

§ 5 From the Bureau to Data Protection

The *chancery* is replaced by the *office*. With the switch from the nineteenth to the twentieth century, the organization dispositive shifts from administrative techniques to office technologies. The new reign of the office manifested itself in Bismarck's Reich Chancellery, which was a chancellery in name only. In the 1886 official handbook of the German government, it was already defined as the "Central bureau of the Reich chancellor," charged "with conducting all official exchanges with individual department heads."¹ Just like the Roman *ab epistulis* office, it was responsible for official communications throughout the Reich; hence it was also in charge of the postal and telegraph system. But like all channels and relays, the office remained indifferent to the messages transmitted, with the result that the historically decisive advent of the Weimar Republic hardly affected the internal organization of the chancellery. From its inside perspective, the end of the monarchy in 1919 amounted to no more than a simple distribution problem: According to the memoirs of Arnold Brecht, a former secretary of the Reich Chancellery, it merely became a bit more difficult to distribute incoming letters, because in many cases the secretaries were no longer personally acquainted with the senders.²

Max Weber used the principle of bureaucratic rationality to capture the remarkably smooth way the administration continued to function after 1918. The rationality of the bureaucracy is the *ratio* of the office, which, following the recommendations of 1910, increasingly came to depend on modern means of communication, such as telephones and typewriters. Since the turn of the century, reformers had been trying to introduce these technologies, which were already in use in the private sector, to

public offices. The suggested reforms of 1910 and 1919, however, were only gradually implemented; in part they were included in the Common Rules of Procedure for the Administration (1926) and the Common Rule of Procedure for Higher Reich Offices (1928). The war-induced break in the transmission of tacit administrative knowledge made it necessary to explicitly formulate rules of procedure to replace Bismarck's legendary file marks, which until then seem to have been a sufficient basis for the Reich administration after 1870. In 1912 they were compiled and published for official use (quoted in what follows as *Compilation*). Though it continued to apply these administrative means, the National Socialist regime put an abrupt stop to the suggested reforms before they could be fully realized. There was no sympathy anymore for the principle of municipal self-administration that reformers had inherited from the Stein-Hardenberg reform. Its implementation was forestalled by the centralist and authoritarian elements of the administrative structure, as is evident from Arnold Brecht's description of administrative procedures after 1933: "Ultimately, the reason for the demise of the office reform was the amalgamation of the Reich ministries and the Prussian ministries under Hitler. Given the large preponderance of files in the Prussian ministries, the reform was stopped in its tracks; nobody had the energy to introduce the proposed changes to the Prussian sector of the new combined ministry."³ While this may have spelled the end of the reforms (with the result that all historical accounts dealing with them end in 1933), it did not mark the end of bureaucratic innovation. On the contrary, when it came to the census and subsequent selection of the population, the Nazis made full use of office technologies, such as index cards and the tabbing system (i.e., tabs affixed to identity cards for purposes of classification).⁴

There are very few accounts that reflect this continuity and focus on the administrative aspects of the Nazi policies of colonization, deportation, and extermination. In 1959, Hans Günther Adler, a German writer and expert on National Socialism living in exile in London, analyzed, at the behest of the Munich *Institut für Zeitgeschichte*, the deportation files of the Würzburg Gestapo. The results were published in 1974 as *Der verwaltete Mensch* [Administered man]. The study offers a perspective on the National Socialist regime beyond all ideological analyses. It inquires into administrative efficiency and the practical implementation of legal power. What is lacking, though, is a comprehensive history of administrative techniques that reaches from the modernized administration of the

Weimar Republic and the Nazi administration to the Federal Republic of Germany, highlighting in particular the manufacturers of office technologies as well as the careers of administration experts who were influential in all three time periods. Only Götz Aly and Karl Heinz Roth, in their study *The Nazi Census*, researched precisely these aspects of Nazi selection and extermination politics by dwelling on modern office technologies from the 1920s to the 1980s. The main focus of their work was on population statistics. Their analysis, which in turn was indebted to Raul Hilberg's comprehensive study *The Destruction of the European Jews*, is the point of departure for the following remarks on the normality of the bureaucratic machine.

