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FACT-MAKING AND EPISTEMIC VIRTUE IN THE  
ADMINISTRATIVE STATE

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# Fact-making and Epistemic Virtue in the Administrative State

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**Abstract:** *This chapter highlights the vital importance of government fact-making for the project of reimagining administrative law. It begins with Max Weber's observation that bureaucracy depends fundamentally on knowledge production, and canvasses some of the most important examples of government fact-making, including especially regulatory science. The chapter then emphasizes three aspects of the Trump administration's ongoing effort to undermine government fact-making: deconstruction, politicization, and epistemic capture, showing how these efforts have been framed in the language of epistemic virtue and hyper-ethics as part of a longer-term strategy to direct attention to the virtues of government knowledge practices rather than the underlying problems. The chapter concludes with some proposals for structural reform as well as a discussion of how the ongoing assault on government fact-making undermines not only our ability to see and understand particular problems but also the capacity for new publics to take shape in the first place.*

**Keywords:** fact-making; knowledge production; bureaucracy; administrative law; regulatory science; epistemic virtue; hyper ethics; public problems

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## Introduction

*The public agency is the repository of the facts; you can't operate a democratic society, particularly a complex technological one, unless you have such a repository. Above all, the factual guardian must be trusted, a failure of trust courts chaos. Chaos, in turn, creates its own thirst for order, which craving in its more extreme forms threatens the very foundation of democratic freedom. So in a democracy a public agency that is not trusted, especially where the protection of public health is concerned, might as well close its doors.*

-William Ruckelshaus, *Risk in a Free Society*, Address given at Princeton University, Feb. 18, 1984, reprinted in 4 RISK ANALYSIS 157 (1984).

Fact-making is one of the most obvious and important functions of the administrative state.<sup>1</sup> From the collection and production of data and statistics of all kinds to the testing and screening of new chemicals and drugs, inspecting food, surveilling disease, monitoring economic conditions and trends, measuring environmental quality, imposing various accounting and disclosure requirements on private actors, and carrying out basic and applied research, the list is endless. Without this basic knowledge infrastructure, the government, much of our economy, and our political system itself would cease to function.

The importance of government fact-making has taken on new meaning in the wake of the second Trump administration's wide-ranging attacks on the government's capacity to gather data, produce facts, and mobilize science to inform decision making. While the motivations behind the attacks are not entirely clear, the administration does seem to recognize that fact-making is a key source of government effectiveness and legitimacy. They understand better than most the import of Max Weber's insight that bureaucratic administration operates first and foremost as a form of "domination through knowledge."<sup>2</sup> One lesson they seem to have taken from this is that one of the best ways to undermine the administrative state is to diminish and even destroy its ability to make facts and produce

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<sup>1</sup> For a recent, comprehensive overview of "agency fact-making" and an argument that it deserves more attention from administrative law scholars, see Haiyun Damon-Feng, *Agency Fact-Making*, 135 YALE L. J. 2525 (2026).

<sup>2</sup> MAX WEBER, *ECONOMY AND SOCIETY: AN OUTLINE OF INTERPRETIVE SOCIOLOGY* 225 (Roth and Wittich eds., 1978)

knowledge. All of which, of course, comports with the strong authoritarian tendencies that has animated so much of the Trump Presidency.<sup>3</sup>

Much of this was apparent and widely remarked upon during the first Trump administration. “Post truth” was the word of the year in 2016, and the administration’s expressed preference for “alternative facts” was on full display on an almost daily basis.<sup>4</sup> But the widespread and systematic efforts of the second Trump administration have taken this all to a new level. The sheer breadth and volume of activity, manifest in the execution of the Project 2025 blueprint, DOGE, the blatant politicization of independent experts and scientific advice across various government domains, the concerted effort to dismantle and destroy fact-making capabilities across the government, the intensification of long-standing efforts to articulate and police a set of highly restrictive norms and practices for regulatory science, and the cursory removal of basic facts about American history from important sites of public memory, is truly unprecedented. So too the velocity at which the Administration has proceeded, leaving critics and concerned citizens stunned at how much has happened in such a short time. Taken together, the results are truly impressive in terms of shock and awe. The long-term damage, of course, is immeasurable.

As with the first Trump administration, moreover, much of the response has traversed from indignation and disbelief to earnest appeals to maintain scientific integrity and restore a rapidly disappearing world of independent, technocratic expertise.<sup>5</sup> While such a response is obviously essential in the day-to-day work of triage, it also seems radically incomplete as a basis for understanding and confronting the Trump administration’s efforts, much less for any sort of longer term project to reimagine new forms of public administration and administrative law that are capable of organizing and sustaining a robust machinery of government fact-making.

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<sup>3</sup> Cf. HANNAH ARENDT, *THE ORIGINS OF TOTALITARIANISM* 474 (1951) (“The ideal subject of totalitarian rule is not the convinced Nazi or the convinced Communist, but people for whom the distinction between fact and fiction (i.e., the reality of experience) and the distinction between true and false (i.e., the standards of thought) no longer exist.”).

<sup>4</sup> See *Word of the Year 2016*, Oxford Languages (2016), available at: <https://languages.oup.com/word-of-the-year/2016/>. See also MICHAEL LEWIS, *THE FIFTH RISK* (2017).

<sup>5</sup> See, e.g., David Michaels and Wendy Wagner, *Fools Gold*, 388 *SCIENCE* 1245 (2025). Much of the mainstream response has called for a doubling down on the technocratic ideals of independent fact-making and scientific integrity. This was also the position that the Biden administration took in response to the first Trump administration. See *Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking*, 86 *FED. REG.* 8845 (Feb. 10, 2021); Jacob M. Carter, *Strengthen Scientific Integrity Under the Biden Administration*, 371 *SCIENCE* 668 (2021).

Put more bluntly, in the wake of the destruction wrought by the second Trump administration, we can no longer maintain the pretense that government fact-making and knowledge production can somehow proceed independently of politics. Clearly, there are degrees of political interference and influence and obviously it is important to continue to defend the everyday practices of science and fact-making from ongoing interference. But the rupture brought on by the second Trump administration also underscores the need to develop an affirmative vision and plan for government fact-making that reflects a different set of political commitments and serves the broader public interest. As this chapter argues, any project that seeks to reimagine administrative law and cultivate democratic capabilities must include more explicit attention to the structure, organization, and governance of fact-making within the federal bureaucracy as well as the substantive aims of government fact-making and knowledge production, anchoring them where possible in specific statutory commitments.

To that end, it seems important to move beyond the narrow focus on experts and expertise that has occupied so much attention over the last half century and attend to the institutional configurations and knowledge practices that constitute government fact-making and that so often determine how problems are made visible in the first place and turned into viable objects of governance.<sup>6</sup> At stake, is nothing less than the relationship between knowledge and state power and, by extension, the possibility of democratic governance.

Indeed, if problems are what stir publics into action, as John Dewey maintained, then there must be a common, trusted set of facts that can serve as a basis for deliberation and debate over the problems themselves and those which might ripen into actual matters of public concern.<sup>7</sup> This is what William Ruckelshaus was referring to when he spoke of the public agency as the guardian

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<sup>6</sup> While the role of “experts” in public discourse is hardly going away, it is worth recognizing that much of government fact-making and knowledge production long ago moved away from expert judgement to various forms of what might be called expert systems—models, routines, and quantitative techniques for collecting and making facts—what Theodore Porter called technologies of distance. See THEODORE PORTER, *TRUST IN NUMBERS: THE PURSUIT OF OBJECTIVITY IN SCIENCE AND PUBLIC LIFE* ix (1995). In place of an older tradition of delegating responsibility to the judgment of experts, since at least the 1970s much of government has moved decisively toward what Theodore Lowi referred to as “delegation to formula.” Examples include cost-benefit analysis, quantitative risk assessment, and the construction of various economic indicators such as price indexes or the unemployment rate. See Theodore J. Lowi, *The State in Political Science: How We Become What We Study*, 86 AM. POL. SCI. REV. 1, 5 (1992) (“The rise of economics as the language of the state parallels the decline of Congress as a creative legislature. . . . Policymaking powers are delegated less to the agency and more to the decisionmaking formulas residing in the agency.”).

<sup>7</sup> See JOHN DEWEY, *THE PUBLIC AND ITS PROBLEMS* (1927). Dewey, of course, was well aware of the distance (often vast) between facts and the meaning of the facts and the challenges this posed for identifying and agreeing upon shared problems.

and repository of the facts.<sup>8</sup> Without a common set of facts, without a basic commitment to facticity, there is no hope of even identifying the common problems that need attention, much less any possibility of crafting solutions. The alternative, as Ruckelshaus maintained, is chaos.<sup>9</sup>

Needless to say, all of this takes on additional urgency in a world where large language models and algorithms are devouring the very possibility of a shared social intelligence that can support an informed and deliberative approach to the exercise of collective human judgment. Here the Trump administration's close alignment with Silicon Valley elites and, specifically, with the proponents of the massive, ongoing, unregulated expansion of artificial intelligence further underscores the stakes involved. If "all governance is data governance," as Salomé Viljoen argues, we need to pay special attention to how the basic infrastructures of fact-making and knowledge production in the administrative state are being altered and even subsumed by a new regime of data governance that seems far less inclined toward the promotion of democratic capabilities.<sup>10</sup>

This chapter investigates the essential role of fact-making in the administrative state and elaborates on some of the ways that this crucial capacity can be made more resilient. It takes the second Trump administration's various attacks on government fact-making as a point of departure, but it speaks to a broader set of issues and concerns that transcend any particular administration. The goal is to make visible the many important modes of government fact-making, to center these within our understanding of the administrative state, and to sketch out some possibilities for elaboration and reform.

