts about the world.

In *American Trucking Associations v. U.S. Environmental Protection Agency*, the U.S. Court of Appeals for the D.C. Circuit rejected the EPA's failure to consider the potential health harms that could result from a *reduction* in ambient levels of tropospheric ozone when setting the ozone NAAQS under the

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[44] Nat'l Ass'n for Surface Finishing v. EPA, 795 F.3d 1, 18 (D.C. Cir. 2015) (cleaned up). *See also* Small Refiner Lead Phase–Down Task Force v. EPA, 705 F.2d 506, 535 (D.C.Cir.1983)

[45] Appalachian Power Co., 249 F.3d at 1052.

[46] *Id.*(quoting Appalachian Power Co. v. EPA, 135 F.3d 791, 802 (D.C.Cir.1998)).

[47] *See* Allied Local & Reg'l Mfrs. Caucus v. USEPA, 215 F.3d 61, 71 (D.C. Cir. 2000) ("We generally defer to an agency's decision to proceed on the basis of imperfect scientific information, rather than to 'invest the resources to conduct the perfect study"); Sierra Club v. EPA, 167 F.3d 658, 662 (D.C.Cir.1999) (same).

Clean Air Act.[48] Under the Act, the EPA was obligated to base the NAAQS or air quality criteria that, in turn, were to "reflect the latest scientific knowledge useful in indicating all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities."[49] Comments submitted to the rulemaking record indicated that ozone blocks ultraviolet radiation and therefore a reduction in tropospheric ozone levels could produce an increase in human exposure to ultraviolet radiation, with negative effects on human health.[50] In finalizing the ozone NAAQS rule, the EPA failed to account for these effects on the grounds that it was not required to consider potentially beneficial effects of pollutants in the ambient air, as the purpose of the NAAQS is to protect people against breathing unhealthy concentrations of regulated pollutants.

The D.C. Circuit rejected the EPA's arguments because, under its reading, the plain text of the CAA required the agency to consider "all identifiable effects" of regulated pollutants in the ambient air, not merely negative effects or those effects that come from the inhalation of pollutants. Further, the Court rejected the EPA's argument that it could ignore the relevant studies finding potential adverse health consequences from ozone reductions because the EPA had not simply discounted the results of such studies. Rather, it "chose to give the studies no weight at all."[51] The EPA's failure was its refusal to engage with the arguments and evidence presented, not any particular conclusion about the robustness of the relevant studies or specific scientific conclusions.

The *American Trucking* court was careful not to circumscribe how the EPA evaluated or weighted the import of such studies on remand. To the contrary, the court made clear that it was up to the EPA to develop criteria for evaluating the

[48] *See* 175 F.3d 1027, 1051-53 (D.C. Cir. 1999). For a general discussion of the issue raised by "benefits" of ground-level ozone, see Randall Lutter & Howard Gruenspecht, *Assessing Benefits of Ground-Level Ozone: What Role for Science in Setting National Air Quality Standards*, 15 TUL. ENVTL. L.J. 85 (2001).

[49] 42 U.S.C. §7408(a)(2).

[50] *See*, *e.g.*, Randall Lutter & Christopher Wolz, *UV-B Screening by Tropospheric Ozone: Implications for the National Ambient Air Quality Standards*, 31 ENVTL. SCI. & TECH. 142A (1997). Based upon the estimates presented in this paper, increased UV-B exposure due to the reductions in concentrations of tropospheric ozone anticipated by the EPA's then-proposed NAAQS could result in as many as 11,000 additional cases of melanoma skin cancer and as many as 50 melanoma related deaths per year, in addition to as many as 28,000 new cataract cases per year.

[51] American Trucking Assns., 175 F.3d at 1052.

potential effects of ozone reductions on ultraviolet radiation exposure and consequent health effects.[52] Accordingly, and permissibly, on remand the EPA concluded that there was insufficient information on the connection between reduced levels of tropospheric ozone and patterns of exposure to ultraviolet radiation to justify any relaxation of the ozone NAAQS on the grounds of public health.[53] Had the EPA made this argument in the first instance, it would likely have prevailed. There is a meaningful difference between choosing to provide a different degree of weight to particular findings or potential effects, and refusing to consider them altogether. The former is entitled to great deference, whereas the latter is a failure to engage in reasoned decisionmaking.

While super deference does not allow an agency to ignore scientific claims with which it disagrees altogether, it cannot simply deny readily established scientific claims either. When the EPA listed methylene diphenyl diisocynate (MDI) as a "high risk" hazardous air pollutant, the Chemical Manufacturers Association challenged the listing on the grounds that it was based upon assumptions and speculations that bore "no rational relationship to the physical properties of the chemical" at issue.[54] In reaching its judgement about MDI, the EPA had concluded that MDI posed a health risk from inhalation, despite uncontroverted evidence that "MDI is a solid" at the ambient temperatures at which the EPA assumed people might be exposed.[55] EPA's mere "speculative assertion" that MDI might nonetheless be dispersed as a gas was plainly contradicted by scientific evidence in the record to which the agency had offered no substantive response. It was as if the EPA had characterized day as night, or up as down.[56] Thus, the court had no difficulty concluding the EPA's MDI listing was arbitrary and capricious "[f]or want of a rational relationship between the model and the molecule."[57]

Rejecting the EPA's MDI listing did not require abandoning the traditional degree of deference shown to an agency's scientific conclusions. The D.C. Circuit's review was still quite

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[52] *Id.* at 1053.

[53] *See* National Ambient Air Quality Standards for Ozone: Final Response to Remand, 68 Fed. Reg. 614 (Jan. 6, 2003).

[54] Chemical Mfrs Assn v. EPA, 28 F.3d 1259, 1261 (D.C. Cir. 1994).

[55] 28 F.3d at 1266.

[56] Or, as occurred in one case, "daily" as "weekly." *See* Friends of Earth, Inc. v. EPA, 446 F.3d 140, 142 (D.C. Cir. 2006) (the EPA could not set a "total maximum daily load" on a seasonal basis because "daily means daily").

[57] 28 F.3d at 1266.

deferential.[58] The EPA was not required to "justify the model on an ad hoc basis for every chemical to which the model is applied, even when faced with data indicating that it is not a perfect fit."[59] Imposing such a burden on the agency, the court noted, would "defeat the purpose of using a model."[60] Likewise, the court noted that it should defer to "the determination of fit between the facts and the model, . . . so that the agency rather than the court may balance marginal losses in accuracy against marginal gains in administrative efficiency and timeliness of decision making.[61] But deference was not to be "boundless."[62] Insofar as the agency adopted a model that bore "no rational relationship" to "the known behavior" of the chemical compound at issue, deference would become abdication.[63]

To illustrate the point, the D.C. Circuit offered an illustration:

> the reasonable assumption that a certain type of fish comes from the sea leads directly to the prediction that a fish of that type will die when put in an aquarium without salt water; but if one should learn that the particular fish comes from a lake, and thus that the prediction is certainly wrong and that the fish will die without fresh water, then it would be wrongheaded in the extreme to persist in the original assumption.[64]

The physical reality of the known world is a constraint on the findings and conclusions to which courts may be expected to defer. The fact that experts may disagree, that there is persistent uncertainty or a degree of indeterminacy, on the other hand, are not. Provided that agencies can provide reasonable explanations for the scientific and technical research and assumptions upon which they rely, courts will tend to defer.

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[58] Among other things, the court rejected CMA's claims that EPA's model was a "poor fit" because it assumed MDI was emitted from point sources, rather than as fugitive emissions, easily concluding that EPA's choice here was "reasonable." *Id.* at 1266

[59] 28 F.3d at 1265.

[60] *Id.*

[61] *Id.*

[62] *Id.*

[63] *Id.*

[64] *Id.*

B. Rationales for Super Deference

There are multiple reasons why courts should be deferential to agency factual determinations and particularly deferential to administrative agency assessments concerning scientific matters, as is called for in *Baltimore Gas*. These includes a) the relative expertise of agencies when compared to courts, b) the need to account for the accumulation of scientific evidence and changing evidence over time, c) the intertwined relationship between agency scientific judgments and policy judgments, and d) the fact that Congress has delegated responsibility for making scientific judgments to administrative agencies, rather than to the courts.

1. *Expertise*

It should be "obvious" that "expert agencies are better situated than generalist judges to make policy decisions in light of policy uncertainty."[65] Indeed, the utility of agency expertise is one of the reasons Congress opted to create administrative agencies in the first place.[66] Specialized agencies with specified jurisdiction have the ability to address complex and technical matters with greater felicity and understanding than either members of Congress or generalist federal judges.[67] As the Court noted in *Chevron*, "judges are not experts in the field."[68]

Agencies employ scientists, engineers, economists and other

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[65] Meazell, *supra* note _ at 734. After all, "technocrats do understand and judges clearly cannot understand." Martin Shapiro, *Administrative Discretion: The Next Stage*, 92 YALE L.J. 1487, 1507 (1983).

