

SPECIAL ISSUE

## Revenge of the Humdrum: Bureaucracy as Profession and as a Site of Science

Theodore Porter

University of California, Los Angeles, US  
tporter@history.ucla.edu

---

Bureaucracy, so often demeaned, should be understood as an embodied means for the production and deployment of knowledge. Its reputation as humdrum and rule-bound is not necessarily undeserved, yet it makes possible a variety of activities on a scale that would otherwise be out of reach. Here we survey and ponder some of its diverse forms as they have adapted to diverse aims and circumstances evolved over several centuries.

This afterword is part of a special issue entitled "Histories of Bureaucratic Knowledge," edited by Sebastian Felten and Christine von Oertzen.

---

**Keywords:** bureaucracy; standardization; knowledge; expertise; liberalism; trust

---

"Now, no other being—not even a Chinese clerk—is in the same degree as the Prussian bureaucrat a slave to routine." In the Enlightenment era, Europeans admired the orderly competence they associated with Chinese administration, but to this English author, writing in 1876, the comparison was damning. The term bureaucrat, still barely familiar (he said) in the languages of Europe, corresponded to the German title of *Geheimrath*, literally privy counselor, the very quintessence of bureaucratic inactivity. So many privy counselors in a place with no privy counsels! If indeed Europeans remained ignorant of the word "bureaucrat," they had substitutes. Where had Charles Dickens turned up so rich a source of evasion and irresponsibility for the "circumlocution office" in *Little Dorrit*? Bureaucracy, in the Victorian era, was decidedly on the rise, though no one wanted to be classed as a bureaucrat. Even Max Weber, who took great interest in the historic significance of bureaucratic power, held back from describing bureaucracy as organized wisdom or as a calling, *Bureaukratie als Beruf*.<sup>1</sup>

If less elevated than a calling, bureaucracy stands for a basic dimension of modern life, the management of human affairs. Bureaucracy is one of the prototypical forms of social science, and one on which the natural sciences as well as technical enterprises have long depended. We explore it in this collection as an agency of knowledge-making, a worldly social enterprise that natural scientists have often preferred to disdain. Historians of science have typically disdained it too, never more so than in the early postwar decades that established the history of science as a legitimate academic specialty. The barriers they erected, however, are artificial ones, which encourage historians to bypass what often is fundamental to the historical issues we confront.

The articles in this special issue reach back to the European Middle Ages and extend outward to diverse regions of the world, taking in at the same time a wealth of human activities. All are concerned with how knowledge has been put to work for practical ends. Such ambitions do not reduce bureaucratic knowledge to the routine application of knowledge made by others. The relationship of knowledge to bureaucracy is rather like that of craft work or engineering to the experimental sciences, a field of fluid exchanges rather than a settled hierarchy. The activities described here involve science in motion. It is possible that many bureaucratic efforts are destined to crystallize and to rigidify, but these articles do not point to any such fatality.

---

<sup>1</sup> Tuttle, "Prussian Bureaucrat," 325.

The idea of bureaucracy as enslavement to pettifogging routine, as we have noted, was already becoming a cliché by 1880. It also could signify arbitrariness and corruption, the perversion of the letter to evade the spirit of the rules. These seeming opposites are in fact complementary. If the wheels of administration do not appear to turn in accordance with their own plodding logic, they must instead afford opportunities to elicit illegitimate favors in exchange for a license or service. In an earlier era, and even into the twentieth century, bureaucratic offices could be held as a form of property, a sinecure. Under the Old Regime, and not only in France, heads of state and high officials often put a price on offices in view of their emoluments, then used the revenue to fight a war, to maintain a lavish court, or to secure political alliances. Such, indeed, are the ways of political privilege. Office holding in this manner remains familiar in many societies, though in the richest countries the privileges are ordinarily less transparent, hence less likely to be identifiable as bribes, and are not commonly issued in small denominations.