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<sup>8</sup> William Ruckelshaus, *Risk in a Free Society*, Address given at Princeton University, Feb. 18, 1984, reprinted in 4 RISK ANALYSIS 157 (1984). Ruckelshaus, who had served as EPA's first administrator, gave this speech shortly after returning to the EPA to repair an agency that had been badly damaged during the tenure President Reagan's first EPA Administrator, Ann Gorsuch.

<sup>9</sup> *Id.*

<sup>10</sup> Salomé Viljoen, *The Right Understands that All Governance is Data Governance*, LPE Blog (May 12, 2025), available at: <https://lpeproject.org/blog/the-right-understands-that-all-governance-is-data-governance/>. See also JULIE COHEN, BETWEEN TRUTH AND POWER: THE LEGAL CONSTRUCTIONS OF INFORMATIONAL CAPITALISM (2019). The Trump Administration has already taken several steps in this direction, including with its new "Genesis Mission," which it describes as "a dedicated, coordinated national effort to . . . build an integrated AI platform to harness Federal scientific datasets—the world's largest collection of such datasets, developed over decades of Federal investments—to train scientific foundation models and create AI agents to test new hypotheses, automate research workflows, and accelerate scientific breakthroughs." The Executive Order launching the Genesis Mission designates the Secretary of Energy and other political appointees as key decision-makers over the new AI-driven data platform. See Launching the Genesis Mission, Exec. Order No. 14,363, 90 Fed. Reg. 88,215 (Nov. 28, 2025); David Shepardson, *Trump Aims to Boost AI Innovation, Build Platform to Harness Government Data*, REUTERS (Nov. 25, 2025), <https://www.reuters.com/business/trump-aims-boost-ai-innovation-build-platform-harness-government-data-2025-11-24>.

To that end, one of the concerns that motivates the chapter is that too much of the discussion about how to respond to the Trump Administration's efforts (in both the first and second administrations) has operated on the terrain of ethics rather than politics and political economy. Too much attention, in other words, has been dedicated to battles over scientific integrity and epistemic virtue, rather than the facts themselves and the problems they illuminate.<sup>11</sup> Much of this can be seen as an extension of longstanding industry tactics to claim the mantle of "sound science" or what the Trump Administration now refers to as "gold standard science." By provoking opponents into a full-throated defense of scientific integrity and epistemic virtue, the administration and its allies work to keep the public debate focused on who speaks for science and what "sound science" or "gold standard science" actually means. The near constant refrain of the need to "follow the science" and defer to the scientific community implies that if we can somehow insulate science and fact-making from politics, trust in government will return; that if government officials simply follow the facts and the science they will produce good decisions that will resonate with the public and restore our faith in government. If only it were that easy.<sup>12</sup>

This Essay argues that it is time to recognize that government fact-making and regulatory science have always been in service to particular policy choices and thus have always been a terrain of contest and struggle. This does not mean that the results from various fact-making exercises and regulatory science are not objective or reliable. Objectivity is not the same as value neutrality.<sup>13</sup> Nor does it mean that we should not defend and protect the independence of fact-making and scientific research within the government and beyond. But it does mean that we

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<sup>11</sup> Although the term epistemic virtue comes from the field of virtue epistemology, this Essay uses the term in the way historians of science Lorraine Daston and Peter Galison use it in their history of the epistemic virtue of objectivity. See LORRAINE DASTON AND PETER GALISON, OBJECTIVITY 40-41 (2007) ("Epistemic virtues are virtues properly so-called: they are norms that are internalized and enforced by appeal to ethical values, as well as to pragmatic efficacy in securing knowledge. . . . New epistemic virtues come into being; old ones do not necessarily pass away. Science is fertile in new ways of knowing and also productive of new norms of knowledge. Just as the methods of experiment or statistical inference, once invented and established, survive the various demise of various scientific theories, so epistemic virtues, once entrenched, seem to endure—albeit to differing degrees in differing disciplines.").

<sup>12</sup> For a discussion of this dynamic in the context of risk assessment, see William Boyd, *De-Risking Environmental Law*, 48 HARV. ENVTL L. REV. 153 (2024); William Boyd, *With Regard for Persons*, 86 LAW & CONTEMP. PROBS 101 (2023).

<sup>13</sup> See ROBERT N. PROCTOR, VALUE-FREE SCIENCE? PURITY AND POWER IN MODERN KNOWLEDGE 10 (1991) ("[N]eutrality and objectivity are not the same thing. Neutrality refers to whether a science takes a stand; objectivity to whether a science merits certain claims to reliability. The two need not have anything to do with each other. Certain sciences may be completely 'objective'—that is, valid—and yet be designed to serve certain political interests. . . . In general, knowledge is no less objective (that is, true or reliable) for being in the service of interests. This has been a stumbling block for much social theory of science.").

need to take care to recognize that what are often framed as questions of epistemic virtue are in fact political questions about what kind of fact-making is done (and not done) and whose interests it serves.

### **Fact-making in the Administrative State**

Max Weber's famous observation that "bureaucratic administration means fundamentally domination through knowledge" provides a useful starting point for an investigation of government fact-making.<sup>14</sup> For Weber, of course, bureaucracy was a form of legitimate domination.<sup>15</sup> In his view, the central feature of bureaucracy that made it technically superior to other forms of organization and allowed it to exercise control over vast segments of human affairs lay in its internal and external forms of knowledge.<sup>16</sup> By tying together domination and knowledge, Weber provides an important lead to follow as we seek to elaborate new forms of administration and governance that can promote democratic capabilities, while also attending to his warnings regarding the immense power inherent in bureaucratic modes of knowledge production and their soul crushing capacity.

In his actual writing on the role of knowledge in bureaucracy, Weber was characteristically bland and brief, contrasting the technical knowledge for which bureaucracies are known with other less formal, more tacit forms of knowledge that allow officials and others to exercise influence within bureaucracies.<sup>17</sup> Both are central to his notion of bureaucracy as a form of domination and both underwrite and are reinforced by the common bureaucratic elements of technical training and expertise, hierarchical organization, delimited spheres of substantive competence, extensive documentation, and files (the files!).<sup>18</sup>

But Weber's brief reflections on the centrality of knowledge to bureaucracy are worth recovering and elaborating. In short, Weber's insight serves to underscore that knowledge provides not only the means by which bureaucratic power is exercised but also the basis for its legitimacy. Much of this legitimacy in turn depends on trust in the knowledge that the bureaucracy produces. And much of that knowledge takes the form of government produced facts.

The vast social science literature on bureaucracy that has followed Weber has tended to emphasize formal organization, rule-governed conduct, information

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<sup>14</sup> See Weber, *supra* note 2 at 225.

<sup>15</sup> See Weber, *supra* note 2, at 223–26 (discussing "monocratic bureaucracy" as a form of legitimate domination).

<sup>16</sup> *Id.* at 225.

<sup>17</sup> See *id.* at 225 (discussing different forms of knowledge).

<sup>18</sup> *Id.*; See also REGINA F. TITUNIK, *Democracy, Domination, and Legitimacy in Max Weber's Political Thought*, in MAX WEBER'S ECONOMY AND SOCIETY: A CRITICAL COMPANION, 143, 150 (2005).

processing, and technical expertise, adopting Weber’s instrumental view of knowledge without much attention to the actual practices of knowledge production that take place in different kinds of bureaucracies (or in different parts of the bureaucracy).<sup>19</sup> Likewise, the mountain of legal scholarship on the administrative state has focused, for obvious and good reasons, on agency discretion, principal-agent problems, and questions of judicial review and accountability (among others).<sup>20</sup> But to a large extent, the collective enterprise of knowledge production that is at the heart of modern bureaucracy gets sidelined in much of administrative law scholarship and is for the most part subordinated in discussions of the problems of the regulatory state. In short, as I have argued previously, “administrative law’s traditional focus on reason giving has not been matched with sufficient attention to the regulatory state’s substantial role in fact-making.”<sup>21</sup>

That said, and as elaborated in previous work, it would not be too much of a leap to describe much of administrative law as a field concerned fundamentally with the integrity of agency knowledge practices—a set of procedures for evaluating and ensuring that knowledge production runs along certain well-defined grooves.<sup>22</sup> Indeed, the principal virtues of modern American administrative law—transparency, participation, accountability—all reflect a commitment to sound knowledge as a basis for legitimacy.<sup>23</sup> Leading figures in the field have long recognized this. Jerry Mashaw, for example, references Weber’s observation about knowledge and bureaucracy in an early article and describes bureaucratic rationality primarily in terms of information processing, making quick recourse to

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<sup>19</sup> See, e.g., JAMES Q. WILSON, *BUREAUCRACY: WHAT GOVERNMENT AGENCIES DO AND WHY THEY DO IT* xvii–xix (1989); DWIGHT WALDO, *THE ADMINISTRATIVE STATE: A STUDY OF THE POLITICAL THEORY OF AMERICAN PUBLIC ADMINISTRATION* 47 (1948).

<sup>20</sup> On agency discretion, see, e.g., Martin Shapiro, *Administrative Discretion: The Next Stage*, 92 YALE L.J. 1487 (1983); KENNETH CULP DAVIS, *DISCRETIONARY JUSTICE: A PRELIMINARY INQUIRY* (1969). On principal-agent models of administrative law, see, e.g., J.R. DeShazo & Jody Freeman, *The Congressional Competition to Control Delegated Power*, 81 TEX. L. REV. 1443 (2003); Elena Kagan, *Presidential Administration*, 114 HARV. L. REV. 2245 (2001); Thomas H. Hammond & Jack H. Knott, *Who Controls the Bureaucracy?: Presidential Power, Congressional Dominance, Legal Constraints, and Bureaucratic Autonomy in a Model of Multi-Institutional Policy-Making*, 12 J.L. ECON. & ORG. 119 (1996). On accountability, see, e.g., Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1667 (1975); Lisa Schultz Bressman, *Beyond Accountability: Arbitrariness and Legitimacy in the Administrative State*, 78 N.Y.U. L. REV. 461 (2003).