[66] *See* Sidney A. Shapiro, *The Failure to Understand Expertise in Administrative Law: The Problem and the Consequences*, 50 WAKE FOREST L. REV. 1097, 1097 (2015)("Congress establishes administrative agencies and often gives them substantial discretion because it lacks the expertise and political agreement to resolve the policy issues that are likely to arise under a statutory scheme"); *see also* MICHAEL A. LIVERMORE & RICHARD L. REVESZ, REVIVING RATIONALITY: SAVING COST-BENEFIT ANALYSIS FOR THE SAKE OF THE ENVIRONMENT AND OUR HEALTH 13-14 (2020) (discussing the need for agency expertise to meet the demand for rules to "structure commerce and regulate risk"); Anne Joseph O'Connell & Jacob Gersen, *Deadlines in Administrative Law*, 121 U. PENN. L. REV. 923, 925-26 (2008) ("A central premise of the administrative state is that agencies have better information and greater expertise than the Congress that initially delegates authority to agencies").

[67] *See* David B. Spence & Frank Cross, *A Public Choice Case for the Administrative State*, 89 GEO. L.J. 97, 136 (2000) ("there is little that could be done to provide Congress with the engineering expertise of OSHA or EPA").

[68] Chevron U.S.A., Inc. v. Nat. Res. Defense Council, 467 U.S. 837, 865 (1984).

technical experts who accumulate years of experience handling the particular sorts of matters and questions that lie within the agency's jurisdiction. Federal courts, on the other hand, lack these technical capacities and do not have the same degree of specialized experience. Professional staff within the EPA's Office of Air and Radiation will have spent years figuring out how to incorporate scientific findings and ongoing research into the agency's assessment of the health risks posed by air pollution and what sorts of measures may be adopted to control it. Their accumulated expertise is not simply a question of knowledge of the subject matter or training in a particular discipline, but also operating in a given policy space.[69] Judges on the U.S. Court of Appeals for the D.C. Circuit, on the other hand, may only see a handful of Clean Air Act cases every few years.

In some cases, courts do hear and evaluate detailed scientific evidence, evaluate the admissibility of such evidence under the Federal Rules of Evidence, and rely upon such evidence to reach legal judgments. But the ability of courts to handle complex scientific evidence in such contexts (which is itself disputed[70]) does not mean courts are well-positioned to evaluate the scientific predicates of agency rulemakings.[71] Adopting a more skeptical view of judicial capacity only underscores the point. As Peter Huber notes:

> The legal system has no special competence to assess and compare public risks, and the legal process is not designed or equipped to conduct the broad-ranging aggregative inquiries on which sensible public-risk choices are built. Expert administrative agencies, troubled and erratic though they may be, remain best able to regulate public risks in a manner calculated to advance the

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[69] *See* Sidney A. Shapiro, *The Failure to Understand Expertise in Administrative Law: The Problem and the Consequences*, 50 WAKE FOREST L. REV. 1097, 1099 (2015) ("agency professionals (and some nonprofessionals) develop expertise in reconciling and accounting for conflicting evidence and arguments, disciplinary perspectives, political demands, and legal commands. This expertise is a 'craft' form of expertise.").

[70] *See generally*, PETER W. HUBER, GALILEO'S REVENGE: JUNK SCIENCE IN THE COURTROOM (1991).

[71] David E. Bernstein, *What to Do about Federal Agency Science: Some Doubts about Regulatory* Daubert, 22 GEO. MASON. L. REV. 549, 558 (2015)("while judicial scrutiny of expert testimony is preferable to simply dumping a matter on a jury, there's little reason to think that judges will make better scientific decisions than agencies.").

public health and welfare.[72]

2. Flexibility

Deference to agencies also helps preserve agency flexibility.[73] The need for agencies to be able to evaluate and incorporate new scientific research and improved understandings into regulatory standards and agency actions further supports deferring to an agency's evaluation of uncertain scientific questions. One reason Congress delegates authority to administrative agencies is that such agencies are in a better position to respond to changes that may require new or modified policy responses. Forcing courts to resolve such questions could "fix" scientific judgments into place within the law and risk obsolescence.[74] As Stephanie Tai warns, this would be bad for both science and the courts.[75]

Scientific knowledge is not static. Over time, additional data is accumulated, new studies are conducted, understandings are updated and re-evaluated. While cumulative, scientific knowledge is not always linear. Marginal improvements and discoveries may ultimately shift or upset settled paradigms. Administrative agencies, more than legislatures or courts, are able to anticipate and account for such changes in a proactive fashion, revising standards or providing new guidance when improvements in scientific understandings so warrant.

Numerous regulatory statutes expressly anticipate the development of improved scientific understandings and require agencies to revise their rules and policies appropriately. Perhaps the most prominent example can be found in the Clean Air Act, under which the Environmental Protection Agency is instructed to review and potentially revise the National Ambient Air

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[72] Peter Huber, *Safety and the Second Best: The Hazards of Public Risk Management in the Courts*, 85 COLUM. L. REV. 277, 329 (1985). *See also* LIVERMORE & REVESZ*, supra* note __, at 14 ("agencies largely, derive their legitimacy from reputations for impartiality and expertise").

[73] *See* O'Connell & Gersen, *supra* note __, at 928 (noting agency clexibility is a "running theme" in administrative law).

[74] *See* Stephanie Tai, *Uncertainty about Uncertainty: The Impact of Judicial Decisions on Assessing Scientific Uncertainty*, 11 U. PA. J. CONST. L. 673, 696 (2011) ("The dangers of the Court making its own determinations on scientific and medical issues is that such determinations will fix into place 'science' that could be ultimately undermined by additional studies.").

[75] *Id.* at 697 ("Permanent determination of the state of science . . . may create challenges for the legitimacy of courts, especially when later scientific developments call those earlier determinations into question. This danger is not as great for legislative determinations of science, given that legislatures are freer to revisit their determinations.").

Quality Standards every five years.[76]

The EPA is obligated to set NAAQS for criteria air pollutants at the level "requisite to protect the public health" with "an adequate margin of safety."[77] These standards are to be based upon air quality criteria that "accurately reflect the latest scientific knowledge."[78] This periodic review sometimes results in maintaining the status quo.[79] Other times it results in the tightening (or, in one instance, the loosening) of the applicable standards.[80] At still other times, it results in the EPA revising the way that standards are measured, such as by changing the time period over which compliance is to be assessed or redefining the relevant pollutants. The ozone NAAQS had required keeping ambient concentrations below 0.12 parts per million as measured over a one-hour period. In 1997, however, the EPA concluded that the "latest scientific knowledge" counseled a lower standard (0.08 ppm) but measured over a longer period of time (eight hours).[81]

The CAA also accommodates changes in what is considered a pollutant. New pollutants may be added as health effects are recognized.[82] Old pollutants may be recharacterized or redefined. At the same time the EPA tightened the ozone NAAQS from 0.12ppm to .08 ppm, the agency also revised the NAAQS for particulate matter needed to be refined so as to measure coarse and fine particles separately.[83] Whereas the relevant NAAQS previously focused on total suspended particulates in the ambient air, the EPA revised the standards to focus on those particles between 10 and 2.5 microns in

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[76] *See* 42 U.S.C. §7409(a), (d) (requiring the establishment and five-year review of national ambient air quality standards

[77] *See* 42 U.S.C. §7409(b).

[78] *See* 42 U.S.C. §7408(a).

[79] S*ee* National Ambient Air Quality Standards for Sulfur Oxides (Sulfur Dioxide)—Final Decision, 61 Fed. Reg. 25,566 (May 22, 1996) (retaining NAAQS for sulfur dioxide); National Ambient Air Quality Standards for Ozone—Final Decision, 58 Fed. Reg. 13,008 (Mar. 9, 1993) (retaining NAAQS for ozone).

[80] *See* Revisions to the National Ambient Air Quality Standards for Photochemical Oxidants, 44 Fed. Reg. 8202 (Feb. 8, 1979) (raising ozone NAAQS from 0.08 to 0.12 ppm).

[81] *See* National Ambient Air Quality Standards for Ozone, 62 Fed. Reg. 38,856 (July 18, 1997) (tightening NAAQS for ozone and changing measurement time period from 1-hour to 8-hours).

[82] *See* NRDC v. Train, 545 F.2d 320 (2d Cir. 1976) (concluding the EPA was obligated to list lead as a criteria air pollutant).

[83] *See* National Ambient Air Quality Standards for Particulate Matter, 62 Fed. Reg. 38,652 (July 18, 1997) (adding PM2.5 standards to complement PM10 standards based upon available scientific evidence).

diameter (PM_{10}), and those smaller than 2.5 ($PM_{2.5}$).[84]

Agency expertise is not solely about what information or data is in the technical literature, or what science tells us about existing problems and potential solutions. Expertise also includes practical experience with implementing and administering a regulatory program in light of inherently uncertain and incomplete scientific information and technical knowledge.[85] The accumulated expertise with operating in this space may also be a basis for judicial deference.

