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Science, Politics, and Administrative Legitimacy

Louis J. Virelli III*

I. INTRODUCTION

Administrative agencies in the United States and other constitutional democracies around the world are continually faced with difficult questions about the legitimacy of their decisions.¹ Each of these legitimacy questions in turn raises important second-order questions about how agencies should view their role within a constitutional democracy: How closely should agency decisions reflect popular political will? When and to what degree are deviations from popular opinion justified, and what measures should be taken to reduce the gap between regulators and the governed? What other sources of information are critical to agency decision making, and how should those inputs be treated when they counsel against politically popular outcomes? This short Article seeks to direct closer attention to a particular legitimacy question and, in the process, to offer some additional areas for thought as well as some ideas on how to begin addressing that question.

The specific legitimacy question of interest here is whether an agency decision may be made for political reasons² that are at odds with the scientific inputs underlying that decision. This is not to say that political considerations should not be a primary concern of administrative actors, or that a particular decision or category of decision is substantively incorrect or outside the public interest because it does not comport with relevant scientific evidence. These statements may or may not be true, but in either event, they are not the subject of the present inquiry. This Article focuses on a more basic question

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1. According to Habermas, “[l]egitimacy means that there are good arguments for a political order’s claim to be recognized as right and just *Legitimacy means a political order’s worthiness to be recognized.*” Gerald E. Frug, *The Ideology of Bureaucracy in American Law*, 97 HARV. L. REV. 1276, 1285 (1984) (quoting JÜRGEN HABERMAS, COMMUNICATION AND THE EVOLUTION OF SOCIETY 178 (Thomas McCarthy ed. & trans., Beacon Press 1979) (1976) (emphasis in original)).

2. For purposes of this discussion, I am using the phrase “political reasons” to mean any decisions driven by an agency’s exercise of its policymaking discretion, rather than by scientific or other more objective sources of information.

about the role of scientific information in administrative law—whether agencies have a democratic obligation to incorporate scientific understanding into their policy decisions. Part II highlights the phenomenon of “counter-scientific” policy decisions; decisions that overlook otherwise uncontroverted scientific evidence in favor of political rationales. Part III introduces the principles underlying administrative legitimacy and draws a distinction between legitimacy and statutory authorization. Part IV then examines counter-scientific policy decisions in light of those legitimacy principles and identifies several variables that affect legitimacy, including the nature of the agency and its mission and the type and form of the specific policy decision at issue.

II. SOME TENSIONS BETWEEN SCIENCE AND POLITICS

Three relatively recent examples from the United States illustrate the focus of this Article. The first two involve decisions by the Environmental Protection Agency (EPA). In 2005, the EPA decided not to promulgate additional regulations regarding the weed killer Atrazine.³ Just prior to the EPA’s decision, the European Union banned Atrazine on the basis of multiple scientific studies concluding that Atrazine caused dangerous hormonal changes in test animals.⁴ Although the EPA claimed that there was uncertainty regarding Atrazine’s harmful effects, the EPA’s Scientific Advisory Panel found that the studies relied on to support Atrazine’s continued use were fundamentally flawed.⁵ The EPA, however, remained steadfast in its decision not to further regulate Atrazine due to scientific uncertainty about its effects, despite significant (and essentially uncontroverted) scientific evidence to the contrary.

A more recent EPA example involved an attempt by the agency to lower the emissions threshold for ground-level ozone.⁶ The EPA Administrator suggested decreasing the threshold because, in the agency’s view, the existing standards “were not legally defensible given the scientific evidence” provided by the EPA’s scientific advisory committee.⁷ President Obama asked the

3. See Rick Weiss, *‘Data Quality’ Law Is Nemesis of Regulation*, WASH. POST (Aug. 16, 2004), <http://www.washingtonpost.com/wp-dyn/articles/A3733-2004Aug15.html> (explaining that in the same month that the European Union banned Atrazine, “[T]he EPA decided to permit ongoing use in the United States with no new restrictions.”).

4. *Id.* (noting that the harmful effects of Atrazine “have been echoed by at least four other independent research teams in three countries.”).

5. See FIFRA SCIENTIFIC ADVISORY PANEL, SAP REPORT NO. 2003-01, POTENTIAL DEVELOPMENTAL EFFECTS OF ATRAZINE ON AMPHIBIANS 20-22 (2003), <http://www.epa.gov/scipoly/sap/meetings/2003/june/junemeetingreport.pdf>.