<sup>21</sup> See Boyd, *De-Risking Environmental Law*, *supra* note 12 at 166. See also Damon-Feng, *supra* note 1. Dan Walters has also written recently about the need to attend how the government communicates facts and other information, what he refers to as “communicative administration.” See Daniel E. Walters, *Communicative Administration: The Administrative State Beyond Legal Administration*, 78 STAN. L. REV. 1339 (2026).

<sup>22</sup> See Boyd, *De-Risking Environmental Law*, *supra* note 12 at 166–68.

<sup>23</sup> *Id.* The practices of “internal administrative law” also clearly implicate agency knowledge practices at multiple levels. See Gillian E. Metzger & Kevin M. Stack, *Internal Administrative Law*, 115 MICH. L. REV. 1239 (2017).

rules of conduct, formal organization, and judicial review.<sup>24</sup> Adrian Vermeule has written about “local and global knowledge in the administrative state,” with particular attention to the challenges of centralization and epistemic coordination in the vast, unwieldy American bureaucracy.<sup>25</sup> Cass Sunstein has also emphasized the “knowledge problem” confronting regulation and, specifically, the exercise of cost-benefit analysis, arguing for a more open and more public notice-and-comment process as a corrective to the knowledge limitations that inevitably affect technocrats trying to understand the consequences of particular rules.<sup>26</sup> Drawing on John Dewey, Charles Sabel and his various co-authors have identified and elaborated the key features of an iterative, experimentalist form of governance that can engage in adaptive problem solving in the face of deep and pervasive uncertainty confronting regulators.<sup>27</sup> Recent efforts to recover earlier Progressive era conceptions of the administrative state by scholars such as Blake Emerson and Sabeel Rahman have stressed the importance of building deliberation and participation into the DNA of regulatory agencies, embracing a Deweyan faith that experts can make the technical knowledge that informs government decisions clear to the public and that the public will engage in a sustained manner.<sup>28</sup> And longstanding calls to focus on the actual practice of public administration have also received new life in more recent efforts to reimagine administrative law as the law of public administration with a focus on administrative competence.<sup>29</sup>

Within environmental law, to take a specific regulatory domain as an example, considerable attention has been directed to the use and abuse of science at EPA, to the normative shortcomings of various decision-making tools, and to the

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<sup>24</sup> See Jerry L. Mashaw, *Conflict and Compromise Among Models of Administrative Justice*, 1981 DUKE L.J. 181, 185 (1981). In their article on automobile safety and administrative law, Mashaw and David Harfst similarly invoke Weber’s insight, noting that “[j]udicial review of the rationality of administrative rules operates on the Weberian maxim ‘Bureaucratic administration means fundamentally domination through knowledge.’” Jerry L. Mashaw & David L. Harfst, *Regulation and Legal Culture: The Case of Motor Vehicle Safety*, 4 YALE J. REG. 257, 292 (1987).

<sup>25</sup> See Adrian Vermeule, *Local and Global Knowledge in the Administrative State*, in LAW, LIBERTY AND STATE: OAKESHOTT, HAYEK AND SCHMITT ON THE RULE OF LAW 24 (Dyzenhaus & Poole eds., 2015).

<sup>26</sup> See CASS R. SUNSTEIN, *THE COST-BENEFIT REVOLUTION* 79 (2018).

<sup>27</sup> See, e.g., Jeremy Kessler & Charles F. Sabel, *The Uncertain Future of Administrative Law*, 150 DAEDALUS 188, 191 (2021); Charles F. Sabel & William H. Simon, *Minimalism and Experimentalism in the Administrative State*, 100 Geo. L.J. 53, 55, 79 (2011); Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 COLUM. L. REV. 267, 267 (1998).

<sup>28</sup> See, e.g., BLAKE EMERSON, *THE PUBLIC’S LAW: ORIGINS AND ARCHITECTURE OF PROGRESSIVE DEMOCRACY* 168–80 (2019); K. SABEL RAHMAN, *DEMOCRACY AGAINST DOMINATION* (2017); JOHN DEWEY, *THE PUBLIC AND ITS PROBLEMS* 208–09 (1927).

<sup>29</sup> See ELIZABETH FISHER & SIDNEY A. SHAPIRO, *ADMINISTRATIVE COMPETENCE: REIMAGINING ADMINISTRATIVE LAW* (2020). See also EDWARD L. RUBIN, *BEYOND CAMELOT: RETHINKING POLITICS AND LAW FOR THE MODERN STATE* 57 (2005) (calling for more “microanalysis of existing practices and problems” within the administrative state).

perverse incentives that administrative law creates for agencies seeking to regulate in areas marked by irreducible uncertainty.<sup>30</sup> Important debates over the proper role of precaution in environmental law have also often focused on the epistemic limits of various forms of technocratic decision-making and the inadequacies of welfare economics as a baseline for the field.<sup>31</sup> And, of course, there is a rich literature debating the merits of cost-benefit analysis.<sup>32</sup> All of this work raises important (even fundamental) questions regarding the appropriate relationship between knowledge and bureaucracy.

Fact-making, needless to say, has always been a key tool of government.<sup>33</sup> The word “statistics,” as historians have pointed out, was first used in eighteenth-century Germany to describe a new “science of the state.”<sup>34</sup> As Michel Foucault and James Scott have demonstrated, the collection and generation of statistics about populations have been foundational for state projects of legibility and simplification.<sup>35</sup> Ian Hacking has written similarly about “the avalanche of printed numbers” and the rise of statistical reasoning during the 19<sup>th</sup> century that had far

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<sup>30</sup> See, e.g., THOMAS O. MCGARITY & WENDY E. WAGNER, BENDING SCIENCE: HOW SPECIAL INTERESTS CORRUPT PUBLIC HEALTH RESEARCH 2–7 (2015); Wendy E. Wagner & Rena Steinzor, *Introduction: Principled Science, in RESCUING SCIENCE FROM POLITICS: REGULATION AND THE DISTORTION OF SCIENTIFIC RESEARCH* (Wendy E. Wagner & Rena Steinzor eds., 2006); Howard Latin, *Good Science, Bad Regulation, and Toxic Risk Assessment*, 5 YALE J. ON REG. 89, 142 (1988); Marcia R. Gelpe & A. Dan Tarlock, *The Uses of Scientific Information in Environmental Decisionmaking*, 48 S. CAL. L. REV. 371 (1974).

<sup>31</sup> See DOUGLAS A. KYSAR, REGULATING FROM NOWHERE: ENVIRONMENTAL LAW AND THE SEARCH FOR OBJECTIVITY (2010); Sheila Jasanoff, *Technologies of Humility: Citizen Participation in Governing Science*, 41 MINERVA 223 (2003). See also William Boyd et al., *Law, Environment, and the Non-Dismal Social Sciences*, 8 ANN. REV. L. & SOC. SCI. 183, 184 (2012).

<sup>32</sup> See, e.g., CASS R. SUNSTEIN, THE COST-BENEFIT STATE: THE FUTURE OF REGULATORY PROTECTION (2002); CASS R. SUNSTEIN, THE COST-BENEFIT REVOLUTION (2019); RICHARD L. REVESZ & MICHAEL A. LIVERMORE, RETAKING RATIONALITY: HOW COST-BENEFIT ANALYSIS CAN BETTER PROTECT THE ENVIRONMENT AND OUR HEALTH (2008); Kysar, *supra* note \_\_; FRANK ACKERMAN & LISA HEINZERLING, PRICELESS: ON KNOWING THE PRICE OF EVERYTHING AND THE VALUE OF NOTHING 35 (2004).

<sup>33</sup> ALAIN DESROSIERES, THE POLITICS OF LARGE NUMBERS: A HISTORY OF STATISTICAL REASONING (1998); Porter, Trust in Numbers. Weber himself was writing at the beginning of the Weimar Republic, which saw very significant growth in the use of statistics as a mode of governance. See J. ADAM TOOZE, STATISTICS AND THE GERMAN STATE, 1900-1945: THE MAKING OF MODERN ECONOMY KNOWLEDGE (2001).

<sup>34</sup> Desrosieres, *supra* note 33 at 179.

<sup>35</sup> See JAMES C. SCOTT, SEEING LIKE A STATE: HOW CERTAIN SCHEMES TO IMPROVE THE HUMAN CONDITION HAVE FAILED 80-81 (1998) (discussing the specific characteristics of fact-making entailed by state simplifications). Foucault’s concepts of biopolitics and governmentality depended upon increasingly elaborate mechanisms of collecting, classifying, and coding data on populations during the 18<sup>th</sup> and 19<sup>th</sup> centuries. See, e.g., MICHEL FOUCAULT, THE BIRTH OF BIOPOLITICS: LECTURES AT THE COLLEGE DE FRANCE, 1978-1979 at 317 (Burchell trans., 2008). Michel Foucault, *Governmentality*, in THE FOUCAULT EFFECT: STUDIES IN GOVERNMENTALITY 98-99 (Burchell et al. eds., 1991) (discussing rise of a new technology of government starting in the 18<sup>th</sup> century centered on the population as a problem of government with statistics operating as “one of the major technical factors of this new technology”).

reaching effects on the conduct of government and the nature of bureaucracy.<sup>36</sup> These practices altered not only the governance of populations but also the very ways in which people came to understand themselves and the societies in which they lived.<sup>37</sup>

There is of course a long history here as well of the development and deployment of these very same government fact-making capabilities to surveil, discipline, and coerce various populations, as Foucault, Scott, and others have emphasized.<sup>38</sup> The use of various taxonomies to organize and format data on different groups and sort them into different categories is often a *sine qua non* of social control.<sup>39</sup> Taxonomies, in this sense, do an immense amount of social work.<sup>40</sup>

While it is beyond the scope of this chapter, it is also important to recognize that there is also a whole shadow world of non-public facts and fact-making capabilities that have long circulated as “official secrets” and classified information at the very highest levels of government.<sup>41</sup> Needless to say, this is an area that we ignore at our peril and one that takes on additional urgency in the face of deepening collaboration between Silicon Valley, the military, and the national security state.