3. *Policy Discretion*

That courts should defer to an agency's permissible policy determination is almost beyond question. The need for deference on normative policy questions further supports the argument for deference to scientific determinations, particularly those sorts of complex and evolving areas of science anticipated by *Baltimore Gas*. It is "obvious" that "expert agencies are better situated than generalist judges to make policy decisions in light of uncertainty."[86]

Many agency actions informed by science are, ultimately, normative policy judgments, even if agencies are not quick to acknowledge that fact.[87] Policy-relevant science is, itself, grounded in and shaped by value judgments.[88] The rhetorical debate over whether a given regulatory or deregulatory agenda is grounded in "sound science" or "junk science" is typically a debate over the policy conclusions that should be drawn from what is often incomplete or uncertain scientific research. Purportedly scientific conclusions often mask normative judgments about how data should be interpreted and how uncertainties should be resolved. The conclusion that a particular confidence interval should be determinative is a value-based judgment, as are various policy-relevant inferences that are routinely drawn from scientific research.

Throughout the administrative state, "the formulation of

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84 *Id.*

85 *See* Shaprio, *supra* note __.

86 Meazell, *supra* note __, at 734.

87 *See* Edward J. Rykiel, *Scientific Objectivity, Value Systems, and Policymaking*, 51 BIOSCIENCE 433, 434 (2001) ("Scientists typically portray the information they provide to the public as objective and value free, with the implication that those traits confer greater weight to their opinions than should be accorded to the value laden opinions of nonscientists.").

88 Roesler, *supra* note __, at 526-27 ("Policy-relevant science will always incorporate value judgments.").

standards involves choices that by their nature require basic policy determinations rather than resolution of factual controversies."[89] Science-dependent conclusions are not always purely scientific. Should a risk assessment adopt "conservative" assumptions about exposure pathways or dose-response curves? How should such assessments account for the likelihood of acutely sensitive subpopulations in the absence of concrete evidence on the size or sensitivity of such groups? Should sparse data on species populations be construed as evidence of the species absence? How should potential future harms be discounted, if at all? And so on. When the Fish & Wildlife Service assesses whether the "best scientific and commercial data available,"[90] it must still make judgments about how much risk to a species actually constitutes the degree of endangerment the Endangered Species Act prohibits.[91]

The persistence of scientific uncertainty serves to underscore the extent to which agencies rely upon policy considerations when reaching scientific judgments. As David Bernstein notes, federal agencies often have "often has no choice but to rely on a certain amount of speculation based on limited data."[92] When considering whether a given pollutant causes adverse health effects at various levels of exposure, the relevant research is rarely sufficient to identify the precise risks at each level of exposure. Consequently, agencies are required to adopt simplifying assumptions, such as whether to assume that the pollutant's health effects are best modeled with a linear dose-response curve, and these assumptions will be based upon normative policy judgments, such as whether to adopt a more protective or precautionary interpretation of the relevant

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[89] Indus. Union Dep't, AFL-CIO v. Hodgson, 499 F.2d 467, 474–75 (D.C. Cir. 1974)

[90] See 16 U.S.C. § 1536(a)(2).

[91] *See* Michael S. Carolan, *Is It a Distinct Subspecies? Preble's Mouse and the 'Best Available Science' Mandate of the Endangered Species Act*, 21 SOCIETY & NAT. RES. 944, 947 (2008)("deciding when a species is safe versus endangered (and this in need of protection) is really a question of how much risk a society is willing to take with that species. And since there is no 'correct' level of risk, such decisions rest upon policy rather than scientific choices."); *see also* Doremus, *Listing*, *supra* note __, at 1035(, "science alone cannot answer all the relevant questions. Science cannot tell us whether a group of organisms has value to society, or what risk of extinction society should tolerate.") .

[92] Bernstein, *supra* note __, at 562. As Bernstein notes, indeed, "agencies are often legally required" to make decisions based upon incomplete scientific evidence. One example of this is the Endangered Species Act, which requires decisions be made upon the "best available" research, without regard for whether the evidence is particularly robust or reliable. *See* Adler, *supra* note __.

research.

Persistent uncertainty means that policy-relevant scientific judgments will often be inherently intertwined with policy judgments, such that a failure to defer to an agency's assessment and application of the relevant science is, in effect, a failure to defer to the agency's policy judgment. Thus, upholding the principle that courts should defer to agency policy judgments that are not otherwise precluded by statute, requires a fair amount of deference to agency assessments and applications of relevant scientific research.

4. Delegation

Perhaps a more fundamental reason for courts to be particularly deferential to the scientific judgments of administrative agencies is because Congress has delegated the responsibility to make such determinations to expert agencies, instead of delegating such matters to the courts (or leaving such questions to themselves).[93] While authorizing judicial review of agency action, Congress has not instructed courts to be particularly searching in their review of agency assessments of scientific or technical information. To the contrary, in many statutes Congress has expressly anticipated broad deference to agency "judgement" about what sorts of reasonable inferences may be drawn from readily available research and analysis. Further, insofar as scientific determinations are interlaced with policy determinations, as discussed above, Congress has likewise delegated the responsibility to agencies to make such policy judgments, subject only to requirements of adequate explanation and reasoned decisionmaking.

Consider the various "endangerment" findings that the EPA Administrator is directed to make under the Clean Air Act. Under these provisions, the Administrator is required to adopt emission controls when "*in his judgment*," emissions of an identified pollutant causes or contributes to "air pollution which *may reasonably be anticipated to endanger* public health or welfare."[94] With this language, Congress has not required that

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[93] *See* Sidney A. Shapiro, *The Failure to Understand Expertise in Administrative Law: The Problem and the Consequences*, 50 WAKE FOREST L. REV. 1097, 1097 (2015)("Congress establishes administrative agencies and often gives them substantial discretion because it lacks the expertise and political agreement to resolve the policy issues that are likely to arise under a statutory scheme.").

[94] *See, e.g.*, 42 U.S.C. §7521 (a) (1):

The Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the

the Administrator demonstrate a given quantum of harm or health risks, nor must the Administrator demonstrate that his finding is supported by a preponderance of evidence. Rather, it is a question of the Administrator's "judgment," and all that the Administrator must find is that it would be "reasonable" to "anticipate" a threat to public health or welfare. This language is clearly precautionary. At the same time, it delegates to the Administrator a great deal of discretion to make the relevant determination, based upon the scientific evidence before the agency.

Congress could have resolved key regulatory policy questions through legislation, as many have argued it should.[95] Yet Congress has not taken this course. The pervasive delegation of regulatory authority includes the delegation of responsibility to resolve matters implicating controversial and often uncertain scientific questions. Federal regulatory statutes are replete with provisions that instruct federal agencies to consider and account for relevant scientific research in the promulgation and enforcement of regulatory standards, and that instruct courts to engage in fairly deferential review.

Congress could also have required federal courts to resolve contested scientific questions in the context of administrative matters, perhaps even subjecting scientific research relied upon by agencies to Rule 702 of the Federal Rules of Evidence.[96] There are areas of law, such as antitrust, where the relevant statutory provisions require courts to consider competing technical analyses in resolving disputes, but in many other areas, Congress has delegated responsibility for making relevant scientific determinations to administrative agencies, and provided for deferential judicial review.

Whatever one thinks of the administrative state, there is no denying that Congress has made the judgment that science-

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emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.

[95] *See, e.g.*, DAVID SCHOENBROD, POWER WITHOUT RESPONSIBILITY: HOW CONGRESS ABUSES THE PEOPLE THROUGH DELEGATION (1993) (arguing that Congress should delegate less to administrative agencies); Ernest Gellhorn, *Returning to First Principles*, 36 AM. U.L. REV. 345 (1987).

[96] For an argument in support of this approach, see Alan Charles Raul & Julie Zampa Dwyer, *"Regulatory* Daubert*": A Proposal to Enhance Judicial Review of Agency Science by Incorporating* Daubert *Principles into Administrative Law*, 66 LAW & CONTEMP. PROBS. 7 (2003). For a contrasting view, see David E. Bernstein, *What to Do about Federal Agency Science: Some Doubts about Regulatory* Daubert, 22 GEO. MASON. L. REV. 549 (2015).

infused policy questions should be resolved by administrative agencies.

II. HEIGHTENED SCRUTINY

Federal administrative agencies may be entitled to substantial deference on scientific questions and science-informed policy judgments as a general matter, but what happens when agency actions intrude upon constitutionally protected rights or implicate constitutionally suspect classifications? The rationales sketched above may provide ample support for a general policy of judicial deference to agency fact-finding on scientific and technical matters, particularly where such matters are within an agency's core expertise and congressionally delegated realm of responsibility. Where heightened scrutiny is triggered, however, courts are generally instructed *not* to defer to government decision makers. Therein lies the potential conflict.

Actions taken by federal agencies are generally subject to a "presumption of regularity."[97] Lawmakers and executive branch officers take an oath to uphold the Constitution and laws of the United States, and courts generally start with the presumption that whatever actions they take are consistent with their understanding of their legal obligations. This presumption is reflected in the baseline of rational basis review, which embodies a presumption of constitutionality and merely requires that governmental actions be rationally related to a legitimate governmental interest,[98] not that they represent good policy,[99] or even that such actions were undertaken for the reasons articulated by the relevant government decision makers.[100]

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[97] *See* Citizens to Pres. Overton Park, Inc. v. Volpe, 401 U.S. 402, 415 (1977); *see also* Ranchers Cattlemen Action Legal Fund United Stockgrowers of Am. v. U.S. Dep't of Agric., 415 F.3d 1078, 1093 (9th Cir. 2005), as amended (Aug. 17, 2005) ("Regulations are presumed to be valid, and therefore review is deferential to the agency.").