6. See Juliet Eilperin, *Obama Pulls Back Proposed Smog Standards in Victory for Business*, WASH. POST (Sept. 2, 2011), http://articles.washingtonpost.com/2011-09-02/national/35274851_1_ground-level-ozone-burdens-and-regulatory-uncertainty-smog-standards.

7. *Id.*

Administrator to withdraw the proposed standards not due to scientific uncertainty, but for economic reasons.⁸ In this instance, the conflict between politics and science was made explicit – rather than take issue with the credibility of the agency’s scientific conclusions, the President relied on political considerations to support his decision to block the new standards.

Finally, a recent and highly controversial decision by the United States Department of Health and Human Services (HHS) provides perhaps the most revealing example of the potential problems for administrative law when science and politics collide. In 1999, the Food and Drug Administration (FDA), a federal agency under the purview of HHS, approved the morning-after contraceptive pill “Plan B” as a prescription drug.⁹ Pursuant to an application requesting that Plan B be approved for over-the-counter (OTC) as opposed to prescription sales, an FDA scientific advisory committee voted 23-4 to approve OTC sales of Plan B in 2003.¹⁰ After several years of internal agency deliberations, including some public comment periods and a federal court decision,¹¹ the FDA approved Plan B for OTC sales to consumers seventeen years and older (and prescription sales to those younger than seventeen).¹² In 2011, the FDA received a supplemental application to remove the prescription-only status of Plan B for consumers under seventeen.¹³ The FDA’s Center for Drug Evaluation and Research reviewed the application and provided its scientific determination that Plan B is safe and effective for OTC use by “all females of child-bearing potential,” including those younger than seventeen.¹⁴ HHS Secretary Sebelius, however, rejected the FDA’s recommendation on the grounds that “the data . . . do not conclusively establish”

8. *See id.*

9. *The Emergency Contraception Website*, OFFICE OF POPULATION RES. & ASSOCIATION OF REPRODUCTIVE HEALTH PROFESSIONALS, <http://ec.princeton.edu/pills/planbhistory.html> (last updated June 14, 2012).

10. *Id.*

11. *Tummino v. Torti*, 603 F. Supp. 2d 519 (E.D.N.Y. 2009).

12. *Id.*

13. Press Release, FDA, Statement from FDA Commissioner Margaret Hamburg, M.D. on Plan B One-Step (Dec. 7, 2011), [http://www.fda.gov/NewsEvents/Newsroom/ucm282805.htm?utm_campaign=Google2&utm_source=fdaSearch&utm_medium=website&utm_term=hamburg plan b statement&utm_content=1](http://www.fda.gov/NewsEvents/Newsroom/ucm282805.htm?utm_campaign=Google2&utm_source=fdaSearch&utm_medium=website&utm_term=hamburg%20plan%20b%20statement&utm_content=1).

14. *Id.* FDA Commissioner Hamburg went on to explain that: CDER carefully considered whether younger females were able to understand how to use Plan B One-Step . . . [and] determined that the product was safe and effective in adolescent females, that adolescent females understood the product was not for routine use, and . . . would not protect them against sexually transmitted diseases. Additionally, the data supported a finding that adolescent females could use Plan B One-Step properly without the intervention of a healthcare provider.

Id.

that Plan B should be available OTC for “all girls of reproductive age.”¹⁵ The Secretary did not cite to any data inconsistent with the FDA’s conclusion, but instead simply stated that the data supporting Plan B’s safety and efficacy was inconclusive.¹⁶ The decision by HHS to override the FDA’s recommendation was unprecedented¹⁷ and reflected a decision that, although explained at least in quasi-scientific terms, reflected what President Obama later called a “common sense” decision that would be consistent with the views of “most parents.”¹⁸ In short, HHS’ decision is a clear example of politics operating at the expense of science.¹⁹

It is far easier to offer examples of what this Article calls “counter-scientific” policy decisions – decisions that overlook otherwise uncontroverted scientific evidence in favor of political rationales – than to formulate a coherent set of parameters to define them.²⁰ In some cases it may be difficult

15. Press Release, A Statement by U.S. Department of Health and Human Services Secretary Kathleen Sebelius (Dec. 7, 2011) [hereinafter Press Release, Sebelius statement], <http://www.hhs.gov/news/press/2011pres/12/20111207a.html>.

16. *See id.*

17. *See* Gardiner Harris, *White House and the F.D.A. Often at Odds*, N.Y. TIMES (Apr. 2, 2012), http://www.nytimes.com/2012/04/03/health/policy/white-house-and-fda-at-odds-on-regulatory-issues.html?_r=2&pagewanted=all (explaining that the Plan B decision by HHS was “the first time a cabinet member had ever publicly countermanded a determination by the F.D.A.”).