Professional dignity, after all, presumes some degree of looseness in the rules of bureaucratic exchange. High office-holders do not like to see their positions reduced to performing routine transactions in a manner that could be described as mindless routine. Indeed, this is an image that haunts them. Officials concerned with the administration of productive enterprises, territories and resources, public services, financial regulation, or building codes are more vulnerable than scholars and scientists to the charge of behaving bureaucratically. For this very reason, they have worked out defenses. Eighteenth-century European professionals looked to China not as a tyranny of blind routine, but as a model of administrative coherence, the outcome of painstaking study. In Europe in the wake of the French Revolution, the privilege of inherited position had to be redefined. While the titled nobility lived on, dignified officials in this new era were likely to present themselves as gentlemen and to insist on a continuity of family traditions and knowledge, or perhaps a refined sensibility, passed along as a kind of moral inheritance. We think, for example, of Edmund Burke, Alexis de Tocqueville, or Frédéric Le Play, all of whom thought of political wisdom as constructed on a foundation of intellectual inheritance. Formal education had a role in this transmission of knowledge and wisdom but could not occlude the role of family background and experience.<sup>2</sup>

Bureaucratic officials, in short, have not wanted to define their work in terms of dull routines. They have cared about their dignity and wanted to be recognized as knowledgeable, even wise. And this presentation of self, often enough, is no mere pretense. The dullest and most repetitive calculations require an ability to recognize problems and adjust the procedure when something has gone wrong. Examples include the sorting of ticket segments in the nineteenth-century (English) Railway Clearing House and the application of least squares to draw lines through clouds of data in the work of a nineteenth-century observatory. Each requiring years of experience before a clerk or (human) computer could be trusted to deal with ambiguous cases. Even highly repetitive labor was subject to elaborate hierarchies of skill and experience. The statistician Karl Pearson insisted that the personality of the computer was discernible in his mathematical tables.<sup>3</sup>

The spatial-temporal sweep of this collection on bureaucratic knowledge extends from medieval and modern Europe to Oceania, both ends of Asia, and the Americas. European colonialism has a key role in some of these histories, but it is never the whole story. Science of the sort practiced in academies and universities is for the most part secondary, yet the focus remains on knowledge in relatively open and public forms rather than unarticulated craftiness. While the disciplining of knowledge is intermittently at issue in these histories, we see rather little to justify the stereotypes of inflexible bureaucratic routines. The order of bureaucracy is imposed more strictly on the administered than on the administrators, who typically hold on to a degree of discretion.

But of course. How could it be otherwise? Except that we (post-) moderns have liked to turn the story around. Michel Foucault famously emphasized how the prison guard became subject to a discipline on the same order as the prisoner, and then how professional efforts to suppress sexual deviance ended by enhancing the sexual stimulation of defying them.<sup>4</sup> I do not detect here any sharp temporal divides between distinct epistemic regimes. European monarchies had worked out powerful technologies to rein in their clerks by the eighteenth century, and in some respects even earlier. We might like to argue that bureaucracies like these were somehow more *bureaucratic* than the institutions featured in this collection. Yet there are good reasons not to insist on too strict a definition. Bureaucracies are diverse, and they have undergone

<sup>2</sup> For those who have endeavored to get beyond these barriers, see for example, Porter, *Rise of Statistical Thinking*; Porter and Ross, *Cambridge History Science*; Porter, "Social Sciences"; "Reforming Vision"; Lindenfeld, *Practical Imagination*.

<sup>3</sup> Campbell-Kelly, "Railway Clearing House"; Porter, "Information"; Grier, *When Computers Were Human*; Porter, *Karl Pearson*, 304–5.

<sup>4</sup> I think especially of Foucault's *Discipline and Punish* and *History of Sexuality*.

great transformations through history. Bureaucratic knowledge involves a shifting balance between highly constrained recording and partly free inquiry.

If governing large territories or an overseas empire requires an abundant flow of information, it also depends on competent, trustworthy agents in these distant lands. Colonial administrators must have had less access to an understanding of the people they governed than did employers, seigniors, and officials at home, and, on this account, were likely to be even more dependent on formal inquiries rather than intuitive understanding. Such information provided also a basis for reports—which, however, they sometimes preferred to shield from public view. Numbers conveyed a nice sense of solidity without suppressing the bureaucrat's prerogative to explain what they mean.

