

C H A P T E R O N E

Bad Cameralists and Disordered Police States

It should be crystal clear, then, that cameralism is nothing more than the science of filling the Kammer with as much money and cash value as the needs of the lord demand. The cameralist, therefore, is a person who procures these proceeds for the Kammer.

—[Maria Machiavel], *Der volkommene Kameraliste* (1764)

They strangled him in a great iron cage—Jew Süss, bloodsucker of the people. Carl Alexander, the Catholic Duke of Württemberg, was dead; now the people were rid of his financier, Joseph Süss Oppenheimer. On his execution day, 4 February 1738, the shops were closed, weddings were delayed, and twelve thousand people lined the streets of Stuttgart, drinking and celebrating. Twelve hundred militia guarded the marketplace, another six hundred surrounded the execution ground, and six hundred more lay in reserve. Dozens of locksmiths and carpenters worked for days to build the killing machine, which featured a scarlet-red cage hanging high above the huge iron gallows. It was an elaborate spectacle. After strangling Süss in the cage, the hangmen hoisted his body up by the neck, so that the people could see it. The corpse, dressed in Süss's signature scarlet red jacket, dangled there, forty feet above the ground—on the tallest gallows in the Holy Roman Empire—as a reminder and a symbol. The body hung there, high above Stuttgart, for six years.¹

Süss has become a prominent emblem of the anti-Semitism that raged through early modern Germany.² But Süss Oppenheimer was not just any Jew. He was privy finance councillor for a Catholic Duke in a Protestant land, where he introduced controversial measures for collecting the state revenue.

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Süss helped fix the sovereign finances, and he enraged the estates of Württemberg in the process. After his death, Süss became a symbol of the bad fiscal official—robber of the people, creature of the prince, embezzler of state funds, Court Jew.

I am not interested in the usual questions. Was Süss guilty? Was he innocent? What is certain is that his case resonated through the courts and coffee shops of the empire for decades. People talked about it; people wrote about it. And though his case was remarkable, it was not the only one. Other prominent ministers and officials, like Saxony’s Count Heinrich von Brühl or Hessen-Kassel’s Wolfgang Günther, were long the stuff of satire and legend, flesh-and-blood symbols of the “faithless servant” or “bad official.” There was a whole literature devoted to corrupt officials—bad leaseholders, crooked excise officers, rotten ministers—and though one often spoke about dishonest officials in general, figures like Süss added life and specificity to abstract categories.

Historians, of course, use categories to organize and arrange the motley past. It is what we do. Sometimes we use the language and concepts of the past to arrange our histories, hoping to avoid the myriad traps of anachronism. But it is not that easy, because we inherit words stripped of their symbolic resonances, phrases emptied of specificity and meaning; and yet, we also inherit language that has been reconstructed and remade over time, tailored to fit the needs of changing circumstances. It is a mess.

Twenty-five years after Süss was executed in Stuttgart, an anonymous satirist suggested that his case should serve as a lesson to “cameralists.” Writing under the pseudonym Maria Machiavel, the author urged caution. After cheating and bilking the people, cameralists like Süss could not rely on the protection of lords and princes. Careless officials would taste the vengeance of the land. “The Finance Councilor Süs [sic], a martyr of the Württemberg *Kammer*,” explained Machiavel, “can serve as an example.”³

Sometimes, things don’t make sense. You encounter a trace of the past—a document, a case, a pamphlet—that seems to contradict the terms of the present. This is such a case. Today cameralists are mostly regarded as the propagators of an economic theory called *cameralism*. A quick review of the secondary literature reveals that cameralists were writers and theorists, and that they produced a body of literature that came to be known as the *cameral sciences*. But if cameralists were just early modern economic theorists and writers, what can they possibly have to do with Süss Oppenheimer, martyr of the *Kammer*? That is my question.

Palgrave’s *Dictionary of Economics* defines cameralism as “a version of mer-

cantilism, taught and practiced in the German principalities (*Kleinstaaten*) in the 17th and 18th centuries.”⁴ Cameralists were its propagators. Like many definitions, this one seems relatively straightforward and unobjectionable until you think about it. We have, on the one hand, something that can be taught, a doctrine; we have, on the other hand, something that is done, a practice. It remains unclear how, or whether, the doctrine and the practice are related. We should not blame the messenger. The article merely reflects the latent tensions of a deeply divided historiography.⁵ At the heart of the problem lie unresolved issues of science and practice, and the essential question is simply this: What relationship did the cameral sciences bear to administrative practice in the fiscal bureaus and collegia of the Holy Roman Empire? Some have argued that the cameral sciences mirrored administrative practice in the bureaus; others have denied any relationship between the two.⁶

Albion Small’s 1909 work, *The Cameralists*, broke with those who had treated the cameral sciences as an early modern economic doctrine.⁷ In his opinion historians of economics like Wilhelm Roscher had been guilty of gross anachronism, imposing their nineteenth-century categories and expectations on the early modern map of knowledge. “Cameralism was an administrative technology,” he insisted. “It was not an inquiry into the abstract principles of wealth, in the Smithian sense.”⁸ According to Small, “the cameralists were not primarily economists. They were primarily political scientists.”⁹ He complained that Roscher had completely ignored the context of early modern administration, thereby neglecting the main import of the cameralist literature. The point, that is, was not economic theory but rather how to ensure a regular supply of money for the prince. The cameralists, therefore, were both writers and administrators, and their works ought to be understood as a kind of how-to literature for aspiring bureaucrats. Small’s thesis was endorsed and elaborated by Kurt Zielenziger a few years later, in 1914. Like Small, Zielenziger insisted that the context of fiscal administration was absolutely central to the cameralist literature.¹⁰ The work of Small and Zielenziger would dominate scholarly debate on the subject for decades to come.¹¹

In the years before World War I, the fight over cameralism was a fight over disciplinary authority, as sociology sought to limit the jurisdiction of economics over political and social phenomena.¹² At issue was disciplinary identity: to whom did the cameralists belong? For Small, the answer was clear: they were not economists, but men with a normative vision of good government and the good society.

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The cameralists of the books, as distinguished from the cameralists of the bureaus, although the former class was usually recruited from the latter, were the men who worked out for publication, and especially for pedagogical purposes, the system of procedure in accordance with which German governments were supposed to perform their tasks. As a rule these men were employed in administrative positions of some sort, and spoke to a certain extent from experience. They were not mere academic theorists.¹³

Zielenziger too drew a distinction between the “cameralists of the bureaus” and the “cameralists of the books.” The former he called “fiscalists,” and the latter “cameralists proper.”¹⁴ Scientific cameralism, he argued, had arrived only after 1727, with the establishment of academic chairs in the subject at Prussian universities in Halle and Frankfurt an der Oder.¹⁵ The cameralists, in other words, were not misguided economic theorists; they were the writer-administrators and academics who had provided a blueprint for governance in early modern Germany.