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<sup>36</sup> See, e.g., IAN HACKING, *THE TAMING OF CHANCE* 2-3 (1990). See also IAN HACKING, *HISTORICAL ONTOLOGY* 81 (2002) (“Great webs of bureaucracy evolve endless ways to count and classify people. Birth, death, sickness, suicide, fertility: these inaugurate the modern era, the era of statistical data. There is an avalanche of printed numbers early in the nineteenth century. It occurs not because people can count better but because new kinds of facts about populations are taken to be the things to find out.”).

<sup>37</sup> Hacking, *Taming of Chance*, *supra* note 36 at 3 (“There is a sense in which many of the facts presented by the bureaucracies did not even exist ahead of time. Categories had to be invented into which people could conveniently fall in order to be counted. The systematic collection of data about people has affected not only the ways in which we conceive of a society, but also the ways in which we describe our neighbour. It has profoundly transformed what we choose to do, who we try to be, and what we think of ourselves.”).

<sup>38</sup> See Scott, *supra* note 35 at 81-82 (claiming that “the modern state, through its officials, attempts with varying success to create a terrain and a population with precisely those standardized characteristics that will be easiest to monitor, count, assess, and manage. The utopian, immanent, and continually frustrated goal of the modern state is to reduce the chaotic, disorderly, constantly changing social reality beneath it to something more closely resembling the administrative grid of its observations.”).

<sup>39</sup> See GEOFFREY C. BOWKER AND SUSAN LEIGH STARR, *SORTING THINGS OUT: CLASSIFICATION AND ITS CONSEQUENCES* (1999).

<sup>40</sup> See Ian Hacking, *Biopower and the Avalanche of Printed Numbers*, 5 *HUMANITIES IN SOCIETY* 279, 280 (1982) (“Counting is hungry for categories. Many of the categories we now use to describe people are byproducts of the needs of enumeration.”).

<sup>41</sup> Peter Galison points out that the amount of material here vastly exceeds that which is in the public domain. See Peter Galison, *Removing Knowledge: The Logic of Modern Censorship*, in *AGNOTOLOGY: THE MAKING AND UNMAKING OF IGNORANCE* 37-38 (Robert N. Proctor and Londa Schiebinger eds., 2008) (observing that the “classified universe” of information is probably much larger than the unclassified one). See also Weber, *supra* note 2 at 225 (discussing the importance of “official secrets” as a particular form of knowledge that is central to bureaucratic administration).

This chapter focuses instead on the more mundane world of public-facing government fact-making in the United States—what Haiyun Damon-Feng calls “agency fact-making.”<sup>42</sup> There is a long history here as well, stretching back to the very founding of the Republic, marked most obviously by the Constitution’s provision for a decennial census—a regular exercise in fact-making that provides the foundation for apportionment of congressional seats, taxation, and electoral votes and one that included at its inception the infamous and dehumanizing three-fifths compromise that counted enslaved people as only three-fifths of a person.<sup>43</sup>

In addition to the population census, the Department of Commerce and the Bureau of the Census have long collected all manner of official statistics on various aspects of American society and the American economy. The first U.S. census of manufacturers was carried out in 1810 and has provided an invaluable tool for understanding basic trends and conditions in the U.S. economy ever since.<sup>44</sup>

During the latter 19<sup>th</sup> century, the U.S. Geological Survey was established to assess and map the lands and resources of the western United States and make them legible for the expanding American empire—an undertaking that served to facilitate various projects of dispossession and violence against native peoples. John Wesley Powell, who served as the second director of the USGS from 1881 to 1894, viewed this mapping effort as among the most important functions of Government. “A Government cannot do any scientific work of more value to the people at large,” Powell famously remarked, “than by causing the construction of proper topographic maps of the country.”<sup>45</sup>

By the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, various government departments and agencies initiated new research programs to support an expanding regulatory state—much of which reflected a growing commitment to expertise. In 1889, Congress established the predecessor of the US Public Health Service, with the express aim of training professional who would, among other things, conduct

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<sup>42</sup> Damon-Feng, *supra* note 1.

<sup>43</sup> U.S. CONST. art. I, § 2, cl. 3 (“Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other persons. The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct.”). See also Naomi Mezey, *Erasure and Recognition: The Census, Race, and the National Imagination*, 97 NORTHWESTERN UNIV. L. REV. 1730 (2003).

<sup>44</sup> See, e.g., Meyer H. Fishbein, Nat’l Archives & Recs. Serv., Reference Information Paper No. 50, *The Censuses of Manufactures, 1810–1890* (1973).

<sup>45</sup> Hearing Before the Joint Comm’n to Consider the Present Org. of the Signal Serv., Geol. Surv., Coast & Geodetic Surv., & Hydrographic Off., 48th Cong. 170 (1884) (statement of John Wesley Powell, Director, U.S. Geological Survey).

research on various diseases and their control.<sup>46</sup> In 1902, it expanded the mission to include surveillance and research on various infectious diseases as well as sanitation, water supply, and sewage disposals.<sup>47</sup> Investigations of food additives by the USDA Bureau of Chemistry led to passage of the Pure Food and Drug Act of 1906.<sup>48</sup> The early work of the Interstate Commerce Commission and the Federal Power Commission in developing standard approaches to accounting and rate making depended upon various fact-finding hearings and investigations.<sup>49</sup> And, of course, the bureau of labor, which became the Department of Labor in 1913 supported various investigations to better understand working conditions and workplace accidents across multiple industries.<sup>50</sup>

But all of this was mere prelude to the rise of the modern administrative state during the middle decades of the 20<sup>th</sup> century, which called forth an explosion of government fact-making by a host of new agencies operating across vast domains of social and economic life. In addition to the collection, processing, and classification of large quantities of data on conditions and trends across American society, the government developed new tools and techniques for surveying, testing, monitoring, inspecting, modeling, forecasting, and researching a huge range of “new” social, economic, political, and environmental problems. Substantial new government bureaucracies arose on the basis of an unprecedented investment in these “technical” forms of knowledge that Weber saw as fundamental to bureaucratic administration.

Today, of course, the contemporary regulatory state depends on a truly massive apparatus of fact-making and knowledge production. This is particularly true in science-based fields such as health, safety and environmental law. But it is also true in the administration of government entitlement programs, in economic regulation and economic policy, in disaster response and recovery, and so on. From business surveys to disease surveillance to remote sensing by NASA space satellites, the sheer scope of government fact-making is awe inspiring.

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<sup>46</sup> See FITZHUGH MULLAN, *PLAGUES AND POLITICS: THE STORY OF THE UNITED STATES PUBLIC HEALTH SERVICE* (1989); JOHN DUFFY, *THE SANITARIANS: A HISTORY OF AMERICAN PUBLIC HEALTH* (1990).

<sup>47</sup> See Mullan, *supra* note 46. See also ELIZABETH W. ETHERIDGE, *SENTINEL FOR HEALTH: A HISTORY OF THE CENTERS FOR DISEASE CONTROL* (1992).

<sup>48</sup> See *Pure Food and Drug Act*, ch. 3915, 34 Stat. 768 (1906) (repealed 1938); OSCAR E. ANDERSON, JR., *THE HEALTH OF A NATION: HARVEY W. WILEY AND THE FIGHT FOR PURE FOOD* (1958).

<sup>49</sup> See I.L. SHARFMAN, *THE INTERSTATE COMMERCE COMMISSION: A STUDY IN ADMINISTRATIVE LAW AND PROCEDURE* (1969); Robert L. Hale, *Commissions, Rates, and Policies*, 53 HARV. L. REV. 1103 (1940).

<sup>50</sup> See, e.g., Bureau of Lab. Stat., U.S. Dep’t of Lab., Bull. No. 157, *Industrial Accident Statistics* (1915).

And, yet, we have no comprehensive inventory of government fact-making—a reflection perhaps of the simple fact that we have long taken the government’s fundamental role in fact-making for granted. One important task going forward, therefore, is to develop a working taxonomy of government fact-making—that is, to make legible the various ways that the government pursues its own projects of legibility. As a rough first approximation, such a taxonomy might include the following categories: (1) censuses, surveys, and assessments; (2) monitoring conditions and trends; (3) testing and screening; (4) compliance monitoring and investigations; (5) basic and applied research; (6) formatting of private sector reporting and disclosure; (7) history and public memory. In many of these areas, moreover, the government and its partners have played an important role not only in producing facts but also in developing new methods, techniques, and instruments for collecting and making facts of all kinds. Finally, one might also include in such a taxonomy the ways that the U.S. government has developed a set of institutions and practices, such as inspector generals and internal government watchdogs, to investigate and collect facts about the government’s own activities.<sup>51</sup>

In addition to a more comprehensive assessment of government fact-making, it is also vital to better understand the history of specific fact-making activities within different regulatory domains and how various modes of fact-making – as part of a larger set of knowledge practices – shape and stabilize how we come to see particular problems, such as poverty, unemployment, or food insecurity, and how we understand larger more complex objects of governance like the economy.<sup>52</sup> This includes, for example, investigating how specific ways of seeing and thinking, what Elizabeth Popp Berman refers to as “the economic style of reasoning” in the history that she tells, have shaped not only government fact-making but also our understanding of problems and the possibilities for response.<sup>53</sup> By rendering certain aspects of a problem visible and (legally) cognizable, while marginalizing or even erasing others, these knowledge practices have a profound

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<sup>51</sup> These were some of the first government fact-making activities to be targeted by the Trump administration.