[98] *See, e.g.*, New Orleans v. Dukes, 427 U. S. 297, 303 (1976) (legislation must be "rationally related to a legitimate state interest"); Pennell v. City of San Jose, 485 U.S. 1 (1988) (same).

[99] *See* Williamson v. Lee Optical, 348 U.S. 483, __ (1955) ("it is for the legislature, not the courts, to balance the advantages and disadvantages of the new requirement").

[100] *See* Federal Comm. Comm'n v. Beach Comm., Inc., 508 U.S. 307, 315 (1993) (noting that invalidating a law under rational basis requires refuting "every conceivable basis which might support it" and that "it is entirely irrelevant for constitutional purposes whether the conceived reason for the challenged distinction actually motivated the legislature"); U.S. Railroad Retirement Bd. v.

When governmental actions intrude upon fundamental rights or implicate suspect classifications, however, courts apply heightened forms of judicial scrutiny. The forms such scrutiny takes may vary, but what all forms of heightened scrutiny have in common is a suspicion of governmental action that has particular types of effects or utilizes particular types of classifications in policy implementation.[101] Such outcomes are inherently suspect, and must be supported by more thorough and pervasive justifications than other governmental actions.[102] The governmental processes that can be generally trusted to produce legitimate outcomes must be scrutinized once heightened scrutiny is triggered.[103]

The basic rationale for heightened scrutiny was set forth in *United States v. Carolene Products*.[104] There, writing for the Court, Justice Stone explained that courts should generally presume that legislative actions are constitutional.[105] However, Stone added in the famous Footnote 4, "there may be narrower scope for operation of the presumption of constitutionality"

Fritz, 449 U.S. 166, 179 (1980)("It is . .. constitutionally irrelevant whether this reasoning in fact underlies the legislative decision"); Williamson, 348 U.S. at 487-88 ("It is enough that there is an evil at hand for correction, and that it *might be thought* that the particular legislative measure was a rational way to correct it."). *See also* ERWIN CHEMERINSKY, CONSTITUTIONAL LAW 2nd ed. 518 (2002) (noting the asserted state interest "need not be the actual purpose" that motivated enactment). As Laurence Tribe observed, under this approach, the degree of deference afforded to economic regulation under this approach became "virtually complete judicial abdication." *See* LAURENCE H. TRIBE, AMERICAN CONSTITUTIONAL LAW §8-7 at 582 (2nd ed 1988).

[101] *See* LAURENCE H. TRIBE, AMERICAN CONSTITUTIONAL LAW §16-6 at 1451 (2nd ed. 1988) (""the idea of strict scrutiny acknowledges that other political choices—those burdening fundamental rights, or suggesting prejudice against racial or other minorities—must be subjected to close analysis in order to preserve substantive values of equality and liberty").

[102] *See id.* at 1453 ("heightened scrutiny entails "judicial wariness of interests such as these which can be so easily and indiscriminately be invoked, and which almost never point uniquely to a challenged political choice.").

[103] As the Court explained in Vance v. Bradley: "we will not overturn [a statute that does not burden a suspect class or a fundamental interest] unless the varying treatment of different groups or persons is so unrelated to the achievement of any combination of legitimate purposes that we can only conclude that the legislature's actions were irrational." 440 U.S. 93, 97 (1979).

[104] 304 U.S. 144 (1938)

[105] *Id.* at 152 ("[T]he existence of facts supporting the legislative judgment is to be presumed, for regulatory legislation affecting ordinary commercial transactions is not to be pronounced unconstitutional unless in the light of the facts made known or generally assumed it is of such a character as to preclude the assumption that it rests upon some rational basis within the knowledge and experience of the legislators.").

where governmental action infringes upon fundamental rights, such as those enumerated in the Constitution, "restricts those political processes which can ordinarily be expected to bring about repeal of undesirable legislation," or is "directed" against "discrete and insular minorities" that may lack the ability to protect themselves within the political process.[106] In such cases, the presumption of constitutionality is no longer operable, and the government bears a greater burden to demonstrate the lawfulness of its action.[107] As explained in a leading treatise, *Carolene Products* outlined "a framework of greater judicial deference to the legislature, but with particular areas of more intensive judicial review."[108]

Rational basis review is not premised upon the idea that all, or even most, governmental action represents "good" policy, however measured. Such review does not presume that enacted measures effectively advance the public good or necessarily represents the best accommodation of competing interests. Rather, rational basis review rests upon the presumption that a legitimate process produces legitimate policy outcomes, and that such processes may again be used to modify, amend, or repeal those policies which prove to be unpopular or unwise. At least as far as the courts are concerned, that a given policy may be unwise, inefficient, or ineffectual is no basis for declaring it to be invalid.

Rational basis review presumes that some policies will make some people unhappy. Governmental action routinely produces winners and losers. Fiscal and regulatory measures alike have the potential to redistribute resources or impose constraints that benefit some at the expense of others. An implicit premise of *Carolene Products* is that such consequences are, as a general matter, perfectly acceptable outcomes of factional competition within the political process. The underlying facts of the case underscore the point. The federal government had adopted a law—the Filled Milk Act[109]—restricting the sale of "filled milk" in interstate commerce, on the ostensible grounds that such a restriction was necessary for public health.[110] In actuality, there

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106 *Id.*at 152 n.4.

107 *Id.*

108 ERWIN CHEMERINSKY, CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES 518 (2nd ed. 2002).

109 Pub. L. No. 67-513, 42 Stat. 486 (1923 (codified at 21 U.S.C. §§ 61-63).

110 *See id.* at §62 (declaring filled milk to be "an adulterated article of food, injurious to public health"). The law defined "filled milk" as "any milk, cream, or skimmed milk, whether or not condensed, evaporated, concentrated, powdered, dried, or desiccated, to which has been added, or which has been blended or

was no scientific basis for the indictment against filled milk.[111] If anything, there was evidence that prohibitying filled milk could actually harm low-income consumers.[112]

The Filled Milk Act was "an utterly unprincipled example of special interest legislation," designed to protect the dairy industry from competition.[113] The public health justification was convenient, public-spirited veneer to disguise their rent-seeking.[114] The *Carolene Products* Court did not care about such things, however, for governmental action was to be presumed constitutional in the regular course.[115] Producers and purveyors of filled milk could presumably fend for themselves in the political process. Whether they won or lost in a particular case was of no moment.[116]

What would matter, however, is if those who lost out from the challenged legislation were singled out because of their race, sex, or national origin, or if the regulatory measure achieved its purpose by treading on a constitutional right. Then the presumption of constitutionality would have to yield to greater scrutiny. The government would need to show how the measure served a compelling or important governmental interest, and was either narrowly tailored or substantially related to that interest. Heightened scrutiny would be reserved for those

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compounded with, any fat or oil other than milk fat, so that the resulting product is in imitation or semblance of milk, cream, or skimmed milk, whether or not condensed, evaporated, concentrated, powdered, dried, or desiccated." *Id.* ar §61(c).

111 *See* Geoffrey P. Miller, *The True Story of* Carolene Products, 1987 SUP. CT. REV. 397, 416 (1987) ("even on
the legislative record compiled in 1923 [the justifications for the prohibition] were a tissue of insubstantial rationalizations covering the real motivation of the statute").

112 I*d.* at 419 ("The fact was that filled milk undoubtedly improved the national health. Its lower price increased consumption of skimmed milk and vegetable fats, both wholesome and nutritious foods.").

113 *Id.* at 398.

114 *Id.*at 399 (noting "public interest" justifications were "patently bogus"); *id.* at 406 ("There was no question that filled milk, taken by itself was a healthful product, since it was simply a compound of skimmed milk and vegetable oil, two substances universally recognized as healthful.").

115 *Carolene Products*, 304 U.S. at 152 ("the existence of facts supporting the legislative judgment is to be presumed, for regulatory legislation affecting ordinary commercial transactions is not to be pronounced unconstitutional unless in the light of the facts made known or generally assumed it is of such a character as to preclude the assumption that it rests upon some rational basis within the knowledge and experience of the legislators."),

116 *See* Miller, *supra* note __, at 399 (*Carolene Products* indicated "the Court intended to keep its hands off economic regulation, no matter how egregious the discrimination or patent the special interest motivation").

instances in which particular suspect outcomes were reached, or there was reason to believe that the democratic process did not provide factions with the fair opportunity to advance or protect their interests.

Special interest pleading is not confined to the legislative process. In the regulatory context as well, economic interest groups often seek to camouflage anti-competitive measures with public spirted justifications.[117] As with the Filled Milk Act, it is useful to defend such measures as protective of the public interest, and the language of science can be useful in this regard. But as with legislation, traditional notions of deference to agency judgments should yield when heightened scrutiny is triggered. Any presumption of regularity is forfeit in such instances. It is to this point the article now turns.

III. SCRUTINY VS. DEFERENCE

Federal agency actions are routinely subject to judicial review for their compliance with the Administrative Procedure Act and the requirements of reasoned decision making.[118] At times, however, courts are tasked with ensuring that agency actions are constitutional. Section 706 of the APA expressly instructs courts to "hold unlawful and set aside agency action" that is "found to be . . . contrary to constitutional right, power, privilege, or immunity."[119] And in fulfilling that charge, reviewing courts may need to consider whether agency actions withstand heightened scrutiny.