In his 1988 book, *Governing Economy*, Keith Tribe fundamentally shifted the terms of this old debate. Drawing on a wealth of published material, he broke decisively with the tradition established by Small and Zielenziger, separating cameralists entirely from the context of state administration. Defining cameralism as “a university science” and placing great weight on the context and practice of university instruction, Tribe divorced cameralism from administrative practice in the Kammer. He claimed, for example, that “after reading several hundred of these texts, I am none the wiser about the organization of an eighteenth-century domain office, the relevant spheres of responsibility, or the proper conduct of account-books.” The context of pedagogy, he argued, was much more important. “The two prime influences on these texts were the actual teaching situation and the Wolffian philosophy which informed their style and was itself very largely a product of pedagogic practice.”¹⁶ Of paramount importance, then, were the “discursive conditions” under which the texts were produced. In other words, Wolffian philosophy and the seminar rooms of German universities provided the proper contexts for understanding the cameralist literature. Tribe’s approach represented a radical departure from existing scholarship on the subject, for he treated cameralism as a self-contained academic discourse and separated cameralists completely from the context of the Kammer.¹⁷

Tribe’s work posed a direct challenge to a century of scholarship. Were the cameral sciences a reflection of administrative practice in the German princi-

palities? Or was there no necessary connection between these sciences and everyday administration in the Kammer? It is another version of the debate that preoccupied proponents of the cameral sciences and their adversaries two hundred and fifty years ago. At that time, academic cameralists were arguing that the business of the Kammer could be reduced to a science, complete with first principles. Their opponents ridiculed the idea, claiming that academic knowledge had nothing to do with practical administration.

It may be time to rethink *cameralism*, a term defined and redefined to fight the disciplinary battles of the nineteenth and twentieth centuries. Economists, sociologists, political scientists, and even public administrators have tried to claim cameralists as their disciplinary ancestors. But the obsession with disciplinary genealogy has obscured the obvious: cameralists, as members of an early modern professional class, are dead. Because cameralists are extinct, they have no modern disciplinary or professional constituency, so we have tried to absorb them into our existing frameworks of knowledge. We have sliced and diced them until they fit our narratives about state building, political economy, and science. But what would it mean to understand cameralists on their own terms? How did contemporaries speak about them? How did they speak about themselves?

Today the cameralist generally appears in our histories as an appendage of something called “cameralism,” a disembodied collection of economic principles, academic sciences, and bureaucratic practices. But flesh-and-blood cameralists arrived on the scene well before the more abstract “cameral sciences.” Early references to “cameralists,” those who managed the prince’s finances, had mostly negative connotations.¹⁸ In the late seventeenth century these servants of the Kammer, rapacious bleeders of the people, already had a bad reputation, and cameralists thus became associated with archetypal “bad officials” like Süss.¹⁹ The good cameralist, that utopian servant of the Kammer and protagonist of the cameral sciences, driven only by selfless dedication to the happiness of the people, arrived later. He was a literary and academic invention, designed to improve the poor reputation of the Kammer and its officials. In this sense, the cameral sciences functioned as an academic advertisement for the fiscal policies of the empire’s territorial rulers: good publicity.

But there was an alternative to the doctrine of the good cameralist. Satirists, state officials, and academic cameralists wrote constantly about the bad official, that bloodsucker of the commonwealth who, looking only to his own interest, stole money from prince and people. We have long approached the cameral sciences as if they constituted a self-sufficient body of discourse. It

was not so. The sciences of the good cameralist were continually in dialogue with narratives about the bad official.

BAD CAMERALISTS

Wilhelm Freiherr von Schröder wrote some unflattering things about “*Kameralisten*” in his canonical cameralist text *Fürstliche Schatz- und Rentkammer*. Cameralists, he argued, destroyed the foundations of the sovereign income, like those who stripped the forests bare or emptied fish ponds; they were like wild pigs in a garden. Bad cameralists reaped without sowing. There were also economizing cameralists who told the prince how to spend his money. They wanted to limit the money wasted on hunts, performances, mistresses, and other courtly amusements. But princes, explained Schröder, were not like the rest of us; they needed their diversions. Any “prudent and upright cameralist” understood the dangers of excessive economy, which could suffocate a prince’s credit and reputation. Even more damaging, though, was the constant fiscal maneuvering and innovation—imposts, sale of offices, monopolies, and the like. These tricks had made *Kameralisten* universally “hated” and “suspect.”²⁰

The real problem, as Schröder saw it, was that the Kammer had to oversee “not only expenditure, but also the augmentation and improvement of the revenue.” Those cameralists who dealt with expenditures, narrow-minded and penny-pinching, were wholly unsuited to the risky art of creating wealth. Every Kammer needed its bean counters. “But the increase of sovereign income demands completely different people.” So Schröder imagined a second body of fiscal councillors devoted to the augmentation of revenue. This branch of the Kammer “would have to be composed of the most subtle geniuses” culled from all provinces of the land, experienced and learned, capable of discerning good projects from bad. These cameralists, salaried projectors of state, would enjoy large incomes and be answerable only to the prince.²¹

Schröder’s book was a professional project in its own right, an effort to create a position for himself in the emperor’s *Hofkammer*. In fact, many prominent cameralist texts—if not most of them—were strategic and performative; that is, cameralist writings often sought to procure specific advantages, like positions or patents, and they sought to present the author as a good official, the right kind of cameralist. Canonical cameralist authors, from Veit Ludwig von Seckendorff and Johann Joachim Becher to Johann von Justi, secured specific positions through the force of their writings. They argued everywhere

and always for employing learned reformers—people like themselves—as state officials.

Becher also wrote about “*Cameralisten*.²² “The whole world,” he reported in 1668, “complains that cameralists cheat their lords.” Moreover, “the old song that cameralists pay nobody, collect a lot, and keep most of it for themselves,” made it clear what people thought about cameralists. For Becher the problem was rooted in the four great enemies of the Kammer: “ignorance, indolence, disorder, and dishonesty.”²³ One needed knowledgeable and experienced cameralists to combat ignorance. Like every art or science, Becher explained, the fiscal system (*Cameral-Wesen*) had its own “principles, foundations, and axioms,” which had to be learned in theory *and* in practice. Skilled cameralists needed knowledge about many things—agriculture, architecture, minting and mining, surveying, water wheels, cattle-breeding, and the law. The good cameralist did not merely procure money for his lord; rather, he managed the finances in a way that served the true interests of the prince. Indolence, the second enemy of the Kammer, could be combated only through constant vigilance. Visitations, audits, and fiscal inquisitions would help to ensure industriousness. Disorder, on the other hand, was a more systematic and insidious evil, revealing itself in everything from cluttered archives to untidy account books. Creeping disorder, the nemesis of accountability, made it impossible to police the Kammer. There could be no order without good manuals, registers, and inventories.

Most dangerous of all, however, were dishonesty and faithlessness. Cameralists, with their proximity to the prince and his treasure, had ample opportunity to enrich themselves at the expense of sovereign and people. Once in positions of power, bad cameralists could act with near impunity, bribing or threatening underlings, making alliances, and hatching schemes. It was important, therefore, to choose one’s cameralists carefully. But finding good cameralists was no easy matter. They might be rich without being clever, clever without being honest, or learned without being reasonable.