Reflecting on the sources he used for fifty years, Hilberg himself has drawn attention to the continuity of Nazi bureaucracy: "The whole of the voluminous internal correspondence produced by the bureaucracy . . . conformed to established patterns. It was fashioned in time-honored ways and transmitted through channels hollowed out by generations of functionaries. Formats were adopted. . . . In the creation and distribution of documents, form follows form, and routine perpetuates routine."⁵ To conduct its policies, then, the National Socialist regime relied on the established bureaucratic forms and procedures that it inherited from the administrative reforms of the 1920s, without, however, sharing any of its reformist ideals.

Office Reform around 1920

TELEPHONE, TYPEWRITER, CARBON COPIES

But before these reforms took hold, the Second Reich had to deal with the unstoppable proliferation of files. Bismarck was forced to decree that "henceforth no file may weigh more than two kilos."⁶ Such weight restrictions—which resulted in lighter, though not necessarily fewer, files—were accompanied by selection procedures that had been in effect since the 1830s and were designed to counteract the rapidly growing number of public files. "The registry periodically rids itself of its old files by selling them as scrap paper."⁷ When it comes to processing files, then, chancellery and archive were joined by a third entity: waste paper traders.⁸ These three agencies corresponded to the official designations of the aggregate state of files: "indispensable for ongoing business," "currently not in use

but qualified for further storage," "to be destroyed without further notice." The classification of the files according to these categories was undertaken by the office responsible. To counteract the temptation to consider all clerical work worthy of archival storage, incentives were offered for the destruction of files. If low-ranking officials responsible for sorting out the files and selling them as scrap made a profit, they were entitled to 25 percent of the proceeds. Once files had been cleared for pulping, an official certificate attesting to their complete annihilation precluded any abuse of the documents. The fact that discarded files gave birth to new files dealing with the discarded ones is part of the paradox of a "government in writing." Even the "transmutation of records into wastepaper" has to be recorded.⁹ It appears that nothing on file can ever really disappear. It leaves a trace, be it only in the shape of a registered gap. In the 1920s files were so closely linked to their physical destruction that the entry on files in the handbook of the Prussian administration concentrates almost exclusively on this aspect. Strategies for mastering the incessant growth of files ranged from rules determining their selection to instructions geared toward preempting records. The first legally binding contributions were the 1910 Outlines for Simplified Governmental Procedures, which had been worked out by a commission appointed a year earlier. The civil servants' verdict on this reform was short and devastating: the files concerning the 'reduction of paperwork' had reached an alarming size. The only successful part of the reform was the adoption of a neologism: *Weglegesache* (discardable matter). But since a mere term could not make files disappear in the real, the recommendations issued in 1917-19 once again focused on how official paperwork could be minimized. They not only adopted simplification and rationalization techniques that had been imposed by the austere wartime economy, but an efficiency expert imported more effective administrative and organizational means and procedures from the front.

After 1933, the Nazi government made use of the rhetoric of simplification, but it was directed at legally guaranteed procedural matters rather than bureau-technical details. In fact the reform-oriented selection of files for physical destruction was explicitly revoked, since the new emphasis on research into ethnic and racial ancestry had increased the importance of retired records. Records were to be stored and reused rather than destroyed. This tendency to rule with the help of old files—more precisely, with the aid of the population data contained therein—became evident

soon after the Nazis came to power. The first step was to integrate church registries, which contained data on members of the community reaching back several generations, into the ongoing administrative process. These were analyzed by Protestant theology students in order to issue a certificate of racial descent, which since 1935 was a condition for employment in several party and administrative offices.¹⁰