18. David Jackson, *Obama Defends Plan B Decision ‘As Father of Two Daughters’*, USA TODAY (Dec. 8, 2011), <http://content.usatoday.com/communities/theoval/post/2011/12/Obama-No-involvement-in-Plan-B-decision-581152/1>.

19. A District Court reviewing the Secretary’s decision came to the same conclusion. *See* Tummino v. Torti, 603 F. Supp. 2d 519 (E.D.N.Y. 2009) (finding that HHS Secretary Sebelius’ denial of a citizen petition seeking to make Plan B available OTC to females of all ages was arbitrary and capricious).

20. One reaction to these examples may be that the problem I am describing is in reality a fiction; that scientific conclusions are often not “clear” and that politics and science frequently overlap in policy matters such that a charge of vagueness is often a fair explanation for why the prevailing scientific opinion may not be followed in a given instance. While it is certainly true that science is not a panacea and often does not present binary choices, it is important to acknowledge that the presence of a scientific dispute in a particular policy area is distinguishable from a policy decision rendered in the face of overwhelming and consistent (even if ultimately flawed) scientific information. As with the Atrazine and Plan B examples, when policymakers run afoul of the scientific consensus of *their own scientists*, let alone the broader scientific community, it presents a different dilemma within administrative law than when an agency is forced to weigh competing scientific propositions. The end point is not whether the scientists are ultimately right or wrong, but whether the policymakers’ conduct comes into direct conflict with otherwise uncontroverted scientific inputs. Policymakers are often forced to make judgments in the face of competing scientific evidence, but that is a far cry from either ignoring the only credible scientific information before them or substituting their own scientific judgment for that of the recognized scientific experts.

to identify whether a particular policy decision includes an irreconcilable conflict between political and scientific justifications or just a more nuanced balancing between competing, but not necessarily mutually exclusive, considerations. There is also the problem that the best available scientific information is frequently inconclusive or subject to valid scientific counterarguments, such that it becomes virtually impossible to call any policy position truly counter-scientific. Notwithstanding these complicating factors, there remains a category of cases – characterized by the above examples – that, at minimum, reveals that direct conflicts between science and politics exist in administrative law and that such impasses are often resolved in favor of political, rather than scientific, factors. The question, then, is whether these counter-scientific cases raise issues of administrative legitimacy.

III. LEGITIMACY

Conflicts between politics and science raise a number of normative questions that have been the topic of frequent and thorough scholarly debate. A topic that has thus far been under-appreciated is the effect of such conflict on the democratic legitimacy of an agency's policy decision. For sure, many agencies are constrained by statutory requirements that they consider scientific information in certain policy areas, but the legitimacy question is of a higher order of magnitude.²¹ Because the administrative state is not explicitly provided for in the Constitution,²² administrative law is under constant pressure to justify agency rulemaking, enforcement, and adjudication in a system where all three of those powers are expressly assigned to coordinate branches of government.²³

The principles of administrative legitimacy most directly implicated in conflicts between science and politics are expertise, accountability, and efficiency.²⁴ Agency expertise is a foundational principle of administrative

21. See *infra* note 35 and accompanying text (explaining why congressional approval is not synonymous with democratic legitimacy).

22. The closest constitutional reference to administrative entities is the language about “executive Departments” in Article II: “The President . . . may require the Opinion, in writing, of the principal Officer in each of the executive Departments, upon any Subject relating to the Duties of their respective Offices” U.S. CONST. art II § 2, cl. 1.

23. See, e.g., Lisa Schultz Bressman, *Beyond Accountability: Arbitrariness and Legitimacy in the Administrative State*, 78 N.Y.U. L. REV. 461, 462 (2003) (“From the birth of the administrative state, we have struggled to describe our regulatory government as the legitimate child of a constitutional democracy. That is, we have sought to reconcile the administrative state with a constitutional structure that reserves important policy decisions for elected officials and not for appointed bureaucrats.”).