Becher proposed a solution. By separating the various functions of the Kammer into discrete councils or bureaus, one could create a fiscal machinery largely impervious to the vicissitudes of ignorance, indolence, disorder, and dishonesty. One bureau would manage the prince’s capital, another the income, a third the expenditures, and a fourth the examination of claims and demands. Finally, there would be a “*Fiscal-Cammer*” dedicated to the increase of revenues. In short, Becher proposed to banish disorder by restricting communication. If one could make behavior transparent, like a good book of accounts, perhaps the well-ordered Kammer was within reach.²⁴

Both Becher and Schröder acknowledged the problem of corruption in the Kammer and suggested ways to improve the situation. It was precisely in this context that they discussed “cameralists.” If one could train or recruit better cameralists—less ignorant, more industrious, less haphazard, and more honest officials—or if one could find a way to discipline them, then the sovereign revenue would benefit. It was, Becher argued, *the* most important thing: without ready money, the prince had no authority, and without authority, the people would have neither security nor justice.

The specter of the bad cameralist haunted the cameral sciences throughout the eighteenth century as well, even as the new profession established itself at universities and academies after 1727. Johann Heinrich Gottlob von Justi, the most successful propagator of these new academic sciences, wrote and lectured about cameralist identity in Vienna and Göttingen, and he modeled it too. Justi, who gave himself a noble title, came blowing into Göttingen brandishing a title: Mining Councillor (*Bergrath*) von Justi. Upon arrival, he secured himself another title: chief police commissioner (*Oberpoliceycommissar*). Once in Göttingen, Justi worked tirelessly to protect his honor and his titles in numerous fights with the locals.²⁵ The chief police commissioner also carried this attitude into Göttingen’s lecture rooms. Promising to avoid the dry, pedantic, Wolffian stuff served up at most universities, he proposed something more tasteful and gallant. “I have employed a special teaching style in my courses,” he explained. Instead of reading from a textbook for the whole period, he lectured for only half an hour. “Then I got down from my lectern and, standing together with my listeners, I spent the rest of the hour in free and sociable conversation about the lecture material.” In this way Justi tried to replicate polite court culture in the classroom. The pedantic professor, so reviled and ridiculed by ministers and state servants, would be replaced by the gallant scholar who could offer something useful and palatable to his students. In short, Justi hoped to infuse the cameral sciences with the grace and style of the princely court.²⁶

Justi’s classroom lectures and academic writings were at the same time professional projects. Where Schröder had hoped to create a special council of fiscal geniuses in the Kammer and to secure himself a position in it, Justi proposed an entirely new “faculty of œconomic and cameral sciences.” Cameralists would join theologians, physicians, and jurists as a new breed of university-trained professional. In addition to lecturing, they would offer advice about state projects and initiatives, much like Schröder’s geniuses of the Kammer. They would train good cameralists for the forests, mines, domain offices, and treasuries of the empire.²⁷

But academic cameralists like Justi, purporting to offer public lectures about the prince's most intimate affairs, were in a precarious position. They were the public face of secret things, presenting the fiscal-police state as it ought to be. Good cameralists, the mythical officials of this well-ordered police state, collected revenue only from legitimate sources, without infringing on the rights and privileges of the estates or the people. Academic cameralists like Justi would teach "future cameralists" how to be good cameralists. Because good cameralists collected revenue only from the prince's own possessions and ordinary revenues, lectures focused on the regalian rights and sovereign possessions—mines, forests, and domain lands; because good cameralists collected taxes willingly contributed by the estates and the people, lectures would focus on how to collect revenue without overburdening the populace; and because the prince could only increase his revenue by increasing the wealth of the land, lectures would demonstrate how to improve existing sources of revenue and find new ones, according to the dictates of "good police."²⁸ To serve the good cameralists of the future, then, academic cameralists promised to reduce the seemingly haphazard practices of the Kammer to a science. They would enlist natural philosophy and natural history in the service of "good economy" and secure the foundations of the police state with the latest philosophical principles.

But good cameralists had a bad reputation. Skeptics and satirists suggested that academic cameralists like Justi—the writers, professors, and theorists of cameral sciences—were either incompetent or dishonest. Some even suggested that a science of the Kammer was impossible. Cameralists were simply artisans who learned their jobs by routine and memorization, like shoemakers or carpenters. There were also those who saw something more sinister in the cameral sciences, which they regarded as propaganda for finance ministers determined to fleece the people. These skeptical and critical voices have been silenced in the secondary literature on cameralism, which mostly reflects and analyzes the well-policed reveries of academic cameralists. This may explain why it often feels like one side of a conversation. We have inherited the utopia without the dystopia, the ideology without the criticism, the good cameralist without the bad cameralist.

Broadly speaking there were two sorts of attacks on the cameral sciences. Some critics ridiculed academic cameralism as "impractical," arguing that it was of no use to anybody. Others saw something more cynical in all the talk about general welfare, paternal princes, and good police. For them, the cameral sciences served the treasury and *not* the interests of the people; this implied, in turn, that the interests of the prince were different from those of

his subjects. It was explosive stuff, and those who dared to write it had to hide behind satire and pseudonyms.

“Maria Machiavel,” whose 1764 work *Der volkommene Kameraliste* attacked cameralists and their sciences, was one of these pseudonymous satirists.²⁹ “My ancestor wrote practically,” explained the author; “his great opponent refutes him theoretically.” This “great opponent” was Frederick the Great, whose *Anti-Machiavel* (1740) had directly attacked Machiavelli’s *The Prince*, arguing that a king’s true interest was the welfare of his people.³⁰ “Our cameralist writings are of the same kind,” he continued. “They teach theory; I show practice.”³¹ The primary target of Machiavel’s satire, however, was not Frederick II, but Justi. “What is cameralism [*das Kamerale*]?” asked the author. “Is it a science? Is it an art? Wherein consists the art or science of the same?” he asked, mimicking the preface to Justi’s *Staatswirthschaft*. “Should I give the explanation that one finds in the cameralist writings?” Machiavel continued. “Everyone knows it, and everyone knows that it’s not right.”³²

The science of the Kammer was a chimera, Machiavel went on to explain. Certain speculative types, mostly professors, claimed that cameralism was a true science with its own unshakeable foundations and principles; they hoped to embarrass practicing cameralists, who conducted the business of the Kammer mechanically. But did anyone really believe that cameralism was like theology or philosophy? “Who learns its first principles? Who teaches them? And how necessary is it in order to become a good cameralist? Not any more necessary than it is for learning a trade. One only has to know the sources from which to draw money; one only has to know a few formulas.” Cameralism, the business of the Kammer, was a mechanical art, demanding only memory and repetition. The cameral sciences were a sham.³³

Experience, continued Machiavel, clearly demonstrated that skilled cameralists were more like shoemakers than philosophers. “One can see that pure coincidence is enough to make the most perfect cameralist out of a scribe, cook, hunter, etc. without any prior study.” There were plenty of examples. “A. was the court fisherman. His skill at fishing gave him access to the forest office; it wasn’t long before he was in the *Kammer* fishing for money, instead of in the streams catching fish.” In this way, cooks, pages, messengers, and other subalterns had insinuated themselves into the Kammer.