The bureaucratic innovations of the 1920s, which were indebted to no small degree to the technology transfer of the First World War, had already been anticipated by General Field Marshal Alfred von Schlieffen's vision of a fully bureaucratized military. In his essay "War Today," he depicted a future commander-in-chief "in a house with a spacious office, where telegraphs, telephones, and signal apparatus are to hand."¹¹ In *Economy and Society*, Max Weber confirmed Schlieffen's scenario: The "modern higher-ranking officer fights battles from the 'office.'"¹² Postwar offices took over the telephone from the battlefield offices of the First World War. The reformers' hope of curbing governmental file production now focused on this oral medium. Phone calls, however, are prone to further paper trails, not only because announcing the call has to be done in writing, but also because the conversation itself has to be recorded and put on file to verify that it really took place *in mundo*. Weber defined the paradox of orality in writing as the basic rule of bureaucracy: "Administrative acts, decisions, and rules are formulated and recorded in writing, even in cases where oral discussion is the rule or is even mandatory."¹³ In a frequently quoted passage, Weber elaborated this rule of procedure: "The combination of written documents and a continuous operation by officials constitutes the 'office' (Bureau) which is the central focus of all types of modern organized action."¹⁴ In defiance of a "naïve Bakuninism," then, the link between files and officials secures continuity. In the domain of instrumental reason, files become the means for the modern, rationalized exercise of legal power. Governmental acts *must be*—not just *can be*—documented in writing: "To each official action there corresponds the act of putting it on record."¹⁵ Under these circumstances, the proliferation of files was all but inevitable. Constant reminders to curb stylistic exuberance were insufficient. There was a need for a new Stein or Hardenberg, who would resume and update the reforms shelved after 1848. According to a cabinet resolution of January 19, 1917, Bill Drews, one of the last ministers of state appointed during the Second Reich, and president of the Higher Administrative Court and Prussian state official until 1937, was charged

with preparing an administrative reform. Drews, who wrote a short biography of Stein in 1930, introduced his reforms with a promise that echoed pledges made by Stein, namely to "turn dead pieces of machinery into independently thinking individuals working in an official capacity."¹⁶ His measures for discourse reduction, however, were aimed less at the abolition of soulless writing machines than at the ubiquitous deployment of their mechanized descendants. *Typewriters*, not civil servant-subjects, were to be the bearers of postwar reforms.

By the end of the 1920s, typewriters had become standard equipment for governmental agencies. And with them women, who were more likely than men to be trained in stenography, entered the domain of public administration. The civil service had been open to women since 1897, though only to unmarried ones. Women thus had the choice of either becoming or marrying a civil servant. According to a recommendation by Heinrich von Stephan, the postmaster general, the latter was the preferable alternative, given the low wages for single employees. The celibacy clause rested on the assumption that one cannot be married to the state and a state official at the same time—a logic that remained unchanged even when women and typewriters merged into an effective working unit. Typewriters, after all, cannot enter into a nuptial relationship with the state. Secretaries were and still are not eligible for civil servant status; they are restricted to a terminable employment relationship.

The link between typewriter and stenographer brought about the switch from chancery to office, rendering all basic chancery activities obsolete. The act of preparing a draft was replaced by a combination of dictation and shorthand. Likewise, preparing press copies became unnecessary after typewriters were equipped with carbon paper. The latter in fact predated the typewriter, but it was only due to the link with the typewriter that it became a staple of public administration around 1910. Inserted into the machine, it simultaneously created one or more copies of the clean copy. In short, "shorthand notes and typewritten carbon copies supplant the draft"¹⁷ as well as the press copy. Furthermore, the use of forms rendered copies unnecessary. Transcribing and comparing, those "very dull, wearisome and lethargic" tasks (to quote *Bartleby's* employer) became a thing of the past. To introduce machines is to exclude scribes like *Bartleby*. The chancery had already lost some of its material and media-technological power base around 1500, when the act of canceling was supplanted by storing drafts, but with the loss of its principal activities, drafting and

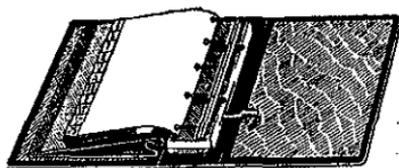
copying, the very institution disappears. Without a draft, there is no cascade of controls, no revision, and no cancellation.