Agency actions informed by scientific determinations that implicate heightened scrutiny may arise in a wide range of contexts. Consider, just as an example, the regulatory purview of the Food and Drug Administration. For years, the FDA has maintained guidelines and policies concerning blood and sperm donation that rest upon sex-based characteristics.[120]

[117] For examples of special interest policies in the environmental regulatory context, see Bruce Yandle & Stuart Buck, *Bootleggers, Baptists, and the Global Warming Battle*, 26 HARV. ENVTL. L. REV. 177 (2002); POLITICAL ENVIRONMENTALISM: GOING BEHIND THE GREEN CURTAIN, (Terry L. Anderson ed., 2000); Todd J. Zywicki, , 73 TUL. L. REV. 845, 847 (1999); Jonathan H. Adler, *Rent Seeking Behind the Green Curtain*, 19 REGULATION No. 4, at 26 (1996); ENVIRONMENTAL POLITICS: PUBLIC COSTS, PRIVATE REWARDS (Michael S. Greve & Fred L. Smith, Jr., eds., 1992).

[118] *See generally* 5 U.S.C. §706

[119] 5 U.S.C. §706(2)(B).

[120] *See* Neiloy Sircar, *Good Health Policy, BetterPublic Health Law: Blood Donation, Individual Risk Assessments, & Lifting the Deferral for Men Who Have Sex with Men*, 73 FOOD & DRUG L.J. 103 (2018) (noting men who have sex ith men

Specifically, the FDA has limited donations made by men who have had sex with other men (termed "MSM") within given time periods.[121] The FDA has justified this policy on the grounds that MSM pose a greater risk of HIV contamination to the blood supply than do other individuals.[122] Yet the scientific and medical basis for this policy has been the subject of extensive criticism and debate.[123] As a sex-based classification, however, the policy would seem to be subject to heightened scrutiny, albeit the intermediate scrutiny provided for sex-based classifications.

The FDA is also extensively engaged in the regulation of commercial speech.[124] Specifically, the agency makes and enforces rules concerning what manufacturers must or must not say about their products. Some products have mandatory disclosures or warnings. In some cases, this compelled speech covers noncontroversial, factual information, but in others it may require statements about matters that are in dispute. At the same time, FDA regulations may prohibit manufacturers from making statements about their products that, the producers believe, are amply supported by the relevant science. Indeed, in some contexts, product makers are not allowed to advertise or label their products with statements made by the FDA. In the FDA's view, such statements might mislead consumers or have other undesirable effects. Whether the FDA's judgment is correct, these speech restrictions would be subject to heightened scrutiny as regulations of commercial speech.

The COVID-19 pandemic has highlighted other instances in

(MSM) have been prohibited from giving blood since the 1980s). These guidelines were relaxed in 2020 due to COVID-19. *See* Maggie L. Shaw, *FDA's Revised Blood Donation Guidance for Gay Men Still Courts Controversy*, AMER. J. MANAGED CARE, Apr. 4, 2020.

[121] While the FDA's policy may appear to be based upon sexual orientation, and the consequences of this policy no doubt fall most heavily on gay men, the FDA expressly bases the policies on the sex of the prospective donor and his prior sexual partners, not upon any expressed sexual orientation or identity.

[122] *See* FOOD & DRUG ADMIN, DEP'T OF HEALTH & HUMAN SERVS., REVISED RECOMMENDATIONS FOR THE PREVENTION OF HUMAN IMMUNODEFICIENCY VIRUS (HIV) TRANSMISSION BY BLOOD AND BLOOD PRODUCTS (1992). This policy has also been applied to sperm donation. *See* Eligibility Determination for Donors of Human Cells, Tissues, and Cellular and Tissue-Based Products, 69 Fed. Reg. 29,786 (May 25, 2004).

[123] *See* Sircair, *supra* note __; John G. Culhane, *Bad Science, Worse Policy: The Exclusion of Gay Males from Donor Pools*, 24 ST. LOUIS PUB. L. REV.129 (2005)

[124] While commercial speech is not subject to the same degree of protection as other forms of speech, such as political speech, it is nonetheless constitutionally protected and is subject to a form of heightened scrutiny under current doctrine.

which administrative agencies may take actions that implicate uncertain questions on the "frontiers" of current understanding that may implicate heightened scrutiny. In December 2020, the Department of Veterans Affairs, for example, indicated its intent to include race and ethnicity s a factor in determining the priority for veterans to receive COVID-19 vaccines.[125] This decision is no-doubt based upon research showing a higher COVID-19 incidence and mortality in certain racial and ethnic groups. This caused some medical experts to call for the inclusion of race in vaccine eligibility criteria.[126] But such calls have not been without controversy. Other medical experts have argued that prioritizing other, race-neutral criteria, such as pre-existing health problems, conditions and risk-factors, when combined with targeted outreach efforts to ensure greater vaccine distribution in under-served communities will adequately account for racial imbalances in the threat posed by COVID-19.[127] Whichever side of this dispute has the better of the argument, the VA's explicit use of race in the provision of medical services would trigger strict scrutiny as a race-based classification, as could the use of race by other public health related agencies.[128]

Some federal regulatory agencies have had to reevaluate the enforcement and application of existing health and safety protections in light of COVID-19.[129] In response to the pandemic,

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[125] *See* COVID-19 Vaccine Planning: Frequently Asked Questions for Veterans (12/2/20), https://content.govdelivery.com/attachments/USVHA/2020/12/08/file_attachments/1620107/3_VeteranFAQs_Chapter3_COVID-19VaccineAwareness_120220_Approved%20and%20Final.pdf.

[126] *See* Megan Twohey, *Who Gets a Vaccine First? U.S. Considers Race in Coronavirus Plans*, N.Y. TIMES, July 9, 2020 (noting consideration of prioritizing racial minorities in COVID-19 vaccine distribution).

[127] *See, e.g.*, Sally Satel, *Race for the Vaccine*, PERSUASION, Nov. 16, 2020, https://www.persuasion.community/p/race-for-the-vaccine.

[128] *See* David E. Bernstein, *Two Decades Ago, The FDA and NIH Mandated the Use of Race to Categorize Subjects and Report Results in Medical and Scientific Research They Oversee. It was a Huge Mistake*, YALE J. REG. Notice & Comment Blog, July 27, 2020, https://www.yalejreg.com/nc/two-decades-ago-the-fda-and-nih-mandated-the-use-of-race-to-categorize-subjects-and-report-results-in-medical-and-scientific-research-they-oversee-it-was-a-huge-mistake-by-david-e-bernstein/.

[129] *See, e.g.*, Charles M. Denton, Richard E. Glaze, & Ashley E. Parr , *EPA's COVID-19 Enforcement Policy under Attack in the Courts*, American Bar Association Environmental & Energy Litigation, Mar. 5, 2021, https://www.americanbar.org/groups/litigation/committees/environmental-energy/articles/2021/spring2021-epa-covid-19-enforcement-policy-under-attack-in-the-courts/.

and the need to reduce disease transmission due to potential in-person exposures, the FDA suspended in-person dispensing requirements for some medications, but not others. Among the drugs for which this in-person dispensing requirement was not suspended is mifepristone, which may be prescribed, in combination with misoprostol, to terminate an early-stage pregnancy.[130] The FDA determined the in-person dispensing requirements should remain in place for this drug. Some outside medical experts, however, disagreed this decision was necessary or appropriate to safeguard public health.

The American College of Obstetricians and Gynecologists sued the FDA, alleging that the maintenance of the in-person dispensing requirement amidst the COVID-19 pandemic would violate women's constitutional right to terminate a pregnancy.[131] In granting a preliminary injunction against the FDA's enforcement, a district court concluded that ACOG was likely to demonstrate that the maintenance of the in-person dispensing requirement would constitute an impermissible "undue burden" on a woman's right to an abortion, and that this restriction should be enjoined, the FDA's expert medical judgment notwithstanding.[132] On October 8, 2020, the Supreme Court denied a stay of the district court's injunction over the dissent of Justices Alito and Thomas.[133] A subsequent stay request was granted by the Court in January 2021.[134] Concurring in the order, Concurring in the order, Chief Justice Roberts stressed the importance of judicial deference to expert agencies, writing "courts owe significant deference to the politically accountable entities with the 'background, competence and expertise to assess public health.'"[135] Additional proceedings are ongoing.

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[130] *See* Amer. Coll. Of Obstetricians & Gynecologists v. USFDA, __ F.Supp.3d ___, 2020 WL 3960625 (D. Md. Jul. 13, 2020). Mifepristone has been approved for use, in combination with misoprostol, to perform a "medication abortion" in which a pregnancy may be terminated without any form of surgery. Mifeprestone may also prescribed to assist with the recovery from a miscarriage.

[131] Although the right to an abortion has been characterized as a fundamental right, abortion rights are governed by the "undue burden" test, a *sui generis* form of heightened scrutiny, but a form of heightened scrutiny nonetheless.

[132] *See* Amer. Coll. Of Obstetricians & Gynecologists v. FDA, __ F.Supp. __ (D. Md. 2020).