Every prince, he explained, preferred clever schemers to scholars of economy and good police. Princes needed their cameralists to find money. The job description was simple: meet the financial needs of the ruler. Nothing more. All the talk about good budgeting and economy was so much bunk. Did anyone really believe that the servant should scold the master? Could anyone be

stupid enough to tell a prince how to spend his money, or how to economize? Questions like these were not for cameralists, but for moral philosophers, and “we do not want to dwell on this gloomy and sad doctrine, because it is so hated at most courts and *Kammern*, and it cannot be applied.”

According to Machiavel, the prince’s Kammer had three main potential sources of revenue: (1) the people; (2) the regalia of the sovereign (like special mineral and forest rights); and (3) the domain lands. Though textbook cameralists liked to focus on the regalia and domains, “these are usually very dry.” Instead, every skilled cameralist knew that one had to invent extraordinary devices for collecting money, because the ordinary revenues were always insufficient. “One must treat the subject like a sponge.”³⁴

For Machiavel, the well-ordered and beneficent police state was a fantasy. “No one really believes,” he explained, “that the sovereign’s main concern is the welfare of his subjects.”³⁵ The territorial princes of the empire had been trampling on the traditional rights of their subjects for decades, a trend that had climaxed during the recently concluded Seven Years’ War (1756–1763). Cameralists were the experts at deception, constantly developing new techniques to exploit the people. Though some stubborn souls in Germany and Italy insisted on their ancient rights and freedoms, the wise cameralist could always invent clever techniques to get around them.

He must work very quietly in these matters. He must be like a miner who works so secretly that one is unaware of the subterranean fortifications until it is too late, so that the people cannot hinder and destroy them. In short, he has to extract a little here and a little there under all kinds of artful and sweet-sounding pretenses. The excise, monopolies, fines, stamped papers, surveying, and a hundred more things like this offer him objects upon which he can exercise and sharpen his wit and inventiveness.³⁶

Within this secret world of fiscal inventiveness and pretense, academics had their own special role as propagandists for the fiscal-police state. Masquerading as friends of the people, they justified the rapaciousness of princes. There were many ways for a cameralist to “enrich the *Kammer* under cover of the general good.”³⁷

Machiavel’s satire may have been funny, but it was deadly serious. Cameral science was a dishonest enterprise. For all their blustering about the common good, cameralists were creatures of the prince; for all their treatises about sustainable forests and happy peasants, cameralists earned their pay as public

relations men for the sovereign. How, after all, could one have an honest public literature about the most secret affairs of the king? Impossible. As the public voice of the fiscal-police state, the academic cameralist had to sell the policies of his sovereign. That was his real job.

Anonymous satirists, however, were not the only ones to obsess over bad fiscal officials. Johann von Justi's books are filled with admonitions about the importance of integrity and the dangers posed by dishonest officials.³⁸ He also published a stinging criticism of Count Heinrich von Brühl, prime minister to the elector of Saxony, Frederick August I, sometime king of Poland.³⁹ The book was very successful, appearing in English translation during his lifetime. Justi's treatment, which immediately became the standard, has defined Brühl's administration ever since.⁴⁰ The count, it argued, had single-handedly bankrupted Saxony, the empire's most industrious and bountiful territory. Starting as a lowly page, Brühl had managed to secure the favor of August the Strong. Soon he showed a gift for raising money. He was, argued Justi, a ruthless "bloodsucker," a creature of the elector, and a self-interested embezzler of public moneys.⁴¹ He was, in other words, the archetypal bad cameralist.

Among Brühl's many crimes, argued Justi, were capital offenses. "It is a standing maxim, allowed by all civilians," he explained, "that the domains of electorates and principalities cannot be legally alienated." And yet this was precisely what Brühl had done, taking some of the elector's domains into his possession, thereby breaking his oath as president of the treasury. Moreover, Justi made it clear that Brühl was a *type*: the "regent-minister." He was the "grand-vizier" of Saxony, oppressing the land like an Ottoman despot and trampling on the rights and liberties of the people. Perhaps most important, Brühl was uneducated. He had risen to his position through intrigue, luck and flattery. Brühl's case, though dramatic, was by no means unique. "Believe me," continued Justi, "I have seen ministers of commerce unacquainted with the very first rudiments of trade; I have known a president of mines who did not know common lead ore; ministers of finances without any notion about the purpose of the financial system."⁴²

Justi's attack on Brühl can be read as a companion piece to his earlier *Staatswirthschaft*, whose preface included an extended pitch for academically trained cameralists. Justi might well have been referring to Brühl, for example, when he wrote that "in various lands those who now hold the most prominent state offices were once lackeys, runners, scribes, common hunters, small-time collectors, and the like." This in turn had led to disorder and corruption, because the practical cameralist lacked "a philosophical head, the accompanying insight into the whole, and the gift of coherence and good

categories.”⁴³ In fact, Justi suggested that science (*Wissenschaft*) itself might protect against the favoritism and corruption of the courts.⁴⁴ “In general,” he explained, “those cameralists who have merely been reared in the affairs of state almost all share the failing that they are too much beholden to the interest of their lord.”⁴⁵ Seeking only to please the prince, practical cameralists neglected his real interest, thereby sacrificing the welfare of the land and the happiness of the people. Universal cameralists, armed with coherent axioms and well-ordered principles, would make no such mistakes. The cameral sciences, and the universal cameralists who had mastered them, would serve the true interests of people and prince. That was the cameralist dream, a dream that derived its power from the cameralist nightmare of fraud, corruption, and disorder.

THE DISORDERED POLICE STATE

Historians like to have their epiphanies in archives and old libraries. Some people make fun of this. How naïve, they say, to imagine that truth waits in some fascicle or book, waiting to be discovered; how silly to fetishize the archive. They are not altogether wrong. Even those of us who do not believe that truth sits on the shelf, waiting to be discovered, sometimes act as if it does. More often than not, though, archival finds confirm what we already know. That does not make them any less valuable.