<sup>52</sup> See, e.g., ALICE O’CONNOR, *POVERTY KNOWLEDGE: SOCIAL SCIENCE, SOCIAL POLICY, AND THE POOR IN TWENTIETH-CENTURY U.S. HISTORY* (2001) (showing how new quantitative techniques for measuring poverty shifted the understanding of poverty from a broad social problem to an individual problem); Timothy Mitchell, *Fixing the Economy*, 12 *CULTURAL STUDIES* 82 (1998) (showing how various government facts were used to stabilize the economy as an object of governance during the middle decades of the twentieth century). For an example from environmental law, see William Boyd, *Ways of Seeing in Environmental Law: How Deforestation Became an Object of Climate Governance*, 37 *ECOL. L. Q.* 843 (2010).

<sup>53</sup> See ELIZABETH POPP BERMAN, *THINKING LIKE AND ECONOMIST: HOW EFFICIENCY REPLACED EQUALITY IN U.S. PUBLIC POLICY* (2022).

effect on administration and governance, with obvious and important implications for distribution and politics.<sup>54</sup>

One important take away here is the recognition that there is no neutral, pre-political set of criteria for determining which facts to collect, how they should be encoded into different categories, and how they might be combined to construct and stabilize different objects of governance. While the specific choices made are often viewed as neutral, technical choices, they can have profound consequences for how we come to see (and not see) certain problems.

To that end, it is worth recalling that all facts are made in some fashion.<sup>55</sup> This includes modest exercises to collect and publish various types of data as well as more elaborate efforts to process and construct more complex facts such as a price index, the employment rate, the poverty line, an air quality index, or GDP. In all such cases, the making of particular facts necessarily involves choices that highlight and emphasize some things while diminishing or marginalizing others.

Many facts are also provisional in the sense that they are partial and incomplete and subject to revision and correction based on new evidence.<sup>56</sup> This is obvious in the case of government statistics, such as, say, the employment numbers produced by the Bureau of Labor Statistics, where we get a series of nested estimates over time based first on monthly surveys that are then revised on the basis of more reliable annual state employment numbers. In all cases, these are estimates based on different types of data and different estimation techniques. The fact that they are subject to revision and correction demonstrates a commitment to accuracy. The fact that the processes followed in making the initial estimates and subsequent revisions are widely understood among key communities of practice and publicly available indicates a dedication to transparency. In both cases, it is clear that fact-

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<sup>54</sup> See, e.g., O'Connor, *supra* note 52 (discussing how changes in government fact-making about poverty changed the way the problem was understood and the appropriate policy responses).

<sup>55</sup> Cf. "RAW DATA" IS AN OXYMORON (Lisa Gitelman ed., 2013).

<sup>56</sup> Indeed, the "scientific method" itself is premised on exactly this capacity for revision and correction in the light of new evidence or new ways of seeing existing evidence. To be sure, this is not the place for an extended engagement with the vast literature in history and philosophy of science, as well as allied fields such as science and technology studies, on the nature of facts and fact-making. For representative works, see LUDWIG FLECK, *GENESIS AND DEVELOPMENT OF A SCIENTIFIC FACT* (1979); BRUNO LATOUR & STEVE WOOLGAR, *LABORATORY LIFE: THE SOCIAL CONSTRUCTION OF SCIENTIFIC FACTS* (1979); IAN HACKING, *REPRESENTING AND INTERVENING: INTRODUCTORY TOPICS IN THE PHILOSOPHY OF NATURAL SCIENCE* (1983); STEVEN SHAPIN AND SIMON SCHAFER, *LEVIATHAN AND THE AIR-PUMP: HOBBS, BOYLE, AND THE EXPERIMENTAL LIFE* (1985); Lorraine Daston, *Marvelous Facts and Miraculous Evidence in Early Modern Europe*, in *QUESTIONS OF EVIDENCE: PROOF, PRACTICE, AND PERSUASION ACROSS THE DISCIPLINES* (James Chandler et al. eds., 1991); MARY POOVEY, *A HISTORY OF THE MODERN FACT: PROBLEMS OF KNOWLEDGE IN THE SCIENCES OF WEALTH AND SOCIETY* (1998). As a matter of common sense, most people live much of their daily lives based on a tacit acceptance that facts are provisional, some more than others, even if they do not agree on the meaning of facts.

making is an ongoing process that takes an enormous amount of work and needs to be handled with care.

One broad area of government fact-making that has often generated significant controversy is what is sometimes referred to as “regulatory science.”<sup>57</sup> In contrast to basic science or what some might call science for science’s sake, regulatory science is mission oriented. That is, it has a direction of travel that derives from regulatory priorities established by statute and regulation. For this reason, it is often a terrain of significant conflict and contestation—a fact that is abundantly clear in the long history of industry efforts to shape and constrain the practice of regulatory science in various domains.<sup>58</sup>

Because the problems targeted for regulation are often “on the frontiers of scientific knowledge,” moreover, much of regulatory science must also proceed in the face of uncertainty (often significant) and draw upon a range of different tools, methods, and data.<sup>59</sup> As a result, questions of *how* regulatory science should proceed have been deeply contested for more than half a century. Indeed, an entire subfield of “science policy” has grown up in response to concerns that agencies themselves should not be left alone to determine how to conduct the science they need to carry out their regulatory responsibilities. In some cases, this reflects the view that agencies lack the appropriate expertise and capacity. In others, it reflects a concern that agency science will be politicized. Such concerns have precipitated ongoing appeals to what might be called the “science policy establishment,” operating through various science advisory committees or the National Academy of Sciences, as trusted authorities on how regulatory science should be conducted in various domains and as a check on agency efforts to deliver regulatory science that is objective and serviceable given a specific set of regulatory objectives.

Thus, over the last fifty years, the science policy establishment has sought to discipline and guide the conduct of regulatory science through various National Academy committees, formal science advisory panels, and informal interventions

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<sup>57</sup> See, e.g., SHEILA JASANOFF, *THE FIFTH BRANCH: SCIENCE ADVISERS AS POLICYMAKERS* (1990) (discussing differences between “regulatory science” and “research science”); Sheila Jasanoff, *Procedural Choices in Regulatory Science*, 4 *RISK* 143 (1993) (discussing characteristics of regulatory science).

<sup>58</sup> The history of quantitative risk assessment in health, safety, and environmental law is a good illustration of this. See Boyd, *De-Risking Environmental Law*, *supra* note 12; Boyd, *With Regard for Persons*, *supra* note 12; William Boyd, *Genealogies of Risk: Searching for Safety, 1930s-1970s*, 39 *ECOL. L. Q.* 895 (2012). See also Rachel Rothschild, *The Origins of the Major Questions Doctrine*, 100 *INDIANA L. J.* 57 (2024).

<sup>59</sup> See, e.g., *Ethyl Corp. v. EPA*, 541 F.2d 1 (D.C. Cir. 1976) (*en banc*) (discussing the various uncertainties associated with airborne lead emissions and their impact on public health and the multiple lines of evidence supporting EPA’s decision to ban lead in gasoline).

from prominent scientists and science advocacy groups.<sup>60</sup> Shelia Jasanoff has referred to these various science policy advisors as a “fifth branch” of government in recognition of their significant influence on policy and regulation.<sup>61</sup> Moreover, even though these efforts are often presented and framed as independent, neutral, and objective, the science policy establishment has itself been subject to influence from various special interests over the years and has sometimes been used by the Executive Branch and members of Congress as a way to delay regulation by demanding further study and review.<sup>62</sup>

Notwithstanding such concerns, however, the science policy establishment has helped deliver better and more effective regulatory science and regulation at least some of the time (perhaps even most of the time). By providing an institutional counter-weight and corrective to agency fact-making, the use of various science advisory bodies has helped to dampen the inevitable oscillations that occur with new administrations and demonstrated the value of a more distributed approach to science policy that allows for peer review and assessment on controversial matters. At its best, this outsourced world of science policy provides an external check on political agendas within agencies.<sup>63</sup>

### **Domination Through Ignorance: President Trump’s Assault on Fact-making**

The second Trump administration’s assault on fact-making has been both broad and deep and executed with great alacrity. While any theory of what motivates the administration is necessarily provisional and must contend with the whims of the President’s own psyche, a considerable part of the attack on fact-making seems to stem from the accurate assessment that these quasi-independent modes of fact-making, like science itself, can and often do act as rival sources of authority and influence on matters that the Administration cares about. Part of it

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<sup>60</sup> In the area of quantitative risk assessment, for example, the National Research Council has issued a series of reports reviewing agency practices and proposing reforms. *See, e.g.*, NATIONAL RESEARCH COUNCIL, RISK ASSESSMENT IN THE FEDERAL GOVERNMENT: MANAGING THE PROCESS (1983); NATIONAL RESEARCH COUNCIL, SCIENCE AND JUDGMENT IN RISK ASSESSMENT (1994); NATIONAL RESEARCH COUNCIL, UNDERSTANDING RISK: INFORMING DECISIONS IN A DEMOCRATIC SOCIETY (1996); NATIONAL RESEARCH COUNCIL, SCIENCE AND DECISIONS: ADVANCING RISK ASSESSMENT (2009).