[133] *See* Food & Drug Admin. v. Amer. Coll. of Obstetricians & Gynecologists, 592 U.S. __ (2020).

[134] *See* Food & Drug Admin. v. Amer. Coll. of Obstetricians & Gynecologists, 592 U.S. __ (2021).

[135] *Id.* at __ (Roberts, C.J., concurring in the grant of application for stay).

The point of these examples is not to prejudge whether the agency policies in question in each instance are correct or can be adequately justified. In each case, the agencies have scientific rationales for the policies in question. In each case, however, were the policy to be challenged, the agency policy would have to satisfy the requirements of one form of heightened scrutiny or another. And in each case, if the principles and premises of heightened scrutiny are to be upheld, the agencies would not be able to rely upon doctrines of administrative deference, and super deference in particular, to deflect careful judicial scrutiny of the scientific conclusions upon which their respective policies are based. The reasons for placing heightened scrutiny over super deference are what this Article addresses next.

IV. SCRUTINY OVER DEFERENCE

As the preceding section shows, there are a range of instances in which agency actions may implicate various forms of heightened scrutiny, either because they rely upon suspect classifications or potentially infringe upon constitutionally protected rights. Such policies are not inherently unconstitutional. They are instead subject to a greater degree of judicial scrutiny when subject to judicial review. In practice, this means that agencies must do more in such circumstances to demonstrate that their policy measures are justified and, as this section explains, insofar as such policies are predicated on technical or scientific judgments, those judgments should be subject to heightened scrutiny as well. And subjecting such judgements to heightened scrutiny is incompatible with affording deference to such agency judgments, let alone the super deference that is commonly invoked with respect to questions of science.

There are several reasons why heightened scrutiny should trump agency deference, including super deference. First, agency deference is a consequence of legislative and judicial choice, whereas heightened scrutiny is a constitutional demand. Second, allowing agencies to evade the more demanding judicial review brought by heightened scrutiny by relying upon scientific determinations would encourage such evasion and the submersion of policy choices under a scientific façade. Third, while it may be appropriate to presume agencies are competent and able to assess matters within their expertise, there is little reason to suspect agencies will show adequate concern for constitutional matters beyond their mission or outside of their purview. And fourth, subjecting agency scientific determinations to heightened scrutiny is consistent with, and perhaps even compelled by, the constitutional fact doctrine.

A. The Constitution Constrains Legislative Choice

Judicial deference to administrative agencies is a product of legislative choice and judicial norms. The Administrative Procedure Act prescribes a limited set of procedural requirements[136] and identifies a limited set of bases upon which an agency action may be struck down.[137] By requiring judicial invalidation of those agency actions that are arbitrary or capricious, or that are based on facts not supported by substantial evidence, Congress has indicated its preference for relatively deferential and limited judicial review. Further, courts have recognized their relative lack of expertise over the subject matter about which most agency actions are concerned. Regulatory agencies have scientific and technical expertise, compounded by substantial administrative experience within the particular vineyards in which they toil. Reviewing courts are interlopers, capable of giving agencies a "hard look" to ensure relevant factors were considered and made subject to reasoned decision making, but they are not capable of improving upon the agency's judgment, nor are they generally authorized to do so.

This all makes sense, provided constitutional questions are not in play. Much as the constitution constrains legislative behavior, it must also constrain administrative behavior. Those entities created by Congress and delegated power through legislation are in no way immunized from constitutional constraints by such delegation. To the contrary, courts have at times suggested agencies should be subject to greater scrutiny than legislatures. Regardless, agencies only exercise that authority delegated to them by Congress, and such delegations are fully subject to the constitutional constraints under which Congress itself must operate.

It may well be that Congress would still prefer that agency actions retain a presumption of regularity or validity even when constitutional concerns are in play, but this does not matter. Insofar as the constitution constrains governmental action, its constraints are no less limiting on federal agencies than upon

[136] *See, e.g.*, 5 U.S.C. §553 (detailing the procedural requirements of informal rulemaking).

[137] *See* 5 U.S.C. §706.

Congress. If Congress cannot regulate in ways that constrain fundamental rights or that rely upon suspect classifications without satisfying the needs of heightened scrutiny, nor can agencies.

Congress delegates to federal agencies the authority to make discretionary policy choices when promulgating regulations and implementing various programs. In such instances, federal agencies are free to prioritize one set of values or concern over another. Where heightened scrutiny applies, however, the resolution of such trade-offs may be predetermined. A conclusion that heightened scrutiny applies effectively puts a thumb on the scales in favor of one value—protecting constitutional liberties, ensuring equal protection, etc.—over others.

B. Agency Competence and Tunnel Vision

Beyond the built-in rationale that heightened scrutiny, by its very nature is antithetical to deference (let alone, super-deference), there are reasons to suspect that agencies are less likely to consider constitutional constraints on their actions than political or other legal constraints. However well-intentioned agencies may be—indeed, perhaps due to their good intentions—agencies are likely to undervalue exogenous constitutional constraints on their ability to achieve their stated missions.[138]

Agencies are created to pursue and implement their organic visions. The FDA is focused on ensuring a safe supply of food and drugs, while the Environmental Protection Agency is focused on environmental protection and the Consumer Product Safety Commission is focused on the potential dangers posed by consumer products, and so on. Such focus facilitates the ability of agencies to achieve their mission,s but it may also produce "tunnel vision," which leads agencies to discount or ignore the consequences of their actions and the trade-offs adjacent to any policy choice.

Then-Judge Stephen Breyer explained why tunnel vision can be a problem in his book *Breaking the Vicious Circle*:

> tunnel vision, a classic administrative disease, arises when an agency so organizes or subdivides its tasks that each employee's individual conscientious performance effectively carries single-minded

[138] *See* David E. Bernstein, *Antidiscrimination Laws and the Administrative State: A Skeptic's Look at Administrative Constitutionalism*, 94 NOTRE DAME L. REV. 1381, 1400-1406 (2019)

> pursuit of a single goal too far, to the point where it brings about more harm than good.[139]

As Breyer explained, when agencies experience tunnel vision they will pursue their missions by embracing ever more stringent or severe measures, despite diminishing marginal returns and potentially past the point at which net benefits may still be obtained.[140] In the context of hazardous waste cleanups under Superfund, for example, Judge Breyer noted the EPA can be so focused on removing "the last little bit" of hazardous materials that it demands remediation past the point at which any benefits to be had can be justified by the resulting costs.[141]

Just as tunnel vision may induce agencies to ignore the consequences of otherwise desirable actions, it may blind agencies to the constitutional values with which the agency rarely has to deal. The narrow focus many agencies have may enhance their technical expertise, but it may also come at the expense of competing constitutional values that lie outside of their core mission.[142] Moreover, it is not as if agencies are disinterested when the question at hand concerns the scope of their own authority.[143]

Under the Clean Water Act, the Environmental Protection Agency and U.S. Army Corps of Engineers are entrusted with the responsibility of protecting the "waters of the United States." The "Waters" subject to their jurisdiction undoubtedly include tributaries and wetlands bound up with the nation's navigable waters. The scope of this jurisdiction is also subject to constitutional constraint. Yet throughout their administration of these responsibilities, the EPA and Army Corps have routinely failed to account the extent to which limits on federal power may constrain their jurisdiction. Their understandable focus on maximizing their ability to protect environmental values has come at the expense of their attention to

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[139] STEPHEN BREYER, BREAKING THE VICIOUS CYCLE: TOWARD EFFECTIVE RISK REGULATION 11 (1993).

[140] *Id.*

[141] *Id.*

[142] *See* Solove, *supra* note __, at 1013 ("the expert rarely factors democratic liberal values into her decisions").

[143] For the classic articulation of the public-choice claim that agencies tend to seek greater power and funding, see WILLIAM A. NISKANEN, JR., BUREAUCRACY AND REPRESENTATIVE GOVERNMENT 9, 37–38 (1971). For a more nuanced account, see Matthew C. Stephenson, *Statutory Interpretation by Agencies*, *in* RESEARCH HANDBOOK ON PUBLIC CHOICE AND PUBLIC LAW (Daniel A. Farber & Anne Joseph O'Connell eds., 2010).

constitutional constraints, and the Supreme Court has pointedly refused to defer to their interpretations of the scope of their own authority.[144] If agency myopia and self-interest preclude deference to agencies concerning the constitutional limits of their authority, they should also preclude deference to the scientific or factual judgments upon which constitutional claims ultimately rest.[145]

In some cases, agencies are simply insufficiently attuned or aware of external constraints on the pursuit of their statutorily authorized missions. In others, they are actually hostile to the suggestion that vague constitutional principles could limit their ability to fulfill their mission.[146] When FDA Chief Counsel Daniel Troy suggested his agency needed to be more attentive to First Amendment concerns, in part because the agency had been losing First Amendment challenges to its regulatory policies in court, he was met with substantial resistance from agency veterans and personnel.[147] Speech was important, to be sure, but for many in the FDA, the agency's public health missions was more so, and that should end the matter.

Just as judges may lack the technical expertise agencies enjoy within their delegated subject-matter, agencies may lack the constitutional expertise of reviewing courts, which further justifies not deferring to agency determinations that ley the predicate for actions that trigger heightened scrutiny.