The bureaucrat as an administrator, enslaved by rules, is after all an idealization or even a myth, all the more so when this official must carry out his duties an ocean away from the metropolis. Readers who fail to grasp this point will not understand the articles in this collection. A monumental expansion of quantitative information, what Ian Hacking called an avalanche of printed numbers, did more to provide a basis for expertise than to squash it. By the 1830s, we begin to find in Europe and North America a wide range of organizations devoted to making sense of all this information and proposing new policies and interventions on the basis of empirical inquiries. By the mid-twentieth century, many social scientists were inclined to identify the beginning of social science with university professorships, doctoral programs, and disciplinary societies. A focus on bureaucratic knowledge helps us recognize academic social science as more or less continuous with the forms of expertise that grew up in state agencies and reform organizations involving clergy, lawyers, and doctors as well as scientists.<sup>5</sup>

Still, bureaucracy in its stereotyped form was also becoming familiar in the late nineteenth century, almost for the first time. The increasing scale of official agencies provided the resources for more formalized structures of knowledge and its wider circulation. The emergence into colloquial usage of the word "bureaucrat" corresponded pretty well with an emerging redefinition of administrative roles. Although we usually identify the bureaucrat with government positions, this story is also about great business enterprises, which were simultaneously assuming a new form. The insistence on competitive markets driven by self-interest was more and more a fiction. In the new age of great corporations, trusts, and cartels, it was not only socialist critics who doubted the sufficiency of markets. Adam Smith's spontaneous order gave way to a visible hand of corporate planning, which in turn was made possible by bureaucratic organization.<sup>6</sup>

Mainstream economics has continued to insist that these giant firms had to be disciplined by market competition. Socialists considered that planning by itself was capable of organizing farms and factories into an economic system. The difference of course was fundamental, but capitalists and socialists alike depended on subduing the chaotic spirit of competition *within* firms. The modern corporation of the late nineteenth century worked hard to achieve this. At the same time, bureaucracy entered its epoch of respectability. Weber, though worrying about the deadening of life under bureaucracy, supposed it must be the way of the future. In America, the economist Thorstein Veblen looked forward to a more efficient and more just economy managed by engineers (including economists). They should be expert, of course, but they also had to set aside their interests, accepting a new role as cogs in a smoothly functioning machine. His worship of engineers had much in common with the idealized role of imperial administrators managing vital institutions for native peoples who, they supposed, were still not ready for it.<sup>7</sup>

Bureaucratic administration, as a model for the generation and circulation of knowledge, was hierarchical and, as critics might say, top-heavy. What mattered most in factories and sales offices should be summarized and passed up, step by step, to headquarters, where it was to provide a basis for coherent planning. Implementation, of course, required additional initiative along with creative adaptation. Even corporate presidents recognized that innovation depended on mechanisms of some sort to loosen the bonds of hierarchy. The most admired American corporate models, for example at Du Pont and General Motors, divided the corporation into divisions, which acted with considerable autonomy. Proper accounting was now essential, since it provided a basis for assessing the performance of these divisions and for rewarding success with bonuses and promotions.

Still, by the 1970s this form of management was coming to seem too bureaucratic, too inflexible. Business leaders in the age of Thatcher and Reagan began to worship entrepreneurs, not bureaucratic managers. The proper model of knowledge for the entrepreneurial firm was not a voluminous flow of information

<sup>5</sup> Brewer, *Sinews of Power*.

<sup>6</sup> Rieppel, *Assembling the Dinosaur*.

<sup>7</sup> On changing economic ideals of science, see Mirowski, *Science-Mart*.

from periphery to center, but the creation of knowledge at its points of its deployment. This new system reflected and exploited an enthusiasm for technology, which, in this bright new era, was narrowed to mean technologies of electronic computers. The ideal of knowledge here was rigorously decentralized along the lines of Friedrich Hayek's economics of information, which emphasized the crucial role of local knowledge. Bureaucratic management was now condemned as slow and cumbersome. The entrepreneur responds to opportunity with lightning speed, before the bureaucrat can be moved from his soft desk chair. If giant firms were to remain—and they did—they would have to be decentralized, meaning that high-level managers should be rewarded according to the profits for which they could claim credit. Graduate schools of business, created to inculcate ideals of corporate life, were redefined as schools of entrepreneurship, even if the “entrepreneurs” were hired by giant corporations.

The new ideals of corporate management, with their disdain for bureaucracy, were soon brought to bear also on the operations of government. State ministries should no longer undertake to carry out governmental functions on their own but should define what is wanted and let private companies be rewarded for carrying them out in the most efficient manner. The ethic of privatization could be understood as an answer to stereotypes of plodding bureaucracy, enslaved to rules. Let statist/statistical uniformity instead give way to nimble entrepreneurship. Yet outsourcing contracts require, to be enforceable, multiple dimensions of standardization. Otherwise, the door again opens to those bureaucratic bugbears, arbitrariness and corruption. And even the most carefully drawn contracts are susceptible to being picked apart by this same entrepreneurial ingenuity. The data-driven ideal, to succeed at all, may require a new era of bureaucratic uniformity. The alternative, no panacea, is to promote the cultivation of expertise within relationships of informed oversight and skeptical trust.