<sup>61</sup> Jasanoff, *The Fifth Branch*, *supra* note 57.

<sup>62</sup> Senator David Vitter of Louisiana, for example, put a hold on the confirmation of one of President Obama’s nominees to EPA, which he lifted only after EPA agreed to send its draft risk assessment to the NRC for an external review. *See* Eric Lipton and Rachel Abrams, *The Uphill Battle to Regulate Formaldehyde*, N.Y. Times (May 3, 2015) (discussing industry opposition and interference with EPA’s formaldehyde risk assessment).

<sup>63</sup> An important recent illustration of this is the report issued by the National Academy of Sciences criticizing the Trump Administration’s Department of Energy report on climate science. *See* NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, & MEDICINE, REVIEW OF THE EVIDENCE ON GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE (2025).

also stems from a general hostility to expertise and a deep-seated distrust of elite knowledge practices and even knowledge itself.<sup>64</sup>

Although our efforts to understand the precise motivations will always be a work in progress, it is critical to develop an accurate inventory and diagnosis of what has actually happened. To that end, there are at least three distinct aspects of the Trump administration's ongoing attack on fact-making: (1) *deconstruction*: the dismantling and wholesale destruction of fact-making capacity across specific government domains; (2) *politicization*: the extension of direct political control over formerly independent or quasi-independent modes of fact-making; and (3) *epistemic capture*: the imposition of a set of norms and practices for the conduct of science across the government, as exemplified by what the administration refers to as “gold standard science.”<sup>65</sup>

The first set of activities—deconstruction—involves widespread dismantling and destruction of fact-making capacity. This is the most visible aspect of the Bannanite project to “deconstruct the administrative state.”<sup>66</sup> It can be seen as an aspect of what Jody Freeman and Sharon Jacobs refer to as structural deregulation, with a particular emphasis on maximizing trauma for civil servants.<sup>67</sup> This includes direct firing and forced early retirement of civil servants, shutting down various offices, freezing or canceling research, discontinuing various surveys, assessments, and investigations, and reducing or eliminating budgets. Some of this was contemplated in Project 2025, although much of it has seemed ad hoc at times (particularly during early DOGE). In some cases, these efforts have been defended based on claims that particular exercises in fact-making have

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<sup>64</sup> This could perhaps be seen as yet another iteration of the intentional production of ignorance, underscoring the need for what Robert Proctor and others refer to as agnotology or the study of ignorance. See Robert N. Proctor, *Agnotology: A Missing Term to Describe the Cultural Production of Ignorance (and Its Study)*, in *AGNOTOLOGY: THE MAKING AND UNMAKING OF IGNORANCE* (Proctor and Scheinberger eds., 2008). See also William Davies, *Stupidology: The Outsourcing of Judgment*, 51 n+1 (Fall 2025).

<sup>65</sup> See White House, *Restoring Gold Standard Science*, Exec. Order (May 23, 2025), available at: <https://www.whitehouse.gov/presidential-actions/2025/05/restoring-gold-standard-science/>. As the Executive Order states, “Gold Standard Science Gold Standard Science means science conducted in a manner that is: (i) reproducible; (ii) transparent; (iii) communicative of error and uncertainty; (iv) collaborative and interdisciplinary; (v) skeptical of its findings and assumptions; (vi) structured for falsifiability of hypotheses; (vii) subject to unbiased peer review; (viii) accepting of negative results as positive outcomes; and (ix) without conflicts of interest.” Taken on its own terms, there is much to agree with here and much of this can be seen as a battle over who gets to decide what these various epistemic virtues actually mean in the everyday practice of regulatory science.

<sup>66</sup> See Philip Rucker & Robert Costa, *Bannon Vows a Daily Fight for ‘Deconstruction of the Administrative State’*, WASH. POST (Feb. 23, 2017).

<sup>67</sup> See Jody Freeman & Sharon Jacobs, *Structural Deregulation*, 135 HARV. L. REV. 585 (2021).

become overly politicized.<sup>68</sup> In others, little or no rationale has been provided.<sup>69</sup> As noted, we have seen some of this before, but the scale of the second Trump administration's assault goes well beyond past efforts. This effort has proven to be highly effective and has created long term damage that will be difficult to repair.

The second set of activities involves various efforts to subordinate formerly independent or insulated government fact-making efforts to political control by the White House.<sup>70</sup> Prominent examples include getting rid of various independent science advisory boards, firing the director of BLS, and firing the head of the CDC. Here the goal is not so much to destroy the capacity to make facts but to redirect that capacity in a direction that supports the White House's political aims. Much of this involves ongoing efforts to attack and vilify independent scientific advisory boards, civil servants, and political appointees who direct and control these efforts. Interestingly, some of this has been framed in the MAHA agenda as an effort to protect against industry capture and undue corporate influence.<sup>71</sup> To the extent that the goal here is to convince the American public to use a different set of facts, success is not at all guaranteed given that the entire effort could easily undermine whatever trust remains in government statistics and government science.<sup>72</sup> Alternatively, if the goal is to further undermine trust in government and further constrain the ability of government to solve real problems, this effort has also delivered with great success.

The third set of activities involves efforts to articulate and impose a particular understanding of science and scientific practice on regulatory agencies (and more generally on federally funded science) and to empower political appointees to enforce this understanding. This can be seen as a form of epistemic capture.<sup>73</sup> The second Trump administration has framed this mostly under the rubric

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<sup>68</sup> See, e.g., Dan Frosch et al., *Trump Administration Cancels Annual Hunger Survey*, WALL ST. J. (Sept 20, 2025) (reporting that the administration has canceled the USDA's annual food insecurity survey starting in 2025 on the grounds that it had become overly politicized).

<sup>69</sup> See for example the cuts to CDC's foodborne illness surveillance system, FoodNet, the closure of USDA research stations, or the National Weather Service cuts to weather balloon operations (among others).

<sup>70</sup> This can, of course, be seen as part of much broader effort to assert political control by the President over various functions of the administrative state. For a recent and important intervention on this broader effort, see Bijal Shah, *Presidential Administrative Discretion*, 100 N.Y.U. LAW REV. 2128 (2025).

<sup>71</sup> See THE MAHA REPORT: MAKE OUR CHILDREN HEALTHY AGAIN 45-47 (2025) (discussing industry influence over environmental toxicology and epidemiology studies, ghostwriting of various studies, and corporate lobbying efforts by the chemical industry).

<sup>72</sup> The ongoing controversy over the Department of Health and Human Services' vaccine policy is an example of this.

<sup>73</sup> Cf. Wendy Wagner, *Administrative Law, Filter Failure, and Information Capture*, 59 DUKE L. J. 1321 (2010) (discussing "information capture" which can be thought of as a form of "epistemic capture"). See also Cass R. Sunstein, *The Office of Information and Regulatory Affairs: Myths and*

of “gold standard science,” which seems to be an expanded version of EPA’s “secret science” initiative from the first Trump administration that draws on a much longer history of industry efforts to shape the nature and direction of regulatory science.<sup>74</sup> Starting with the lead industry in the 1920s, refined by the tobacco industry during the middle decades of the 20<sup>th</sup> century, and practiced with great effect by various other industry groups ever since, the goal here is to claim the mantle of “sound science” and to articulate a set of principles and practices that constitute sound science.<sup>75</sup> By constraining what counts as science (that is, what sorts of data, studies, and methods can be used to support regulatory efforts) and by imposing substantial analytical and evidentiary demands on regulatory agencies, these efforts often serve to block the delivery of timely and effective regulation.

Taken together, and as summarized in Table 1 below, these three efforts comprise a systematic, sustained, and quite radical effort to greatly diminish and remake government fact-making. One might add here as well a fourth category regarding the administration’s efforts to terminate or severely curtail the role of inspectors general and other government watchdogs in monitoring the government’s role in various fact-making activities. In all cases, domination through knowledge has been replaced by domination through ignorance.

[Insert Table 1 here]

## Epistemic Virtue and Hyper Ethics

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*Realities*, 126 HARV. L. REV. 1838 (2013) (discussing various claims of epistemic capture). Here, of course, it is the President who is trying to influence and capture the practice of regulatory science, albeit in service to a longstanding effort by industry to shape the practices of regulatory science.

<sup>74</sup> See *Restoring Gold Standard Science*, *supra* note 65. On EPA’s “secret science” initiative during the first Trump administration, see *Strengthening Transparency in Pivotal Science Underlying Significant Regulatory Actions and Influential Scientific Information*, 86 FED. REG. 469 (Jan. 6, 2021). See also Becky Mansfield, *Deregulatory Science: Chemical Risk Analysis in Trump’s EPA*, 51 SOC. STUD. SCIENCE 28, 30 (2021) (observing that “Trump EPA officials defend their approaches in terms of scientific values, declaring that their approaches are better science: more objective and transparent, less speculative, better grounded in evidence and so forth. According to its political appointees, the Trump EPA stands for scientific integrity, because it is promulgating new, evidence-based frameworks that show that regulation is neither necessary nor appropriate.”); Mario Biagioli & Alain Pottage, *Dark Transparency: Hyper-Ethics at Trump’s EPA*, LOS ANGELES REV. OF BOOKS (Mar. 19, 2022) (discussing how the Trump EPA sought to mobilize norms of openness and transparency to challenge the credibility of scientists).