What is filed is no longer a draft but a carbon copy—that is, an identical copy—of the posted document. But once draft and final version no longer differ from each other, once there is nothing in the files that does not also find its way into the world, all hermeneutic enterprises that frolicked in the interpretive space between the various textual stages and delighted in the marginal notes on records are rendered just as obsolete as a historiography that drew its material from these differences. Historians and archivists deplore what administrative reformers acclaim: “The multiplication of texts that already gained momentum in the nineteenth century, and subsequently of course the employment of typewriters as well as the increased use of forms and print of all kind, divests the content of a file of all uniqueness.”¹⁸ The increasing formalization of administration, which since the days of the printing press resulted in the loss of all reference to an original, breaches the last bastion of secrecy, the mystery of files. They forfeit their privileged position in the universe of writing and thus lose their archival and historiographical significance. Archivists do not know where to store the “uniform mass of single-case files,” and above all they do not know why they are storing them for future generations at all.¹⁹

VERTICAL FILES AND PLANS FOR RECORD-KEEPING

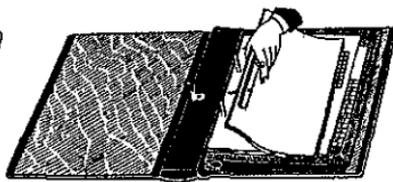
Though not directly involved in the reform debate, Max Weber offered some theoretical observations by reflecting on the degree to which bureaucratization was linked to the emergence of the modern office: “The decisive reason for the advance of bureaucratic organization has always been its purely technical superiority over any other form of organization. . . . All advances of the Prussian administrative organization, for example, have been and will in the future be advances of the bureaucratic . . . principle.”²⁰ The bureaucratic principle is, upon close inspection, a bureau-technological one. It was the technological superiority of files and their ordering systems that inaugurated and secured the reign of the office; no wonder, then, that “of all the parts of a German ministry, the section that was subject to the most particular attention on the part of the reformers was the record and the filing system.”²¹ A new type of ring binder, as consequential to modern bureaucracy as was the plow and stirrup to the

Die Entwicklung des Briefordners



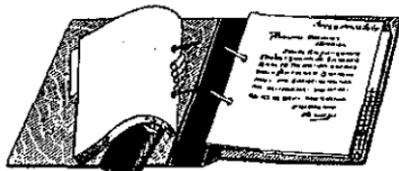
Biblorhapte

Die Briefe werden auf 5 Nadeln aufgespießt. Wenn der Apparat voll ist, wird die Einlage mit den Briefen herausgenommen und eine neue eingesetzt.



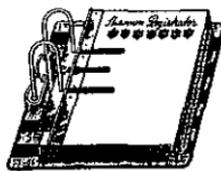
Biblorhapte-Registrator

Die Nadeln sind durch 2 Röhren mit aushebbarem Stecker ersetzt, dadurch können an jeder beliebigen Stelle Briefe eingefügt und entnommen werden.



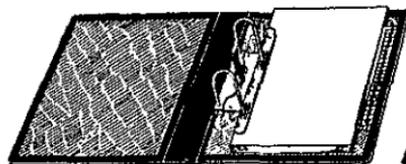
Steckordner

Der Einband hat im Gegensatz zu Bild 2 einen steifen Rücken. Voraussetzung hierzu ist die von Louis Leitz erfundene Beweglichkeit des abgesetzten Unterdeckels.



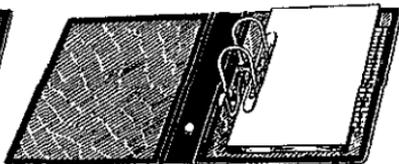
Shannon-Registrator

Erster Ordner mit Umlegebügeln; sie öffnen sich durch die Drehung nach auswärts. Den Shannon-Registrator gab es nur auf zweifarbigem Holzbrettchen.



Leitz-Ordner Vorläufer

Nach langwierigen Versuchen entstand dieses Übergangs-Modell, das erste mit nach links zurückklappbaren Bügeln. Der Hebel befindet sich zwischen den Bügeln.



Leitz-Ordner mit Hebel

Der letzte entscheidende Schritt ist getan, der Hebel nach außen gelegt. Zur Erzielung eines leichten Ganges ist die kleine Rolle eingefügt.

FIGURE 7. The evolution of the file binder. Reprinted with the permission of Jörg Schmalfuß (Department Head, Historisches Archiv, Deutsches Technikmuseum Berlin).