24. See, e.g., Jost Delbrück, *Exercising Public Authority Beyond the State: Transnational Democracy and/or Alternative Legitimation Strategies?*, 10 IND. J. GLOBAL LEGAL STUD. 29, 34 (2003) (“[W]e find several elements and criteria that are

law.²⁵ It reflects the often highly specific and technical mission of administrative agencies and the corresponding need for government officials with compartmentalized knowledge and experience in their delegated policymaking arena.²⁶ Agency expertise reached perhaps its legitimizing peak as part of the technocratic model of administrative law that arose during the New Deal,²⁷ yet it remains significant under other, more current models of administration (like public choice theory and civic republicanism) that depend on reliable inputs to inform the resolution of competing interests and viewpoints in policymaking.²⁸ This is especially true at the intersection of science and public policy, where the sound scientific inputs that result from expert agencies are critical to protecting the quality of the policymaking process.

Accountability, which includes as a prerequisite transparency,²⁹ is also of paramount importance for administrative legitimacy. Accountability refers to the public's ability to retain control over its government – including its administrative institutions – by judging public actors on their performance in office. In order for the public to make that judgment in the administrative

held to contribute to the legitimacy of the exercise of public authority [S]uch criteria are transparency and efficiency of government (or more broadly, public authority), and actions and accountability Finally, we may add expertise as a factor that can contribute to the acceptability of acts of public authorities.”).

25. Lawrence Lessig & Cass R. Sunstein, *The President and the Administration*, 94 COLUM. L. REV. 1, 99-100 (1994) (“To be sure, many insist on technocratic rationality This is an enduring theme in administrative law [T]he absence of expertise, or the distortion of expert judgment . . . is an important obstacle to a well-functioning system of regulatory law.”).

26. JAMES M. LANDIS, *THE ADMINISTRATIVE PROCESS* 23 (1938) (“With the rise of regulation, the need for expertness became dominant”).

27. See LANDIS, *supra*, at 26 (“With the rise of regulation, the need for expertness became dominant”); Robert L. Rabin, *Federal Regulation in Historical Perspective*, 38 STAN. L. REV. 1189, 1252 (1986) (“As in its initial phase, the New Deal continued its propensity to address particularized areas of unrest through regulation by experts”); *id.* at 1266 (“With the final legitimation of the New Deal came the acceptance of a central precept of public administration: faith in the ability of experts to develop effective solutions”).

28. See generally Steven P. Croley, *Theories of Regulation: Incorporating the Administrative Process*, 98 COLUM. L. REV. 1, 3 (1998); Mark Seidenfeld, *A Civic Republican Justification for the Bureaucratic State*, 105 HARV. L. REV. 1511, 1512 (1992).

29. See CASS R. SUNSTEIN, *AFTER THE RIGHTS REVOLUTION* 187 (1990) (“The principle of political accountability has an unmistakable foundation in Article I of the Constitution, and it is an overriding structural commitment of the document. The principle has foundations as well in assessments of institutional performance. At the same time, it operates to counteract characteristic failures in the regulatory process.”); Molly Beutz, *Functional Democracy: Responding to Failures of Accountability*, 44 HARV. INT’L L.J. 387, 428 (2003) (noting that transparency is a “precondition” to accountability, as “[t]ransparency . . . facilitate[s] accountability because citizens need information to know when to hold which leaders accountable for what decisions.”).

context, it must be privy to an agency's explanations for its exercise of authority.³⁰ Transparency is thus a precondition to accountability because it is necessary for the public to have access to the information upon which administrators base their judgments in order to monitor the conduct and competency of those administrators. Where scientific information is involved, the need for accountability and transparency is even greater, as the public and their political representatives require the relevant technical inputs in order to properly understand the agency's rationale for its policy position. Without disclosure of the scientific underpinnings of agency decisions, those decisions are largely untestable by anyone other than experts in the field, which is too narrow an audience to facilitate the robust check on agency action that accountability and transparency seek to provide.³¹

The efficiency principle acknowledges the importance of responsive, timely government.³² It is an important feature of administrative law generally and of decisions based on scientific information in particular, as scientific inputs to policy questions are often costly and aimed at addressing time-sensitive issues.³³ Scientific inputs can thus hinder the efficiency of agency policymaking. Any inefficiency, however, is often seen as overcome by the

30. Mark Fenster, *The Opacity Of Transparency*, 91 IOWA L. REV. 885, 899 (2006) ("The most significant consequences [of government transparency] flow from the public's increased ability to monitor government activity and hold officials . . . accountable for their actions."); see also *Common Cause v. Nuclear Regulatory Comm'n*, 674 F.2d 921, 928 (D.C. Cir. 1982) (Skelley Wright, J.) (describing Congress' purpose in enacting the Sunshine Act to "enhance citizen confidence in government, encourage higher quality work by government officials, stimulate well-informed public debate about government programs and policies, and promote cooperation between citizens and government. In short, it sought to make government more fully accountable to the people."). But see Edward Rubin, *The Myth of Accountability and the Anti-Administrative Impulse*, 103 MICH. L. REV. 2073 (2005) (challenging popular conceptions about political accountability).