<sup>75</sup> There is a large literature here across history, law, and social science. See, e.g., NAOMI ORESKES & ERIK M. CONWAY, *MERCHANTS OF DOUBT: HOW A HANDFUL OF SCIENTISTS OBSCURED THE TRUTH ON ISSUES FROM TOBACCO SMOKE TO GLOBAL WARMING* (2010); THOMAS O. MCGARITY & WENDY E. WAGNER, *BENDING SCIENCE: HOW SPECIAL INTERESTS CORRUPT PUBLIC HEALTH RESEARCH* (2008); DAVID MICHAELS, *DOUBT IS THEIR PRODUCT: HOW INDUSTRY’S ASSAULT ON SCIENCE THREATENS YOUR HEALTH* (2008); GERALD MARKOWITZ & DAVID ROSNER, *DECEIT AND DENIAL: THE DEADLY POLITICS OF INDUSTRIAL POLLUTION* (2002).

As with the first Trump administration, much of the second Trump administration's effort to dismantle and reshape government fact-making has been framed in the language of epistemic virtue and the concomitant need to cleanse or purify the corrupt knowledge practices of the status quo. This is most evident in the call for "gold standard science" but much of the effort to instill more political control over various fact-making activities has itself been premised on claims of politicization and corruption. Similarly, the administration's efforts to dismantle and deconstruct government fact-making across various domains has itself often been presented as part of a more general attack on "woke" science and DEI initiatives. Although some of this appears to be little more than gaslighting, it is critically important to understand the discursive and ideological work that the appeal to these epistemic virtues does in deflecting attention from more fundamental questions of power and politics.<sup>76</sup>

At its core, the Trump administration's constant invocation of epistemic virtue in their defense of "gold standard science" and the extension of political control over various modes of fact-making can be seen as an exercise in what Alain Pottage and Mario Biagioli call "hyper ethics."<sup>77</sup> The key move here is to push for a radical intensification or purification of these norms and virtues of scientific practice such as transparency, reproducibility, or objectivity. Some might refer to this as "weaponization," with the implication that the way forward is to defend and restore the one true "non-weaponized" meaning of these different virtues.

But it is also important to recognize here that "hyper ethics" operates both as a strategy and a general condition (or perhaps as a strategy that makes use of a general condition). That is, hyper ethics has become part of our social formation—a key feature of our politics that is symptomatic of the great devaluation of values that Weber, following Nietzsche, saw as a condition or manifestation of the nihilism of a disenchanted world.<sup>78</sup> In her 2019 Tanner Lectures, Wendy Brown urges us to think with Weber and to bring this forward to our own time to confront the hyper

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<sup>76</sup> Jodi Short argues that the longstanding effort to make government work more like business can be seen as a form of gaslighting. See Jodi L. Short, *Regulatory Managerialism as Gaslighting Government*, 86 LAW AND CONTEMPORARY PROBLEMS 38 (2023). In the case of fact-making, the Trump Administration's gaslighting is directed more at claims of epistemic virtue. We know that these so-called epistemic virtues can take on very different political valences over time. See, e.g., David Pozen, *Transparency's Ideological Drift*, 128 YALE L.J. 100 (2018); Biagioli and Pottage, *supra* note 74.

<sup>77</sup> Biagioli and Pottage, *supra* note 74.

<sup>78</sup> See Max Weber, *Politics as a Vocation; Science as a Vocation*, in FROM MAX WEBER: ESSAYS IN SOCIOLOGY (H.H. Gerth and C. Wright Mills trans and eds., 1946). See also ANTON JÄGER, *HYPERPOLITICS: EXTREME POLITICIZATION WITHOUT POLITICAL CONSEQUENCES* (2026).

politicization and intensification of value and virtue as symptomatic of our nihilistic times.<sup>79</sup>

Viewed in this way, hyper ethics demands careful, sober thinking not only about how to respond but also about the appropriate terrain on which to respond. Put crudely, fighting hyper ethics with hyper ethics looks like a sucker's game. All of which helps us to see more clearly the dilemma facing those seeking to counter the administration's efforts and protect regulatory science and government fact-making. On the one hand, there is a pressing need to vigorously defend science and scientific integrity and to protect knowledge production and fact-making from undue political influence and even wholesale destruction. On the other hand, if the main objective of such a defense is to restore a lost technocratic ideal by reclaiming the high ground on what counts as good science we have missed a big part of the problem. Put simply, by conflating ethical questions about the proper conduct of science with political questions about the problems we care about and the overall direction and purpose of government fact-making, we risk focusing too much on defending the epistemic virtues of science writ large and not enough on what kind of science is done (and not done) in service to particular ends.

The point here is not to suggest that politics should dictate what kind of science is done or how it is done in general.<sup>80</sup> The point, rather, is that when it comes to *regulatory* science and government fact-making more generally—that is, science and fact-making that are already in service to specific statutory objectives such as “protection of public health with an adequate margin of safety”<sup>81</sup> or “no material impairment of health”<sup>82</sup> or “reasonable certainty of no harm,”<sup>83</sup>—we should be thinking hard about the kind of science that is done (and left undone) and whose interests it serves (or fails to serve). As Robert Proctor observed in the early 1990s (at the height of the then raging science wars): “We cannot simply ask the epistemological question: How do we know? Rather we must be vigilant and always ask: Why do we know what we know—and why don't we know what we don't know? Who benefits from knowledge (or ignorance!) of a particular sort and

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<sup>79</sup> See WENDY BROWN, *NIHILISTIC TIMES: THINKING WITH MAX WEBER* (2023).

<sup>80</sup> To be sure, we do need to pay careful attention to the political economy of science and the many ways that federal funding does indeed determine what kind of science is done in the government and among its partners in the private sector and academia. It would be naïve to suggest that the many billions of dollars in government funding for research always proceeds in the public interest. There are important questions here, therefore, not only about how to insulate this funding from politics and but also how to ensure that it does in fact line up with public priorities.

<sup>81</sup> *Clean Air Act*, 42 U.S.C. § 7409 (2025).

<sup>82</sup> *Occupational Safety and Health Act*, 29 U.S.C. § 655(b)(5) (2025).

<sup>83</sup> *Food Quality Protection Act*, 21 U.S.C. § 346a(b)(2)(A)(ii) (2025).

who suffers? How might the practice of science be different? How should the practice of science be different?”<sup>84</sup>

By keeping attention focused on the ethics and virtues of science, the Trump administration avoids these larger, more fundamental questions about what we actually know and don’t know about the real problems we are concerned about. Every day we spend fighting about ethics and epistemic virtue is another day we are not debating how to respond to climate change or forever chemicals or AI or robots or oligarchy or whatever. Hyper ethics thus operates as a highly effective strategy for displacing substantive debate over problems in favor of fights about virtue and process. In doing so, it paralyzes the very possibility of public problem solving.

### **The Public’s Facts? Fact-making and Public Problems**

One of the most corrosive and insidious aspects of the Trump administration’s assault on fact-making, not to mention facticity itself, is that it undermines the very possibility for problems to take shape as matters of public concern. By getting rid of the ability to produce shared facts, we lose our capacity to understand the nature and extent of various problems. To take one recent example, when the government stops collecting data on the extent of food insecurity among Americans, we lose our ability to see chronic hunger as a problem to be solved.<sup>85</sup>

But more than that, we also lose the opportunity for new publics to form in the first place. As John Dewey argued a century ago, shared problems are what stir publics into action.<sup>86</sup> Undermining our ability to collect and generate the facts needed to frame and understand problems diminishes the chances that new publics will take shape around those problems and that they will ripen up into actual matters of public concern. Such problems, in short, will never become shared problems. This can be seen as an extension of what Dewey referred to as “the eclipse of the public.”<sup>87</sup>

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<sup>84</sup> See ROBERT N. PROCTOR, *VALUE-FREE SCIENCE? PURITY AND POWER IN MODERN KNOWLEDGE* 13 (1991).

<sup>85</sup> See Todd Datz, *Cancellation of Food Insecurity Survey a Blow to Understanding Hunger in U.S.*, Harv. T.H. Chan Sch. of Pub. Health (Oct. 16, 2025).

<sup>86</sup> See JOHN DEWEY, *THE PUBLIC AND ITS PROBLEMS* (1927). See also ALAN RYAN, JOHN DEWEY AND THE HIGH TIED OF AMERICAN LIBERALISM 28 (1995) (“Dewey’s main intellectual concept was that of a ‘problem.’ Individuals and societies alike are stirred into life by problems.”); Emerson, *supra* note 28 at 91-93 (discussing Dewey’s concept of the public and its problems and its influence on early conceptions of administrative law as a “science of common action.”). One might say that the current moment underscores our need for both a science *of* common action and a science *for* common action.

<sup>87</sup> Dewey, *supra* note 86 at 126.

As in Dewey's time, there are no easy answers here. But any agenda that seeks to remake public administration along lines of anti-domination or care or abundance or any number of other progressive priorities will need to confront at least two important challenges regarding fact-making and knowledge production. First, what kinds of fact-making and regulatory science are necessary in order to identify, formulate, understand, and debate key problems and the possibilities of response. Second, how should the knowledge infrastructures needed to support these efforts (both within government and beyond) be organized. In both cases, to the extent that there are solutions, they must come from law (by way of politics) rather than science and the scientific community.<sup>88</sup>

With respect to the first challenge, it seems important to go back to key statutes in specific domains to find substantive commitments that can anchor ongoing exercises in government fact-making. In health, safety, and environmental law, for example, many of our core statutory commitments can be read as mandates for fact-making and knowledge production that centers protection of public health in a manner that is precautionary and anticipatory. In economic regulation, there are strong statutory commitments to the public interest, anti-discrimination, open access, and fair pricing that require detailed knowledge of industry structure, costs, underlying technologies, and ways of price making. And in the administration of various entitlement programs, commitments to fairness and transparency inform basic approaches to eligibility, benefits, and program integrity. These substantive statutory commitments are hardly sufficient by themselves to (re)organize government fact-making but they do provide a direction of travel for government fact-making and regulatory science across specific domains.