C. Constraining Evasion and the Science Charade

Consideration of agency incentives reinforces the argument that any deference doctrine, super deference included, should

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[144] *See* Solid Waste Agency N. Cook County v. U.S. Army Corps of Eng'rs, 531 U.S. 159 (2001).

[145] Redish & Gohl, *supra* note __, at 315 ("Because a regulator is insufficiently disinterested concerning questions about the scope of her authority, she cannot be permitted to make the final decision on that constitutional challenge. Because she cannot decide the very issue of constitutionality, she also should be denied final authority to decide factual issues or issues of mixed law-fact that are inherently intertwined with the determination of constitutionality."); *See also* Ernest Gellhorn & Paul Verkuil, *Controlling* Chevron-*Based Delegations*, 20 CARD. L. REV. 989, 994 (1999) ("When agency self-interest is directly implicated, such as when it must decide whether an area previously unregulated by the agency should now come within its jurisdiction, the justifications for deference fade. . . . It is here that concern about agency aggrandizement is at its highest.").

[146] *See* Solove, *supra* note __, at 1013 ("The expert judgments of agencies are often contorted by political needs' they are not always the product of an impartial analysis of factual data.").

[147]

yield to heightened scrutiny. Agencies already have ample incentive to dress up policy arguments in scientific garb. Insofar as resort to scientific justifications may enable agencies to evade constitutional limitations on their authority, this will only serve to magnify the incentive for agencies to engage in the "science charade" and disguise their policy choices as scientifically determined conclusions. In this way, allowing agency scientific expertise to trump heightened scrutiny will also further serve to undermine the transparency of agency decisionmaking.

D. The Constitutional Fact Doctrine

Deference to agency scientific assessments in the context of heightened scrutiny would also appear to conflict with the constitutional fact doctrine, which provides that "courts must independently decide factual issues whose resolution will be determinative of constitutional challenges."[148] This doctrine "recognizes that the need for adjudicatory independence is at its height when a decision-maker finds facts that bear on the constitutional limits of its own regulatory authority."[149] While not applied with the consistency some for which some might hope,[150] the constitutional fact doctrine suggests that courts should not defer to agency determinations used to justify or defend policies that implicate heightened scrutiny.[151]

According to Martin Redish and William Gohl, courts should be *most* willing to enforce this doctrine when reviewing the decisions of administrative agencies.[152] Whether or not this requires *de novo* review, as the Court had suggested in *Crowell v. Benson*,[153] it would seem to preclude the degree of deference generally granted to agency scientific determinations. Although often analyzed solely with regard to adjudicative facts, as opposed to the legislative facts that may form the basis for broad

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[148] Redish & Gohl, *supra* note __, at 290.
[149] Redish & Gohl, *supra* note __, at 311.
[150] *See* Solove, *supra* note __, at 986, n241 ("this mysterious doctrine has been practiced only sporadically").
[151] *See* Redish & Gohl, *supra* note __, at 317 ("Notwithstanding some commentators' doubts about the doctrine's vitality, the Court has continued to recognize Chief Justice Hughes's insight that 'constitutional courts,' not the legislative or executive branches, must have the final say on constitutional facts.").
[152] Redish & Gohl, *supra* note __, at 292.
[153] 285 U.S. 22 (1932).

regulatory policy decisions,[154] there is no reason why these considerations should not apply with equal force when an agency has conducted a rulemaking.[155] Agency determinations of adjudicative facts may require greater procedural protections than findings of legislative facts do,[156] but neither the choice of agency process nor the facts found affect the substantive degree of constitutional scrutiny to be applied.

V. APPLICATION AND IMPLICATIONS

A. Application

A bit more can be said about how the approach in this article would be operationalized. After all, heightened scrutiny concerns constitutional judgments, while super deference concerns scientific determinations.

Agency scientific determinations are often used as the basis or justification for agency actions that implicate suspect classifications or potentially infringe upon constitutionally protected rights. In addition, agency assessments of the relevant science may be used by the agency to satisfy the requirements that heightened scrutiny imposes.

The evaluation of government action under heightened scrutiny requires attention to both means and ends. The end asserted by the government must be a sufficiently weighty and substantive interest to justify intruding into otherwise suspect space. Whereas rational basis merely requires that the governmental interest be legitimate, heightened scrutiny requires that it be "important" or "compelling." Typically this requires something like the protection of consumers, protection of public health, or national security. Mere government convenience, cost-savings, or idiosyncratic political preferences will not do.[157]

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154 *See, e.g.*, Henry P. Monaghan, *Constitutional Fact Review*, 85 COLUM. L. REV. 229, 230 (1985) (defining "constitutional facts" as "adjudicative facts decisive of constitutional claims").

155 *See* Redish & Gohl, *supra* note __, at 295 n.18 (suggesting a constitutional fact should be understood as a fact "asserts [as the] constitutional basis for the exercise of the *power* in question").

156 This is the lesson of the *Londoner-Bi-Metallic* dichotomy.

157 *See* TRIBE, *supra* note __, §16-6 at 1453 (noting heightened scrutiny entails "judicial wariness of interests such as these which can be so easily and indiscriminately be invoked, and which almost never point uniquely to a challenged political choice.").

Heightened scrutiny also requires a focus on the means adopted to pursue the state government end. Although there are different formulations depending upon the precise context, heightened scrutiny invariably requires a degree of "fit" between the end sought and the means selected, limiting the extent to which the chosen policy or classification is over or under-inclusive. It may also require some demonstration that the government lacked available alternatives to achieve its stated goal, or at least that no available alternative would be as effective.

Scientific analysis may be relevant to evaluating both the means and ends of state government policies, and if heightened scrutiny is to have meaning, it cannot be enough for an agency to offer a rote invocation of a sufficient interest. If an agency claims that public health is at stake, for example, it should be able to show the basis for that conclusion. If, for instance, the agency claims a food additive is dangerous, and therefore must be disclosed, it should have to show some modicum of evidence to substantiate that claim. Health-based pretexts, such as were used to prohibit filled milk may be acceptable when regulating unprivileged economic conduct. They should not be permissible when it comes to regulating speech or constitutionally protected rights. Similarly, if the FDA believes that a woman's mail access to mifepresterone poses a risk that could justify constraining the abortion right, it should be able to offer more than its say so, and should be able to put forward medical evidence and assessments to substantiate that claim. Once a constitutional right is recognized, extreme judicial deference should be off the table.[158]

The same scrutiny should be applied to means as are applied to ends. Here again, agencies should not be able to hide behind an invocation of their technical expertise to avoid demonstrating or justifying their choice. If the FDA claims that allowing blood or sperm donations by MSM poses health risks in the blood or sperm supplies due to the potential presence of HIV that justify limits on donation, the FDA should have to show that scientific evidence supports this conclusion, as well as that there are not viable alternatives to safeguard the nation's blood and sperm donation supplies, so as to ensure the policy is not simply the

[158] Note that the argument in this article proceeds on the assumption that the Court's constitutional jurisprudence has properly identified the contexts in which heightened scrutiny should apply. Should one conclude that, for example, commercial speech or reproductive choice should not be subject to heightened scrutiny, this would not change the underlying argument, but only the contexts in which it would apply.

result of stereotypes or prejudice. If the FDA believes more targeted risk-based measures are not viable, it should be able to explain why. If it cannot provide such an explanation, that would simply show that heightened scrutiny is serving its purpose.

If the government claims that a particular measure substantially advances the asserted interest, or is the least restrictive means of achieving that interest, here again this must be demonstrated without the benefit of deference. So, for example, the FDA cannot merely assert that graphic warning labels of a given size or design reduce the likelihood of smoking.[159] This too must be demonstrated.

An inevitable question is what degree of evidence would be enough? Does the rejection of super deference merely mean a more ordinary arbitrary & capricious or substantial evidence review? Or should judicial review of agency determinations be something more akin to *de novo*?

Under current law, if the FTC concludes that an advertiser is engaged in false, misleading, or unsubstantiated claims, it must be able to demonstrate the basis for these conclusions. At present, such conclusions are to be upheld if they satisfy "substantial evidence."[160] As defined by the Supreme Court, this requires "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion,"[161] upon consideration of the whole record and taking into account "whatever in the record fairly detracts from its weight."[162] As understood in the administrative law context, the substantial evidence test is quite deferential, and not much more stringent than typical arbitrary and capricious review, if at all. "Substantial evidence" is "something less than the weight of the evidence"[163]

Is this standard sufficiently protective? In the *POM Wonderful* case, the U.S. Court of Appeals for the D.C. Circuit

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[159] *See, e.g.*, R.J. Reynolds Co v. FDA, 696 F.3d 1205 (D.C. Cir. 2012).

[160] *See, e.g.,* POM Wonderful, LLC v. FTC, 777 F.3d 478 (D.C. Cir. 2015).