31. See, e.g., Bressman, *supra* note 23, at 499 (describing accountability in general as "requir[ing] elected officials to make policy decisions because they are subject to the check of the people if they do not discharge their duties in a sufficiently public-regarding and otherwise rational, predictable, and fair manner"); see also Rebecca L. Brown, *Accountability, Liberty, and the Constitution*, 98 COLUM. L. REV. 531, 565-71 (1998) (same). In the administrative context, this typically involves voters expressing their dissatisfaction with elected officials who appointed or otherwise supported particular administrators or agencies.

32. Glen O. Robinson, *The Making of Administrative Policy: Another Look at Rulemaking and Adjudication and Administrative Procedure Reform*, 118 U. PA. L. REV. 485, 516 (1970) ("The goal of efficiency needs no explanation or defense. If it cannot be considered an ultimate concern of administrative law that tasks be accomplished with the minimum expenditure of time and resources, it is nevertheless a matter of large importance.").

33. See, e.g., SHEILA JASANOFF, *THE FIFTH BRANCH: SCIENCE ADVISERS AS POLICYMAKERS* 77-78 (1990).

benefits to the agency of having scientific information to support its policy determination.³⁴ Administrative law must be attentive to these concerns in order to maintain its legitimacy within a democracy.

Another potentially legitimizing force for administrative agencies is congressional approval of agency action. At first glance, statutory authorization appears to answer the legitimacy question as a matter of course, as endorsement by a democratically representative legislature offers at least some democratic pedigree. Closer examination, however, reveals that statutory authorization and democratic legitimacy are not necessarily coextensive. Assuming the factors discussed here – expertise, accountability, and efficiency – are indeed relevant to legitimacy, it is quite possible that Congress could assign certain prerogatives to agencies that the agency (as constructed by Congress) is neither expert, accountable, nor particularly efficient in pursuing. Conversely, Congress could prohibit agencies from pursuing ends for which the agency is in fact expert, accountable, and efficient. The legality of agency decisions is thus not inextricably intertwined with their legitimacy.

Existing principles of administrative law, especially those pertaining to judicial review of agency action, support the conclusion that legitimacy and congressional approval are not necessarily identical. The high degrees of judicial deference afforded to agency factual determinations, policy decisions, and interpretations of an agency's own enabling statute and regulations all point to the fact that agencies may act in areas and in ways not specifically delineated by Congress.³⁵ Unless all of these well-established gap-filling measures by agencies are illegitimate, congressional approval and democratic legitimacy cannot be precise synonyms. Finally, it is worthwhile to think of legitimacy as related to, but not entirely synonymous with, existing legislative guidelines because doing so permits a broader and more thorough theoretical view of the legitimacy of counter-scientific agency decisions.

34. Reliance on the “best available science” is becoming a critical principle of our administrative government. See Exec. Order 13563 (Jan. 18, 2011) “Our regulatory system must . . . be based on the best available science.”; see also FDA STAFF MANUAL GUIDES VOLUME VI—AGENCY PROGRAM DIRECTIVES 1 (2012), <http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/StaffManualGuides/UCM290169.pdf> (“Access to reliable scientific and technological information is central to FDA’s mission . . .”).

35. See, e.g., 5 U.S.C. § 706(a)(2) (2006) (outlining the highly deferential “arbitrary and capricious” and “substantial evidence” tests for evaluating agency fact and policy determinations); see also *Auer v. Robbins*, 519 U.S. 452, 461 (1997) (establishing standards for judicial deference to an agency’s interpretation of its own regulations); *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 844-45 (1984) (establishing standards for judicial deference to an agency’s interpretation of its enabling statute).

IV. SCIENCE, POLITICS AND LEGITIMACY

The foregoing discussion about administrative legitimacy and the potential conflicts between science and politics in agency decision making highlights the ultimate question of interest here: are counter-scientific agency decisions legitimate? One way to begin answering that question is to consider the effect of conflicts between science and politics in light of each of the animating principles of administrative legitimacy discussed above—expertise, accountability, and efficiency.