I had one such revelation in a seventeenth-century palace, a massive baroque building erected by Ernst the Pious after the Thirty Years’ War. There, in the old library, I opened an obscure, anonymously authored, and seemingly innocuous book about excise taxes, and out fluttered a letter. Addressed to Prince Friedrich II of Sachsen-Gotha, and dated 7 April 1717, the letter had been sent from Halle by someone named Happe.⁴⁶ “Serene Duke, graciously reigning Prince and Lord,” it began, “if one wants to see the model of a God-fearing, upright, and perfect prince, who loves all his subjects like his own children, and who works gladly for their perpetual welfare and increase, then it is surely your Serene Highness.” Happe, who was sending his book along to Prince Friedrich, marked “certain important passages, where they begin and end, with horizontal lines,” so that the prince could go through them in “half an hour.” Flipping through the book that day, I indeed found little dashes penciled in the margins. Happe, it appears, wanted to highlight the interconnected problems of fraud, useless ordinances, and faithless officials. He also wanted a job.⁴⁷

The plague, Happe claimed, had been mere child’s play compared to the

onslaught of police ordinances, edicts, statutes, and orders issuing from the many chanceries, chambers and councils of the Holy Roman Empire. All remedies seemed powerless to stop the madness, and no “state physician” had yet found a cure. The ordinances published during the last generation alone, Happe continued, could fill St. Peter’s Basilica in Rome, and things seemed to be deteriorating by the day. “Hasn’t it constantly gotten worse and more vexing from day to day? Haven’t all these measures enjoyed as little respect and produced as little as empty paper, with nothing written upon it? One has treated them like bits of chaff or worthless slags.” Happe considered the situation serious enough to merit radical therapy. Like a poisonous weed, the existing system, a system based on lies, had to be extirpated. Instead of publishing more edicts and ordinances, which nobody observed anyway, it was time to think about enforcement. Happe imagined himself an inventor-entrepreneur of state finance, a Leibniz of the treasury, who would engineer a better system. And he had the “machine” to do it.

Most palaces, he explained, had empty rooms and apartments that could be used to house all the meetings of the prince’s various councils and colleges—the chancery, the fiscal chamber (*Kammer*), and the secret council (*Geheimer Rat*), among others. More important, the building could be configured for surveillance. A network of tunnels leading to a series of cabinets, or “loges,” would allow the prince furtively to watch his officials. In each cabinet, the windows would be covered by “very fine lattices, screens and the like, so that the person sitting in the loge, while seeing and hearing what happened and what was said in the chamber, could not himself be seen.” Happe imagined cabinets like these in every room, so that the prince could observe the business of state whenever and wherever he pleased. He might even “write, read, eat and drink” in his box, where he would “hear and see everything that was happening there, and no person would know whether or not he was in the loge.”

Happe claimed that his machine would “instill great fear in the prince’s servants, since they would at all times have to worry that he was sitting in his cabinet.” It would benefit the whole land. “There would be such industriousness, order and loyalty!” The invention would work whether or not the prince was observing, since his officials and subjects “would have more fear of the empty cabinet, or loge, than they once had of the prince himself.” Moreover, Happe thought that his invention would spill out beyond the palace, into the streets and structures of territorial towns and cities. Every minister, director, nobleman, state official, collector, merchant, banker, artisan, farmer, or burgher could make use of the same principle. Everyone would have the sense of

being watched. “All work will be done more honestly and industriously. *Many millions less will be stolen, or can be stolen, than up until now.*”⁴⁸ As if to drive home the threat of constant surveillance, Happe suggested that the doors of the palace be emblazoned with a motto: “God sees and hears everything; the emperor, king or prince [sees and hears] as often as he wants.”

There are of course echoes—strong echoes—of Bentham and Foucault in all of this, but they are the echoes of the present, not the past. Happe preceded Bentham by almost a century, and though the similarities between them are undeniable, the differences may be more instructive. I have no evidence, for example, that Happe’s loge was ever built or that any prince even bothered to read his book. Nor did his panoptical dream aim to discipline prisoners; it was a vision for monitoring fiscal officials. But like many other contemporary projects and plans, this one has a whiff of desperation about it. Impoverished scholars and academics, in search of patronage and preferment, were especially prone to construct elaborate visions of control and order. It would be a mistake to take them too seriously.

Happe’s panoptical vision may be less significant than his claims about the police ordinances, which undergird the historiographical foundations of the “well-ordered police state.” Ever since Marc Raeff used the phrase in 1975, it has enjoyed a robust afterlife in English-language books and journals.⁴⁹ Raeff argued that “within the constricted framework of the middling and petty states of Germany” the mania for regulation “easily led to the tyrannical control and supervision of every facet of public and economic life.” Relying on the *Landes- und Polizeiordnungen*—statutes, orders, edicts, police ordinances, and the like—as evidence, Raeff argued that “cameralist police and mercantilist economic policies” had successfully created modern, resource-maximizing societies in the principalities of the Holy Roman Empire.⁵⁰ It was a powerfully persuasive and original argument, one that shifted the locus of modernity from eighteenth-century Paris to seventeenth-century Germany. In making it, Raeff assumed that these ordinances (in contrast to “theoretical writings, plans and projects”) reflected administrative practice on the ground.⁵¹ In other words, he assumed that they were actually enforced, and that they *shaped* the everyday existence of target populations. Some commentators recognized that this assumption was open to debate, as did Raeff himself. Writing in 1978, for example, Mack Walker cautioned that Raeff “should be careful not to assume too close a relation between doctrine or legislation and material effect: but there is vast uncertain room for debate about this.”⁵²

The tremendous success of Raeff’s essay has served to obscure the evidential basis upon which it rests. Over time the “well-ordered police state”

has assumed the patina of established fact, so that it now sometimes appears as a disembodied, stand-alone, self-evident phrase.⁵³ It is also one of those historical constructs that has “jumped species,” finding a welcome in other disciplines like political science and anthropology.⁵⁴ Moreover, the concept has been folded into a growing body of literature that stresses the progressive disciplining of society.⁵⁵

If we are to believe Happe, however, the “well-ordered police state” was nothing more than a paper tiger, existing only in the dreams and delusions of the statute writers. In theory it was a beautiful system; in practice it was an empty promise. Looking back from the present, historians have discerned a rising tide of discipline during the seventeenth and eighteenth centuries; looking forward from the past, Happe and his contemporaries were more likely to sing the anxieties of a recalcitrant and disordered world.

C A M E R A L I S T S A N D T H E K A M M E R

The Kammer, as Happe’s dream of surveillance suggests, was more than some abstract fiscal-juridical concept. It was a physical space, a chamber where fiscal officials met to discuss the most secret affairs of the prince. The character of the Kammer—its size, its business, its members—varied dramatically from territory to territory. Smaller principalities, like Sachsen-Gotha, might have a small Kammer, staffed by a few officials. Others, like Prussia, had elaborate systems of fiscal administration, with a central organ, like the General Directory, and many subsidiary provincial Kammern. By the early eighteenth century most territories in the empire had a Kammer. It might be big or small. It might generate most of its revenue from silver mines, salt, forests, beer, crown lands, or tolls. But in almost every case it was called the Kammer, a chamber where fiscal officials debated important issues and voted on them.⁵⁶ From this central chamber, the Kammer extended its reach outward to the farms, forests, and mines of the periphery. These “ordinary” sources of sovereign revenue constituted the symbolic heart of the Kammer. The good prince of the cameral sciences, unwilling to burden his subjects with oppressive taxes and contributions, knew how to raise enough revenue from his own lands and regalian rights.