[161] Consolidate Edison v. NLRB, 305 U.S. 197, 229 (1938). It may also be understood as sufficient evidence to justify refusing to direct a verdict in the context of a jury trial. *See* NLRB v. Columbian E. & S. Co., 306 U.S> 292, 300 (1939)

[162] Universal Camera Corp. v. NLRB, 340 U.S. 474, 488 (1951). As described by Richard Pierce, the requirement is that "the evidence in support of an agency finding must be sufficient to support the conclusion of a reasonable person after considering all of the evidence in the record as a whole, not just the evidence that is consistent with the agency's finding." RICHARD J. PIERCE, JR., ADMINISTRATIVE LAW TREATISE 4th ed. §11.2 at 770 (2002).

[163] Consolo v. Federal Maritime Comm'n, 383 U.S. 607, (1966)

said it was applying substantial evidence review when evaluating the health claims POM Wonderful made about its products.[164] Yet in upholding the FTC's judgment, the court concluded that it would have upheld the FTC even if it had reviewed the claims *de novo*,[165] suggesting that the effective enforcement of prohibition on false or unsubstantiated claims is not dependent upon deferential judicial review of agency action. The FTC remains an expert agency with greater understanding of the relevant scientific information and technical literature. Requiring it to explain and defend its interpretation is unlikely to be unduly burdensome.

B. Broader Implications

The foregoing arguments raise potential implications for the applicable of *Baltimore Gas* super deference outside of those contexts in which governmental action is subject to heightened scrutiny, as well as whether courts should be deferential to scientific determinations or findings made by legislatures, as opposed to federal agencies. There are countervailing interests that should be addressed, including the nature of the burden this approach would impose on agencies. The arguments sketched above do not suggest that strong deference to agency scientific conclusions is inappropriate where the interpretations do not implicate constitutional questions, but do suggest that courts should not be particularly deferential to legislative findings concerning scientific questions where government action is subject to heightened scrutiny.

1. Ossification and other Constraints on Regulation

One obvious concern with subjecting agency scientific determinations to greater scrutiny is that this will further the ossification of the regulatory process.[166] The development and promulgation of agency rules touching on complex and contested

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164 *POM Wonderful*, 777 F.3d.

165 *Id.* at __.

166 *See generally*, Thomas O. McGarity, *Some Thoughts on "Deossifying" the Rulemaking Process*, 41 DUKE L.J. 1385 (1992). For an overview of the debate over regulatory "ossification," see Richard J. Pierce, Jr., *Rulemaking Ossification Is Real: A Response to "Testing the Ossification Hypothesis,"* 80 GEO. WASH. L. REV. 1493 (2012).

scientific matters already takes years.[167] By some accounts, existing standards of review have already "burdened, dislocated, and ultimately paralyzed" agency rulemaking, at least in some contexts.[168] Might subjecting an agency's ultimate scientific conclusions to greater scrutiny induce further conflict and delay?

Concerns about ossification are real, but perhaps overstated.[169] Nonetheless, it is possible that subjecting agency scientific determinations to less deferential review will expand the time and resources necessary for agency rulemakings. It might also induce agencies to embrace more fulsome procedures in order to justify their ultimate conclusions.[170] In the alternative, the result may simply be to make agencies more attentive to constitutional concerns and more wary of rules and orders that implicate constitutional values. In this way, less deferential review under heightened scrutiny would push agencies away from regulatory measures that infringe upon constitutionally protected rights and toward measures that do not implicate such rights. So, for example, it might induce regulatory agencies to focus less on the regulation of commercial speech, and more on the qualities and characteristics of underlying products. Or it might further incentivize agencies to consider alternative bases for regulatory measures than reliance upon constitutionally suspect classifications. This may make it more difficult to achieve some regulatory priorities, but it may also reinforce the underlying purpose heightened scrutiny is supposed to serve, of providing an extra degree of protection against governmental action in discrete areas of distinct

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[167] *See* Pierce, *supra* note __, at 1496 (noting EPA rulemaking may take six to eight years for a single rule); *see also* See also Cass R. Sunstein & Adrian Vermeule, *Interpretation and Institutions*, 101 MICH. L. REV. 885, 932 (2003) ("[Judicial] review has contributed to the 'ossification' of notice-and-comment rulemaking, which now takes years, in part as a result of the effort to fend off judicial challenges. In light of the risk of invalidation, many agencies have turned away from notice-and-comment rulemaking altogether").

[168] *See* Jerry L. Mashaw & David Harfst, *Inside the National Highway Traffic Safety Administration: Legal Determinants of Bureaucratic Organization and Performance*, 57 U. CHI. L. REV. 443, 443 (1990).

[169] *See, e.g.*, Cary Coglianese, *The Search for Slowness*, JOTWELL (Apr. 11, 2012), http://adlaw.jotwell.com/the-search-for-slowness/ (reviewing Jason Webb Yackee & Susan Webb Yackee, *Administrative Procedures and Bureaucratic Performance: Is Federal Rule-making "Ossified"?*, 20 J. PUB. ADMIN. RES. & THEORY 261 (2010)). *But see* Pierce, *supra* note __.

[170] Some would suggest such changes would, in and of themselves, be a good thing. *See* Aaron L. Nielson, *In Defense of Formal Rulemaking*, 75 OHIO ST. L.J. 237 (2014). (defending formal rulemaking).

constitutional concern.[171]

2. Super Deference without Heightened Scrutiny

If super deference to scientific conclusions is inappropriate in the context of heightened scrutiny, it is fair to ask whether super deference is appropriate at all. Indeed, some have argued, quite forcefully, that super deference represents judicial abdication and provides federal agencies with too much leeway.[172] Emily Hammond lays out the particulars of this indictment:

> Super deference is not grounded in realistic notions of agency science; it may contribute to ossification and the science charade,; and it appears to have a disparate impact on environmental law. Measured against broader administrative-law values, super deference also inhibits transparency; undermines deliberation; fails to accord with political accountability; and generally abdicates the courts' role in the constitutional scheme by encouraging outcome-oriented review.[173]

These are all reasons for Congress to reconsider the extent to which courts should defer to agency judgments about science or, in the alternative, to create structures and processes that channel the assessment and evaluation of scientific matters in helpful ways.[174]

Outside of the constitutional context, judicial review of agency action is governed by Congress. The APA and relevant judicial review provisions in other regulatory statutes authorize and define the extent to which litigants may go to court to challenge agency action. The standard of review anticipated by the text of 706 is quite deferential, and it has long been understood as such by courts and Congress alike. If this is to be changed, that is the job of the legislature, not of reviewing courts.

Professor Aaron Nielson has argued that one benefit of

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[171] It is worth reiterating here that this analysis is independent of which rights or classifications are subject to heightened scrutiny. That is, the argument and effects will correspond with whatever rights or classifications are deemed sufficiently sensitive or important to merit such treatment.

[172] *See* E. Donald Elliott, *Retiring "No Look" Judicial Review in Agecny Cases Involving Science* (Jan. 14, 2021). Available at SSRN: https://ssrn.com/abstract=3766372.

[173] Meazell, *supra* note _, at 737.

[174] The Clean Air Scientific Advisory Committee may be an example of this.

formal rulemaking is that it provides interested parties with greater opportunity to challenge an agency's assessment of the science, particularly when compared to informal rulemakings.[175] Formal rulemakings also provide greater opportunity for those who suspect an agency is shading or misrepresenting the relevant evidence to make their case, and salt the record with contrary assessments. This may all be true, but just as there is no warrant for courts abandoning super deference on their own, there is no warrant for courts to impose greater procedural requirements on agencies than Congress has opted to impose.[176]

3. *Deference to Legislative Findings*

If constitutional values should preclude super deference to agency scientific judgments where agency actions implicate fundamental rights or suspect classifications, it is not clear why the same should not be true for legislative actions. Legislatures may be the source of agency authority, but legislatures are no more free from constitutional constraint. Further, administrative agencies at least have a plausible claim to technical or other expertise on relevant subject matter. Legislators, as a general rule, have little such expertise and, at least at the federal level, the degree of specialized technical support that members of Congress receive is minimal, at best, particularly since legislative staffs were downsized and entities such as the Office of Technology Assessment were closed.

CONCLUSION

Conscious of their own institutional limitations, it is understandable why judges may tend to defer to the scientific judgments of expert administrative agencies. In the usual course, such deference may be appropriate, if even compelled under prevailing administrative law norms. Yet when constitutional values are at stake, such deference must yield to the requirements of heightened scrutiny. The very premise of such scrutiny is that government actors must be held to a higher standard, and such a standard is incompatible with the extreme form of deference—super-deference—federal courts tend to show federal agencies on scientific matters.

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[175] *See* Aaron L. Nielson, *In Defense of Formal Rulemaking*, 75 OHIO ST. L.J. 237, 239 (2014).

[176] *See* Vermont Yankee Nuclear Power Corp v. Natural Resources Defense Council, 435 U.S. 519 (1978) (as a general rule, courts may not impose procedural requirements beyond those required by Congress).

This argument does not depend upon the embrace of a particularly capacious or restrained conception of constitutional rights. It is not about what sorts of activities should receive constitutional protection or what sorts of classifications are particularly suspect. Rather, it is about the way in which courts should evaluate those agency actions that cross the constitutional boundaries that have been established. It is an argument about how courts should ensure that those rights and classifications deemed worthy of heightened scrutiny receive the degree of constitutional protection such scrutiny necessarily demands. It is, in the end, simply a call for courts to recognize that when heightened scrutiny is invoked, super-deference is not so super.