A. Expertise

Counter-scientific agency decisions have potentially serious negative consequences for agency expertise. If an agency assembles a collection of scientific information in pursuit of a policy decision and then seemingly ignores or otherwise disregards that information, any claim by the agency that it is acting as a scientific expert necessarily fails. This failure could in turn have significant consequences for the legitimacy of that agency's ultimate policy decision. At minimum, it begs the question of what entitles an unelected administrator to render binding policy decisions when he or she fails to rely on relevant information that is not only within an area of agency proficiency, but also is likely unavailable to, or beyond the comprehension of, elected officials.

There are some important variables to consider when contemplating a topic as broad as agency expertise. First, it is certainly possible that an agency offers expertise in more than one area, including in areas that are not highly technical or scientific. For instance, an administrator who acted in contravention of the best available scientific information due to his or her understanding of the national political climate or of some other competing public interests may be demonstrating a different sort of expertise that is just as legitimizing as the agency's expertise in a specific scientific discipline. This example is reflected in the EPA's recent decision not to pursue new, more restrictive ground-level ozone standards due to the difficult economic conditions in the country at the time.³⁶ Although the EPA's decision (made with the assistance of the President) was rightly controversial because it was inconsistent with clear scientific evidence supporting more restrictive standards, it is quite another matter to say that the EPA acted so far outside its area of expertise by choosing to wait to promulgate new standards as to threaten the legitimacy of that decision.³⁷

36. See *supra* notes 6-8 and accompanying text.

37. That is not to say that the EPA's decision to forego further ozone regulation for economic/political reasons was within its institutional expertise. It may well be that the EPA is not sufficiently qualified in the economic impacts of its ozone decision to legitimize that decision. The purpose of this exercise is not to establish the

Another related variable in the expertise calculus is the nature of the agency and its mission. The scope of agency expertise can be determined “objectively” by reference to the agency’s statutorily-assigned mission and responsibilities, or “subjectively” through an account of the agency’s historical practices, the agency’s perceived role, or its reputation. Agencies more likely to be thought of as properly “scientific” rather than “political,” such as NASA or perhaps the FDA, will have to carry a higher scientific burden in order to maintain the legitimacy that comes with expertise. By contrast, agencies with more fluid statutory mandates or cultural identities, like the State Department or the Department of Housing and Urban Development, will be better able to claim fidelity to their role as experts even when they make decisions that are scientifically indefensible.

The last variable worth mentioning in relation to agency expertise is the agency’s explanation of its treatment of scientific information. Independent of its effect on accountability,³⁸ the way an agency chooses to explain its departure from scientific data could also bear on agency expertise. Where an agency only explains a counter-scientific decision in scientific terms – such as when the HHS Secretary described the significant and otherwise uncontroverted scientific evidence supporting OTC sales of Plan B to all women of child-bearing age as inconclusive³⁹ – its status as an expert is badly diminished because its only claim to expertise over the subject matter is scientific, and its decision does not reflect sound scientific reasoning.

On the other hand, where an agency cites non-scientific reasons for departing from its scientific inputs, especially where the stated non-scientific reasons themselves fall within another area of agency knowledge and experience, the agency can still be seen as filling its role as an expert. This phenomenon is exemplified by the EPA’s decision to forego additional ground ozone regulations for economic or political reasons.⁴⁰ To the extent the EPA can claim that it has some responsibility to reflect publicly-accepted norms and attitudes, a decision to delay ozone restrictions until the economy could further recover is far less likely to constitute a derogation of the agency’s

legitimacy or illegitimacy of a specific administrative determination. Instead, the EPA ground ozone example is offered as a vehicle for thinking about how to evaluate administrative expertise with regard to counter-scientific decisions. It demonstrates how non-scientific explanations or motivations for such decisions may still implicate agency expertise in ways that support treating those decisions as democratically legitimate.

It is also quite possible that the EPA’s decision to forego ground ozone regulation for economic/political reasons is prohibited by statute. *See, e.g.*, 42 U.S.C. § 7408(a)(1). For reasons articulated in Part III, *supra*, the fact that agency action violates applicable statutes may render that action invalid as a matter of law, but does not necessarily mean that action is democratically illegitimate.

38. For a discussion of agency accountability and legitimacy, see *infra* Part IV.B.

39. *See* Press Release, Sebelius statement, *supra* note 15.

40. *See supra* notes 6-8 and accompanying text.

expert duties than a decision to ignore scientific data for (almost entirely unsupported) scientific reasons.