The origin of the Kammer as a specialized, collegial body dedicated to administering the sovereign finances has been the subject of considerable debate.⁵⁷ Those towering administrative historians of the late nineteenth and early twentieth centuries, scholars like Eduard Rosenthal and Otto Hintze, largely disregarded the Kammer as they traced the development of the secret

council (*Geheimer Rat*).⁵⁸ Their followers, however, discovered its significance. Melle Klinkenborg identified the Kammer as a key site of fiscal-political direction in Brandenburg.⁵⁹ Gerhard Oestreich and Werner Ohnsorge then argued that Klinkenborg's thesis held true for other German territories as well.⁶⁰ The Kammer, they claimed, had provided a basis for many of the secret councils that arose during the seventeenth and eighteenth centuries. Surveying the literature in 1962, Ulrich Heß argued that a new "secret sphere" of sovereign governance, centering around the princely finances, had evolved in the Kammer during the second half of the sixteenth century.⁶¹ By the seventeenth century most German territories, large and small, had developed Kammern to manage the intimate affairs of princes, dukes, kings, and emperors. By the second half of the seventeenth century, members of the Kammer began to be recognized as a distinct group. People started calling them cameralists.

Every cameralist text looked to the Kammer. All that talk about mines and forests, minerals and manure—usually ignored or passed over in the secondary literature—represented more than some technical or scientific curiosity; it was also a moral gesture designed to demonstrate the attributes of the good cameralist. Every responsible fiscal official, that is, had to know his way around a mine or a barley field, because those were the appropriate "ordinary" sources of revenue for his prince. Later, when "aspiring cameralists" flocked to places like Göttingen and Lautern to hear lectures in the cameral sciences, they were not just studying mercantilist policies and the principles of good police. They were learning how to behave as members of the Kammer. It was not enough to know about budgeting and accounting; one had to be fashionable too.

Insofar as cameralists sought to systematize the daily work of fiscal administration, they faced great obstacles, because the logic of every Kammer was distinct, attuned to the local resources of a particular territory or region. The Holy Roman Empire, with its hundreds of kingdoms, duchies, principalities, and bishoprics, presented a staggering diversity of administrative structures, geography, and economic activities. Accordingly, cameralists filled their books with endless detail about everything from pigs and iron mines to forests and barley fields. This has led commentators to suggest that the cameral sciences were descriptive sciences, models of "practical reasoning" that avoided the utopian thinking of nineteenth-century economics.⁶² There is only one problem: the forests were idealized, and the pigs were utopian—all fat and stall-fed, with good manure.

Cameralists did not just dream about perfect pigs; they also wrote about utopian principalities. Veit Ludwig von Seckendorff's *Teutscher Fürsten Stat* (1656) portrayed the little principality of Sachsen-Gotha as a model state, and

it cast Duke Ernst the Pious in the role of ideal Lutheran prince, a ruler who cared for his subjects as a father cared for his children. Historians have long relied on Seckendorff's *Fürsten Stat* as a kind of ideal type, using it to elucidate the structures of everyday life and social discipline in petty Lutheran principalities.⁶³ The success of Seckendorff's book transformed Sachsen-Gotha into the model principality, complete with compulsory schooling, public health, an orphanage, and lots of moral regulations. Seckendorff had a hand in drafting the police ordinances for Sachsen-Gotha too, and his *Fürsten Stat* looks very much like the regulatory apparatus of well-ordered Gotha.⁶⁴ As if to reinforce the point, a statue of pious Ernst, holding a bible, still greets tourists in front of Schloss Friedenstein, the massive palace he built in Gotha after coming to power in 1640. When I visited Friedenstein, I wondered about something else: how did he pay for it all?

The short answer is wood and taxes. Soon after taking over Sachsen-Gotha, the duke established a Kammer to oversee all income and expenses. During the first decade of his rule, Ernst's new Kammer quadrupled the revenue.⁶⁵ Despite huge debts from the Thirty Years' War, Ernst moved ahead aggressively with construction of his new palace. By 1654 it was nearly completed.⁶⁶ During the early years of his rule, Duke Ernst and his officials in the Kammer behaved just like bad cameralists, looking everywhere for new sources of income. The Kammer imposed an excise tax on grain in Gotha during 1644. Not only were excise taxes highly unorthodox in Ernestine Saxony, but it was especially ruthless to impose a grain tax on hungry people during wartime. And it did not work. Farmers took their grain to "foreign" mills (i.e., those in nearby principalities) to avoid the tax. The Kammer responded by imposing a tax on all grain and flour brought into the city, which made things even worse for its residents. When members of the town council complained that the grain and flour excise was ruining Gotha, the Kammer ignored them. Ironically, Ernst's Kammer proved incapable of enforcing its nasty excise. The duchy was just too small.⁶⁷

Though Gotha's Kammer failed to fleece the people with new taxes and tolls, it had more luck in the duke's forests. Ernst had inherited the most valuable parts of the *Thüringerwald*, large tracts of thickly forested hillsides and valleys that stretched through the storied districts of Tenneberg, Reinhardtsbrunn, and Georgenthal. Pious Ernst liked to climb through his forests to the Inselsberg, the highest mountain in Thüringen, and lounge around in his garden house at the top. Young Seckendorff—he was only twenty-three years old—was good at composing cheesy poetry to flatter the duke, who

was just like the mountain, mild and omniscient.⁶⁸ Braunschweig-Lüneburg's Brocken was higher, and Brandenburg Prussia was much bigger, but on his little mountain Ernst could imagine himself king of the world. After hearing Seckendorff's poetry about him, the duke must have realized that the young man could make anything sound good, even a sad, small, poor, disordered territory like his.

The Kammer, which oversaw management of the duchy's forests, did not have the same luxury. It was constantly on the prowl for new ways to make money. With the rising demand for wood after 1650, and with closer oversight, Ernst's forest officials were able to squeeze more revenue out of his "children." Other projects, however, went very wrong. When the Kammer tried to develop a market in Bremen and Amsterdam for its "mast trees," it badly miscalculated what they were worth.⁶⁹ The Kammer also issued an elaborate "forest ordinance" in 1644 that aimed to protect "the land's treasure" for future use. The real purpose of the thing, of course, was to secure more revenue for the duke's treasury by prohibiting various kinds of customary use. This failed too. Despite rising revenues, the duke's forest officials were never able to transform the rollicking *Thüringerwald* into the well-policed forest of cameralist dreams.⁷⁰ Seckendorff knew about all of this, because he was in charge of Gotha's Kammer.⁷¹ His *Teutscher Fürsten Stat*, the seminal cameralist text, was also a staggeringly successful piece of propaganda.⁷²

When Seckendorff resigned his post eight years later, in 1664, he penned an extraordinary indictment of Duke Ernst and his government: "Causes which move me to leave the court, even though it has brought me temporary honor and pleasure, and even though the change will do not a little harm and inconvenience to my finances." The document was never published, and it sat there, in a family archive, for almost three hundred years before anybody noticed it. Seckendorff hated his responsibilities in the Kammer and the secret council, which "always give one occasion for anger, dissimulation and other troubles, which very much hamper Christian love and contemplation."⁷³ Some of it was the workload, which he found overwhelming. The real problem, however, was the duke and the lying. Pious Ernst was a screamer who regularly abused his most important officials and ignored their advice. He mistrusted his closest advisors, and he underpaid them. The constant suspicion and complete disorder that plagued daily business at Ernst's court had quite literally made Seckendorff sick. It had gotten so bad that he could no longer help "his honest servants and friends." Adding insult to injury, Seckendorff even disapproved of how Ernst was raising his *own* children, the future princes of