Does bureaucracy really reduce to an assemblage of inhuman persons and inflexible rules? The articles in this collection provide, in diverse ways, a basis for a different and more realistic conception of administrative practices, which, over history have assumed a variety of forms. The articles emphasize one of bureaucracy's most basic dimensions, perhaps the most consequential of all, a range set of alternative ways for generating, gathering, and deploying knowledge. Bureaucratic knowledge, at bottom, is about organizing people and materials for practical social ends. At times it has deserved its reputation as narrowing and humdrum. At other times, bureaucratic inquiry has merged into scholarship and science. It provides, in any case, challenging problems and resources for histories of knowledge and of science.

## Competing Interests

The author has no competing interests to declare.

## Bibliography

- Brewer, John. *The Sinews of Power: War, Money and the English State, 1688–1783*. New York: Knopf, 1989.
- Campbell-Kelly, Martin. “The Railway Clearing House and Victorian Data Processing.” In *Information Acumen: The Understanding and Use of Knowledge in Modern Business*, edited by Lisa Bud-Frierma, 51–74. Abingdon, Oxon, UK: Routledge, 1994.
- Foucault, Michel. *Discipline and Punish: The Birth of the Prison*. Translated by Alan Sheridan. New York: Penguin Books, 1977.
- Foucault, Michel. *The History of Sexuality*. Vol 1, *An Introduction*. Translated by Robert Hurley. New York: Random House, 1978.
- Grier, David Alan. *When Computers Were Human*. Princeton: Princeton University Press, 2005.
- Lindenfeld, David. *The Practical Imagination: The German Sciences of State in the Nineteenth Century*. Chicago: University of Chicago Press, 1997. DOI: <https://doi.org/10.7208/chicago/9780226482446.001.0001>
- Mirowski, Philip. *Science-Mart: Privatizing American Science*. Cambridge, MA: Harvard University Press, 2011. DOI: <https://doi.org/10.4159/harvard.9780674061132>
- Porter, Theodore M. “Information, Power and the View from Nowhere.” In *Information Acumen: The Understanding and Use of Knowledge in Modern Business*, edited by Lisa Bud-Friedman, 217–30. Abingdon, Oxon, UK: Routledge, 1994.
- Porter, Theodore M. *Karl Pearson: The Scientific Life in a Statistical Age*. Princeton: Princeton University Press, 2004.
- Porter, Theodore M. “Reforming Vision: The Engineer Le Play Learns to Observe Society Sagely.” In *Histories of Scientific Observation*, edited by Lorraine Daston and Elizabeth Lunbeck, 281–302. Chicago: University of Chicago Press, 2011.

- Porter, Theodore M. *The Rise of Statistical Thinking, 1820–1900*. Princeton: Princeton University Press, 1986.  
DOI: <https://doi.org/10.1515/9780691210520>
- Porter, Theodore M. "The Social Sciences." In *From Natural Philosophy to the Sciences: Writing the History of Nineteenth-Century Science*, edited by David Cahan, 254–90. Chicago: University of Chicago Press, 2003.
- Porter, Theodore M., and Dorothy Ross, eds. *The Cambridge History of Social Science*. Vol. 7, *Modern Social Sciences*. Cambridge, UK: Cambridge University Press, 2003.
- Rieppel, Lukas. *Assembling the Dinosaur: Fossil Hunters, Tycoons, and the Making of a Spectacle*. Cambridge, MA: Harvard University Press, 2019. DOI: <https://doi.org/10.4159/9780674240339>
- Tuttle, Herbert. "The Prussian Bureaucrat." *The Gentleman's Magazine* 16 (January–June 1876): 320–31.

**How to cite this article:** Porter, Theodore. "Revenge of the Humdrum: Bureaucracy as Profession and as a Site of Science." *Journal for the History of Knowledge* 1, no. 1 (2020): 18, pp. 1–5. DOI: <https://doi.org/10.5334/jhk.20>

**Submitted:** 02 April 2020

**Accepted:** 03 April 2020

**Published:** 17 December 2020

**Copyright:** © 2020 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See <http://creativecommons.org/licenses/by/4.0/>.



*Journal for the History of Knowledge* is a peer-reviewed open access journal published by Ubiquity Press.

**OPEN ACCESS**