As for the second challenge, there is important work to be done in elaborating a set of design principles and blueprints that could promote a more resilient (even redundant) architecture for government fact-making. Notwithstanding the challenges that come with outsourcing that Jon Michaels has emphasized, it may well be that in the age of Trump a more distributed architecture that relies on the outsourcing of certain key fact-making responsibilities will be more protected from the kinds of attacks we are currently witnessing.<sup>89</sup> This could

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<sup>88</sup> It is important here to recognize the dual nature of science, as Richard Levins has observed. Science is both a self-correcting method of inquiry that has facilitated tremendous growth in human knowledge and, at the same time, a tool for industry and governments to advance their interests, often in ways that entrench and compound various forms of domination. Scientism, the ideology that we can simply follow the science, and anti-science (the ideology that science is just mystification and domination) both fail to recognize this dual nature. See Richard Levins, *Ten Propositions on Science and Antiscience*, 46/47 SOCIAL TEXT 101, 103-05 (1996). See also RICHARD LEVINS AND RICHARD LEWONTIN, *THE DIALECTICAL BIOLOGIST* (1985).

<sup>89</sup> See JON MICHAELS, *CONSTITUTIONAL COUP: PRIVATIZATION'S THREAT TO THE AMERICAN REPUBLIC* (2017).

include more of what we have already seen, where states, non-profits, universities, and even private actors are taking over and reproducing government fact-making efforts.<sup>90</sup> To be sure, to the extent that outsourcing operates as cover for privatization, such a move raises important questions of access and accountability as Michaels and others have pointed out.<sup>91</sup> But there may well be certain domains where limited outsourcing can play an important protective role against an unrestrained executive.

Another possibility here, one that could complement the first, would be to (re)locate some government fact-making responsibilities to Congress. This could build upon the various joint committees for economics, budget, and taxes; the Congressional Research Service; the Congressional Budget Office and perhaps even the Government Accountability Office. Obviously, there are limits here to how much new fact-making capacity could (or should) be brought under direct Congressional control, but there is surely some room for experimentation here.

Finally, another possibility, also complementary, would be to experiment with quasi-independent public interest “observatories” that would focus on particular problem domains such as public health, the economy, poverty and inequality, technology, energy and climate change, pollution, etc. Experience with efforts to establish observatories in countries such as Brazil and in the EU as well as here in the U.S. might provide some lessons.<sup>92</sup> There are a range of options here as well for how to organize the governance of these observatories, including public-private models with governing boards made up of representatives from Congress and the Executive branch, together with representatives from the states and civil society; non-governmental models built around university research consortia; and more informal models organized around networks of key scientists and researchers such as those who already participate in the various directorates and boards of the National Research Council. In all cases, however, it seems vitally important to include meaningful participation by the public, as Dewey urged a century ago.

## Conclusion

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<sup>90</sup> Some of this has already happened with public health and vaccine policy, as illustrated by groups of states such as the West Coast Health Alliance and the Northeast Public Health Collaborative.

<sup>91</sup> See Michaels, *supra* note 89.

<sup>92</sup> In Brazil, for example, a group of civil society and scientific organizations formed the Observatório do Clima (OC) (Climate Observatory) in 2002 to provide independent monitoring of climate conditions and trends as well as policy implementation. See <https://oc.eco.br>. The EU established its own climate and health observatory in 2021 as a multi-disciplinary partnership, jointly managed by the European Commission and the European Environment Agency (EEA), that provides data, tools, and knowledge exchange on climate and health to the 39 EU member and cooperating countries. See <https://climate-adapt.eea.europa.eu/en/observatory>.

The role of government in collecting and producing facts of all kinds and in supporting research (both basic and applied) has long been taken for granted, with political debate typically reserved for overall priorities and levels of spending. To be sure, there have sometimes been intense debates about support for various lines of research, the collection of particular types of information, and the use of certain types of decision-making frameworks such as cost-benefit analysis. But for much of the last century, a broad cross section of the public has had the luxury of assuming that most government science and fact-making could be trusted most of the time. That period of relative innocence is now over.

The second Trump administration's sustained attack on longstanding modes of public fact-making represents an effort to reconfigure the relationship between knowledge, state power, and civil society in a manner that leans toward autocracy. The potential loss of social intelligence here is staggering; as is the very possibility of tethering politics to knowledge in a way that promotes the public interest and enhances democratic capabilities.

Much of the response has by necessity focused on defending what is left and rebuilding what has been destroyed—a project that must proceed brick-by-brick as they say. But rebuilding can also be an opportunity to go beyond restoration and repair. One of the many important questions looming before us as we confront the wreckage left by a nihilistic and vindictive President on the one hand and an exhausted liberalism on the other is how to imagine and, more importantly, how to build new and improved knowledge infrastructures that are once again worthy of the public and its problems.

**Table 1: Summary of Trump Administration's Attacks on Government Fact-making**

| Category                 | Description                                                                                                                    | Key Mechanisms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Primary Agencies                                               | Representative Examples                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DECONSTRUCTION</b>    | <i>Systematic elimination or severe restriction of government fact-making capacity</i>                                         | <ul style="list-style-type: none"> <li>• Mass firing of civil servants and career scientists; forced early retirement; office closures</li> <li>• Freezing or canceling research programs and ongoing investigations</li> <li>• Discontinuing surveys, assessments, disease surveillance, and monitoring systems</li> <li>• Closure of data portals, libraries, and historical archives</li> <li>• Budget cuts eliminating statistical series and data collection capacity</li> <li>• Termination of datasets tracking inequality, race/ethnicity, health, and environment</li> </ul> | HHS, CDC, NIH, EPA, USGS, DOE, NOAA, BLS, USDA, CIA            | <ul style="list-style-type: none"> <li>• Termination of career scientists from multiple agencies</li> <li>• Mass elimination of federal datasets across multiple agencies</li> <li>• Elimination of EPA's Office of Research and Development</li> <li>• Dissolution of National Center for Atmospheric Research</li> <li>• Termination of National Climate Assessment</li> <li>• Proposed shut-down of land-based observatories and NASA satellites</li> <li>• Closure of NASA Goddard Space Center Library</li> <li>• Termination of NOAA disaster tracking program</li> <li>• Cuts to National Weather Service weather research and forecasting</li> <li>• Cancellation of USDA annual food insecurity survey</li> <li>• Termination of CDC FoodNet foodborne illness surveillance</li> <li>• Closure of USDA research stations</li> <li>• Proposed termination of EPA Greenhouse Gas Reporting Program</li> <li>• Cancellation of Global Trends Intelligence Report</li> <li>• Cancellation of CIA World Factbook</li> <li>• Elimination of funding for USGS climate adaptation centers</li> <li>• Termination of USDA annual hunger survey</li> </ul> |
| <b>POLITICAL CONTROL</b> | <i>Subordination of formerly independent or quasi-independent government fact-making to White House control</i>                | <ul style="list-style-type: none"> <li>• Termination of independent scientific advisory bodies</li> <li>• Replacement of expert scientific leadership and career professional staff with ideologically selected appointees</li> <li>• Mass firing or reassignment of career scientists and experts</li> <li>• Political override and suppression of agency scientific communications</li> <li>• Obstruction of independent oversight (Inspectors General, ethics offices)</li> </ul>                                                                                                  | HHS, CDC, FDA, NIH, NOAA, EPA, USGS, DOE, BLS, Federal Reserve | <ul style="list-style-type: none"> <li>• Firing of CDC director and vaccine advisory committee members; replacement with officials less supportive of vaccines</li> <li>• Firing of BLS Commissioner</li> <li>• Attempted removal of Federal Reserve board member Lisa Cook; DOJ investigation of Jay Powell</li> <li>• Removal of multiple Inspectors General and agency ethics officials</li> <li>• Bans on use of words such as 'climate change' and 'emissions' in DOE public communications</li> <li>• Executive Order seeking to 'restore truth and sanity to American history'; removal of National Park and museum exhibits</li> <li>• Executive Order asserting political control over federal grantmaking</li> <li>• Executive Order reclassifying civil servants as at-will employees</li> <li>• Elimination of various government advisory committees across multiple agencies</li> <li>• Centralized control of federal scientific data under "Genesis Mission"</li> </ul>                                                                                                                                                                   |
| <b>EPISTEMIC CAPTURE</b> | <i>Imposition of particular norms and standards governing how science and fact-making should proceed across the government</i> | <ul style="list-style-type: none"> <li>• Government-wide directives dictating particular norms and standards for regulatory science</li> <li>• Restrictions on data and evidence that can be used to support agency rulemakings</li> <li>• Subordinating agency science and scientists to political control</li> <li>• Suppression and censorship of certain types of research</li> <li>• Removal of data and content related to inequality, equity, and vulnerable populations</li> </ul>                                                                                            | CDC, FDA, NIH, HHS, EPA, NOAA, USGS, BLS, DOE                  | <ul style="list-style-type: none"> <li>• Executive Order on Gold Standard Science ordering federal scientists to cease public communications and media engagement</li> <li>• Suppression of climate change communications across multiple agencies</li> <li>• Directive eliminating references to 'systemic' or 'structural' racism and inequality from official documents</li> <li>• Removal/cancellation federal data variables and tools including race and ethnicity data from federal workforce database, government-wide sexual orientation and gender identity data, and EPA Environmental Justice Screening and Mapping Tool</li> <li>• Censorship of OIG reports and restriction of Inspector General communications with Congress</li> <li>• Prohibition on federal funding that promotes 'gender ideology'</li> <li>• Tightening of vaccine approval rules</li> </ul>                                                                                                                                                                                                                                                                          |