This expertise analysis admittedly raises more questions than it answers. The questions it does raise, however, are important ones that are often overlooked in evaluating controversial agency decisions involving scientific questions. Thinking of agency decisions in terms of the agencies' role as experts provides a useful framework for evaluating those decisions. Variables such as the scope of a particular agency's expertise, the nature of that agency and its role in government, and the agency's own claims as to how it is exercising its expertise all contribute to what will inevitably be case-specific evaluations of counter-scientific agency decisions.

B. Accountability

The relationship between agency accountability and counter-scientific policy decisions is far more fact-dependent than the corresponding analysis regarding expertise. There are at least three different ways in which an agency could issue a policy decision that runs counter to the prevailing scientific inputs, and each of those ways has different consequences for agency accountability.

One approach by the agency would be to simply say nothing about why its decision did not appear to acknowledge the available scientific information. Beyond the fact that this approach would likely run afoul of procedural requirements for administrative policymaking, at least in the United States,⁴¹ it would seriously hinder the public's ability to evaluate the nature and quality of the agency's decision, the very core of administrative transparency and accountability.⁴²

Another potential course by the agency would be to support its conclusion with a scientific critique of, or counterpoint to, the technical information before it. Where this approach is done convincingly, such as to highlight an area of genuine scientific uncertainty or debate, it would enhance accountability. It would provide the public with access to all of the scientific data and reasoning employed by the agency and, in turn, permit a more robust evaluation of the agency's decision. This course is the least interesting to the present discussion, however, because the availability of valid scientific counterarguments renders the agency's decision far less likely to qualify as counter-scientific.

41. This is certainly the case under the Administrative Procedure Act in the United States. See 5 U.S.C. § 553(c) (requiring new regulations to be accompanied by a "concise general statement of their basis and purpose"); *United States v. N.S. Food Prods. Corp.*, 568 F.2d 240, 252 (2d Cir. 1977) (requiring an agency to divulge scientific information relied upon by the agency in promulgating regulations).

42. See *supra* Part III (discussing the principles of transparency and accountability in administrative law).

A different outcome adheres, however, where an agency's scientific counterargument is less satisfying. For instance, HHS Secretary Sebelius' recent refusal to permit OTC sales of Plan B to all women of child-bearing age relied heavily on the position that the FDA's scientific information describing such sales as safe and effective was "inconclusive," despite the lack of any affirmative scientific evidence to that effect.⁴³ This use of scientific "reasoning" to justify a policy decision in conflict with the relevant scientific data does not enhance agency accountability, but in fact hinders it. It is far more difficult to evaluate the substantive merits of a purportedly scientific conclusion by an agency when that conclusion lacks scientific support. The public is unable to balance the competing scientific claims because only one is affirmatively supported, and any ulterior motives by the agency remain clouded by the agency's proffer of an exclusively scientific justification.

The problem of hidden agency motives arises in situations like the EPA's Atrazine example,⁴⁴ where ostensibly valid, concrete evidence is cited in support of the agency's position, but that evidence turns out to be unreliable because it comes from interested parties and is subject to significant criticism by independent scientific peer reviewers. Whereas this example does not prevent *scientific* accountability, as the public can (at least theoretically) gather all of the proffered scientific evidence and seek to reach its own conclusion about the agency's judgment,⁴⁵ it does nothing to alleviate the agency's obfuscation of its other motivations for its policy decisions, thus leading to a loss in accountability generally. In sum, the effect of a scientific counterpoint on agency accountability is heavily dependent on the quality of that counterpoint, both in terms of the amount of information provided and its scientific pedigree.

A third approach would be for an agency to provide a detailed non-scientific (e.g. political) explanation of its reason for running afoul of the relevant scientific inputs.⁴⁶ This approach – exemplified by the EPA's ground-level ozone example⁴⁷ – has some potentially significant benefits for agency accountability, as it could provide the most transparent account of the

43. Press Release, Sebelius statement, *supra* note 15.

44. See *supra* notes 3-5 and accompanying text.

45. Another important issue that is not directly implicated here is whether the public is qualified, under any circumstances, to hold agencies accountable for highly technical decisions, regardless of the amount and scope of information made available to them.

46. Disclosure by agencies of their political reasons for taking certain actions has become a widely discussed and popular approach among notable commentators like Professors Nina Mendelson and Kathryn Watts. See Nina A. Mendelson, *Disclosing "Political" Oversight of Agency Decision Making*, 108 MICH. L. REV. 1127 (2010); Kathryn A. Watts, *Proposing a Place for Politics in Arbitrary and Capricious Review*, 119 YALE L.J. 2 (2009).