Sachsen-Gotha-Altenburg.⁷⁴ Ernst's Gotha, the mythical model police state, was a bad place for good cameralists.⁷⁵

THINGS TO COME

In 1909 Albion Small argued that Seckendorff, who had “systematized Duke Ernst’s scheme of life” and “composed Ernst’s practices as a manager into a didactic treatise,” was the “Adam Smith of cameralism.”⁷⁶ Small’s thesis has lived a healthy afterlife in the secondary literature. Despite Keith Tribe’s lonely dissenting voice, cameralism survives in our historiography as a *practical* science that mirrored fiscal practice. Seckendorff’s *Fürsten Stat*, built on the well-policed rock of Pious Ernst’s mythical Gotha, serves as ground zero for this line of argument; it is, as I have tried to show, a very unstable rock.

If Seckendorff has functioned as the bedrock of our cameralist narratives, then Johann von Justi has been their keystone. It was Justi, argued Small, who shaped “cameralistic technology” into a system of theory. Given that Seckendorff was the Adam Smith of cameralism, he continued, “we may carry out the conceit by calling Justi the John Stuart Mill of the movement.”⁷⁷ Small, who considered Justi the quintessential cameralist, originally planned to present “Justi alone as the type of cameralism in general.”⁷⁸ The historiography of cameralism has developed considerably during the last century, but Small’s claim still holds today: Johann von Justi appears almost everywhere as the essential and typical representative of German cameralism.⁷⁹

This book takes aim at Seckendorff and Justi, bedrock and keystone of cameralist narratives. By rethinking their published works in the context of their professional ambitions, I want to suggest a different narrative about the cameral sciences. I hope to show that we cannot read these texts in isolation, as a self-contained body of literature that makes sense on its own. I hope to demonstrate that the cameral sciences were intimately and ineluctably tied to the sciences of nature, especially chemistry and mineralogy. I hope to convince you that these “practical sciences” were, in their way, just as idealistic and romantic as Novalis’s blue flower or Young Werther’s yellow vest. Like the romantic heroes of a later age, Justi’s good cameralists longed for better worlds—clean streets, healthy cattle, happy people, beneficent nature—in the face of disorder and poverty. These cameralist dreams often arose out of everyday frustration with silver mines and fulling mills, model farms and œconomic gardens, useless professors and unruly students.

But this book is not just about cameralists and the Kammer. It is also about the fiscal landscapes of the German-speaking lands of the post-Westphalian

Holy Roman Empire. That is a nasty mouthful, and I do not want to repeat it, so please forgive me if I call the thing “Germany.” Contemporaries, including many of those who appear in these pages, referred frequently and unproblematically to *Deutschland*. That does not mean they knew what they were talking about. As Rudolf Vierhaus once pointed out, it can be “difficult to ascertain what constituted ‘Germany’ in the seventeenth and eighteenth centuries.”⁸⁰ And the more you think about it, the harder it gets. The empire was a thing without boundaries—not really a state, not entirely “German,” and without clear lines of authority. For nineteenth-century historians, especially Prussian historians, this made it weak, suspect, and undesirable, a thing to be overcome. That may have been true enough for larger states like Prussia and Austria after 1648. But for smaller entities the empire served as a kind of “incubator,” protecting delicate political organisms—ecclesiastical principalities, imperial cities, tiny *Reichsgrafschaften*—that otherwise might have been gobbled up by predatory neighbors.⁸¹ The staggering political and fiscal diversity of the Holy Roman Empire included European powers and tiny principalities, silver states and agricultural territories, large administrative departments and one-man bureaus. “Germany” was a mess.

Enter the cameralists. Following the Peace of Westphalia (1648) many of the larger and middling states of the empire became increasingly independent, developing diplomatic and fiscal policies that ran counter to the interests of the *Reich*. Cameralists usually appear in our histories as the shock troops of such territorial state building; they were supposedly the mouthpieces of state formation, giving voice to the practical problems that faced central European bureaucracies after the Thirty Years’ War.⁸² Cameralists thus assume their role as mirrors of the world, authors whose books reflected the practical experiences of state servants. An unarticulated corollary of this claim suggests that we may use the cameral sciences as evidence of past bureaucratic practice, because they were *descriptive* sciences.⁸³ That is how idealized texts, originally crafted to please powerful people by sketching well-ordered possible worlds, have come down to us as reflections of administrative practice. If the book does anything, I hope it forces a reconsideration of these sources and how we use them.

This is a book about cameralists and the Kammer, about the public discourse of the cameral sciences and the secret discourse of the fiscal chamber. I explore the relationship between those two worlds in the following chapters by pursuing Johann von Justi from the mines near Vienna, through the university town of Göttingen, and into his Prussian prison cell along the Oder River; by tracking Johann Heinrich Jung-Stilling from his model farm in Siegelbach

to the lecture halls in Heidelberg; by following Johann Beckmann from Linnaeus's Uppsala to the economic garden in Göttingen; and by shadowing Veit Ludwig von Seckendorff from Pius Ernst's Kammer to the family estate in Meuselwitz. Our cameralist tour will pass through large kingdoms and small duchies, silver mines and forests, farms and ironworks, lecture halls and woolen manufactories. But though the scenery changes, my purpose remains the same: to interrogate the functions of knowledge in the mines, manufactories, forests, farms, ironworks, academies, and universities of the empire's fiscal-police states.

SCIENCE AND STATE BUILDING

In his seminal 1918 article, "The Crisis of the Tax State," Joseph Schumpeter located the origins of fiscal modernity in the transition from "domain state" to "tax state." By harnessing modernity to taxation, he implied that domain states like Sachsen-Gotha, whose finances relied on crown lands and regalian rights, embodied fiscal backwardness.⁸⁴ The argument was, as Schumpeter admitted, based primarily on Austria and Germany. Some eight decades later it is just those territories—the German and Austrian lands of the seventeenth and eighteenth centuries—that have caused most trouble for the disciples of Schumpeter's model. Prussia, especially, sustained its substantial army and large administration with a fiscal system that looks suspiciously like a streamlined—dare I say modernized?—"domain state."⁸⁵ The rest of the early modern German and Scandinavian lands, usually disregarded in our histories of European state building, also behaved much like modernizing "domain states."⁸⁶ Here too, however, presumed fiscal peculiarity is generally explained away as some kind of retrograde aberration.