47. See *supra* notes 6-8 and accompanying text.

agency's thought process and reasoning.⁴⁸ The difficulty is one of substance, rather than process. While divulging its non-scientific reasons would provide the public with a true account of the agency's deliberative process, the inherent difficulty in comparing the relative value between scientific and non-scientific justifications may do far less to assist the public in evaluating the ultimate quality of that decision. In either event, offering political reasons for a policy decision is generally a net gain to agency transparency, especially when the alternatives are either no scientific explanations or incomplete ones.

While it is of little surprise that more information tends to better promote agency accountability, a more detailed treatment of accountability in the case of counter-scientific agency decisions reveals the significance of not only the quantity but also the nature of that information for administrative legitimacy.

C. Efficiency

Efficiency is another principle of administrative legitimacy impacted by counter-scientific agency decisions. At first glance, it would appear that the time and money spent developing the relevant scientific inputs are necessarily wasted in a policymaking process that does not meaningfully consider that scientific information. This situation is represented in the Atrazine and Plan B examples above,⁴⁹ where scientific information was overlooked or disregarded on either nonexistent or fundamentally flawed scientific grounds. In these cases, counter-scientific agency decisions are by definition inefficient.

A closer look, however, shows that not all counter-scientific decisions are the products of inefficient policymaking; in some instances, the efficiency calculus may depend on some of the same variables as expertise and accountability. Counter-scientific decisions may be considered efficient, for example, where the relevant technical inputs are the subject of genuine scientific debate and the agency commits to developing data on both sides of the scientific question. In that instance, the science is not wasted but is an active and informative part of the larger policy inquiry. Counter-scientific decisions may also be efficient when the agency's reason for its counter-scientific decision is political. In that case, which is represented by the EPA's ground-level ozone decision, the relevant scientific information can be a useful backdrop for formulating the political reasons for a decision, even if they are inconsistent with that scientific data.

48. While the question would still linger as to whether a particular political reason is itself legitimate, the transparent statement of that reason would likely permit courts to address such a second-order legitimacy question through a case-by-case application of something like an arbitrariness standard. See, e.g., Mendelson, *supra* note 46, at 1171-75.

49. See *supra* notes 3-5, 9-18 and accompanying text.

This result is especially true where the agency's mission is not entirely scientific. Agencies with greater non-scientific roles or responsibilities will more likely be seen as using science efficiently even where the agency ultimately decides to pursue a counter-scientific outcome. In short, although the investment in scientific data may often be lost in a counter-scientific policy decision, there are other factors that may affect an agency's efficiency, and thus its legitimacy, in significant ways.

V. CONCLUSION

Science and politics often interact successfully in administrative law. Potential problems arise, however, when these two valuable sources of information for policymakers are at odds with one another. In cases when the two become irreconcilable, it becomes worthwhile to ask about the viability of an administrative decision that chooses to overlook or otherwise disregard relevant scientific evidence. Under what circumstances may political decisions made by unelected administrators in the face of contrary scientific data be considered illegitimate in a constitutional democracy? While the question is rather straightforward, the answer – especially one that seeks to provide a generalized formula for determining legitimacy – is, at best, elusive. For that reason, the foregoing was designed as more of an analytical exercise than a normative prescription.

Asking about legitimacy in terms of some of the concept's animating principles such as expertise, accountability, and efficiency does, however, offer some insight into the challenges posed by counter-scientific policy decisions. First, it offers an opportunity to reorganize and reevaluate those challenges in familiar terms and to more easily identify some of the critical variables in the analysis. The two most significant variables that emerge are the nature of the agency as well as the type and form of the specific policy decision at issue. Considerations of expertise and efficiency highlight the importance of an agency's statutorily assigned and publicly accepted areas of knowledge, such that the impact on both principles is, at least in part, a function of that agency's governing mission and responsibilities. Expertise and accountability stress the significance of an agency's choice and articulation of its reasons for its policy decision, and efficiency reinforces the value of thoroughness and clarity in an agency's deliberative process.

In addition to reframing counter-scientific policymaking, some very general trends may also be drawn from this exercise. Unsupported scientific explanations for counter-scientific policy decisions, for instance, appear to lead to significant expertise, accountability, and efficiency problems, whereas purely political (i.e. non-scientific) explanations for those same decisions fare better in terms of agency accountability and efficiency and no worse in their effect on expertise. When considered in light of the above variables, this insight can serve as a useful starting point in a more rigorous evaluation of

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counter-scientific agency decisions that could have powerful implications for policymaking as well as for administrative legitimacy in general.