But there is another kind of narrative about the rise of the modern fiscal state, one epitomized by James C. Scott's *Seeing Like a State*. For Scott, the "fiscal forests" of eighteenth-century Prussia and Saxony provide the model of modernity, and Prussia's eighteenth-century administrators, who viewed forests "primarily through the lens of revenue needs," begin to seem more like the proto-managers of a multinational timber corporation than the members of a backward fiscal apparatus. Instead of a domain-state backwater, Prussian forests become an archetype for the "simplification, legibility, and manipulation" so characteristic of the modern state.⁸⁷

My intention here is not to challenge the validity of Schumpeter's model.⁸⁸ Nor do I wish to interrogate Scott's picture of forest management. I just want to point out that we have a problem. Maybe the modern state does exhibit a

progressive evolution from domain state to tax state, so that the German and Scandinavian lands did lag behind France and Britain. Or maybe the domain lands of eighteenth-century Saxony and Prussia were at the cutting edge of fiscal modernity. But we cannot have it both ways.

Each approach has its merits. Schumpeter's followers, led by Richard Bonney, have given us a much better sense of the revenue sources of early modern states, demonstrating that, despite certain common features of European state building, the *revenue mix* could vary dramatically from state to state. Some, like England/Britain, relied almost completely on customs duties and excise taxes.⁸⁹ Others, like Prussia and Saxony, got much more of their funding from domain lands, state-run enterprises, and sovereign privileges (e.g., mineral and forest rights). Developmental models of the fiscal state, regardless of their flaws, have thus performed a great service by encouraging the collection, synthesis, and analysis of much data. Other more qualitative accounts of the modern state, like Scott's, have their advantages too. By focusing on certain features of state activity, like "legibility" or standardization, they sometimes unearth moments of modernity in unexpected places, thereby providing a corrective to sweeping developmental narratives.

But different as they are, these conflicting narratives of the modern state all share one essential attribute: they seek the origins of the present in the past. It is possible to imagine a different kind of fiscal-administrative history, one that looks forward instead of back, taking seriously the dreams and ambitions of the state makers and seeking possibilities rather than origins. Such a history might make the "rise of the modern state" seem a little less inevitable and a little less monolithic; it might conjure a time when the models of state building were many and diverse, and when the road to modernity could have passed through any one of them.

If nothing else, such an approach would allow us, we historians of "backward" states, to focus more on what actually happened and less on what failed to happen.⁹⁰ Most existing models of state formation are normative and, despite frequent claims to the contrary, teleological and anachronistic. You know the drill. Start at a given place and time, be it seventeenth-century Holland or twentieth-century America, and ask, how did we get here? These accounts of progressive development imply a correspondingly stagnant world of less successful and less modern alternatives. But backwardness is in the eye of the beholder. Sitting where we do now, able to survey great changes from a distance—the explosive industrialization of the nineteenth century, the transformation of the globe in the twentieth—one is tempted to look back on the relatively quiet lands of the eighteenth century with a kind of patronizing

nostalgia. In a world of integrated financial markets, nuclear weapons, and multinational corporations, it seems clear where things were headed. The narcissistic present forever seeks itself in the past.

This has been especially true of administrative history. It is by now a truism, for example, that the *Acta Borussica*, that remarkable monument to the older school of Prussian historiography, was written as the success story of a self-confident, young German nation.⁹¹ Today's *Acta Borussicas*, the many memoirs of Anglo-American power, are similarly the retrospective accounts of our own "rise."⁹² What gets neglected, of course, is the "losers' history" of state formation. What about those middling and smaller states of the Holy Roman Empire, the Galapagos Islands of state building? If the history of state finance is about progressive models of development, about the relentless march to *us*, perhaps those territories have nothing to offer. But if we approach that history as a possible source of insight about other things, like culture and knowledge, then the neglect seems unwarranted. If, that is, we suspend judgment about the inevitable destiny of Europe's fiscal dodos, replacing our categories of hierarchy with difference, perhaps we can begin to understand what these revenue systems actually produced instead of how they failed.

Among the things that central Europe's fiscal-police states *did* produce was science. Schumpeter himself, in an uncanny premonition of much recent research, explained that "tax brings money and calculating spirit into corners in which they do not dwell as yet, and thus becomes a formative factor in the very organism which has developed it."⁹³ As it happens, historians of science have shown great interest in practices of standardization, quantification, and objectivity, and they have linked those practices to *general* patterns of state building and administration.⁹⁴ There has, however, been much less research into how *specific* fiscal systems produced certain kinds of knowledge. It may be time to ask, for example, why so many of the most prominent figures in German science and literature—Leibniz, Goethe, Novalis, Abraham Gottlob Werner, and Alexander von Humboldt—were seriously involved with mines and mining; or why "scientific forestry" took root in these same places (Saxony, Hannover, and Prussia); or why alchemy and metallurgical chemistry thrived there too; or why "technology" as an academic subject originated in Hannover.⁹⁵ And so on. My point is simply this: the fiscal structure of the German territories, whether backward or not, was a hothouse for certain kinds of knowledge. Silver mining, long a backbone of the state finances in Saxony and Hannover, provided support for a whole array of chemical and earth sciences. State forests and farms provided laboratories for certain kinds of botany and agriculture. German universities and academies, which were also expected to

generate revenue for the state, engaged in a grand eighteenth-century scheme to sell the sciences. In a word, the fiscal logic of the Holy Roman Empire, whether backward or not, was certainly not neutral or universal. It was an extractive logic, attuned to the particularity of local places and populations. It was also a creative logic, producing knowledge even as it yielded revenue.

German cameralists existed at the nexus between science and economic development. They were the preeminent German proponents of the notion that one could promote development through systematic application of the natural and human sciences. In this sense their efforts constitute the perfect laboratory to test claims that “scientific culture” paved the way for early industrialization.⁹⁶ In Joel Mokyr’s formulation, “The Enlightenment in the West is the only intellectual movement in human history that owed its irreversibility to the ability to transform itself into economic growth.”⁹⁷ Reading the optimistic textbooks and pamphlets of cameralists, it would be hard to disagree with that. Newtonians like Johann von Justi relentlessly promoted the sciences as a tool for transforming the backward lands of the Holy Roman Empire.

But maybe we have taken science too seriously. (For historians of science, it is a distinct possibility.) If you look behind the published literature to the daily business of the empire’s many Kammern, it becomes clear that fiscal officials knew how to sell knowledge. Science, like linen or silver, could fill the treasury. In places like Göttingen or Lautern, where there was not much else to offer, knowledge became the biggest regional export product. Professors talked a good game, promising that the latest chemical innovation or financial system could enrich the state. Their livelihoods depended on it. Sometimes, though, they believed their own press clippings, convincing rulers and their ministers to fund ambitious projects. These ventures invariably failed.

This book is not about how knowledge changed the world; it is about how the world changed knowledge. The protagonist of my story is the Kammer, that ravenous fiscal-juridical chamber that devoured everything in its path. History, I am told, is only as good as its sources, and the cameral sciences, which purported to speak publicly about the most secret affairs of the prince, were deeply dishonest. We cannot trust them. And because many of the most important cameral sciences *were* natural sciences, the dishonesty of the Kammer has been inscribed into the literature of science and technology as well. There is no avoiding it.