Middle Ages, turned out to be the center of the reform: the vertical file. Its invention coincided with the founding of the Second Reich.

In 1871, Louis Leitz, scion of an old Suebian family of craftsmen, opened a manufacture for the production of loose-leaf binders called *biblorhaptas*. In designing his new office gadget, he made use of an expired Parisian patent as well as of the Shannon Arch File. The latter was a contraption consisting of "a finely polished, well-glued wooden tablet, to which the bronzed metal part, including the small nickel tube and the arch, have been attached *sideways*. Inside the tube is a movable, separable and almost indestructible registry or alphabet insert that is imprinted on both sides. The parchment compressor cover has a nickel metal coating that comes equipped with a bolt. . . . Opening and readjusting arch and bolt secures whatever is inserted."²² True to the combinatorial law of all innovations, the encounter of *biblorhapt* and Shannon File in the small workshop in the vicinity of Stuttgart resulted in something new, "the now ubiquitous, well-proven lever mechanism that closes and fixes the clamp."²³ The so-called Registrator-Sammelmappe A was not only the synergic product of the determined, goal-oriented Suebian inventor, it was also the well-concocted result of a legal circumvention in the face of the eagerness of the German owners of the Shannon patent to go to court. Starting in 1885, Leitz acquired a couple of patents related to what was later to become the Leitz binder, but the binder itself—a combination of rods, clamp, pins, rivets, lever mechanism, pull-out hole, nickel fitting, and stiff cover—is not patented.

First, however, the core—a complex "tin case," to quote the patent of 1885—was put under legal protection. By 1893, it had been refined to such an extent that it gave rise to the arch lever. In 1896, the lever, which hitherto had been placed between the arches, was moved to the outside, and with that improvement the perfect design still in use today had been found. But the success story of the Leitz Binder was not over yet. It reached its peak in a third fundamental innovation of office technology: the vertical file. Thanks to wooden, and later cardboard, covers, papers that traditionally would have been laid flat could now be placed upright, thus presenting the appearance that is today automatically associated with the word *file*. As is usually the case with epochal media innovations, there followed a series of changes designed to make the technology more user-friendly, such as improving the compressor bar or adding slits to the cover to prevent undue pressure on the clamps. In 1911, a finger pull hole was

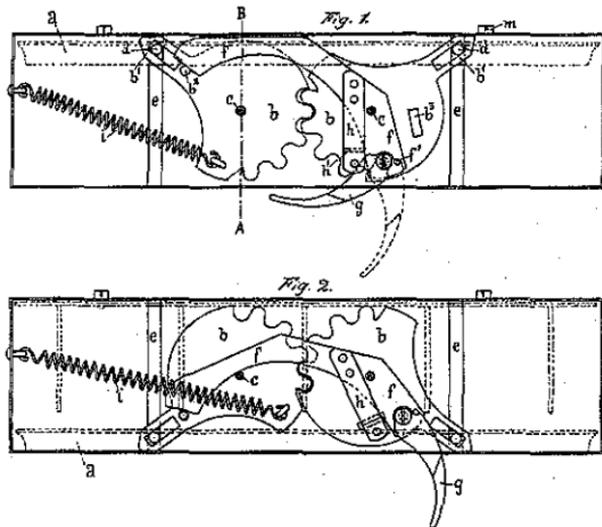


FIGURE 8. From patent 36552/class II (18 July, 1885; figures 1 and 2).

added to make it easier to remove a file. A further, subsequently patented improvement ensured that the clamp lever mechanism—which, to protect the paper, could not be oiled—always worked without friction.

Two worlds coincide in the binder: the mechanized world of the ordering apparatus and the alphabetical world of letters. To quote a prospectus that offers a virtual tour of the Leitz firm, “Metal on the one hand, cardboard and paper on the other . . . unite and give rise to a technological organism, the binder.”²⁴ It clearly states that with the metal container inside the binder, the alphabet-based medium file has turned into a technological-industrial product. Leitz, “mechanic and manufacturer producer of factura books,”²⁵ combined precision mechanics and account ledgers into a third object, the letter binder. Its outside appearance is derived from books—in particular, the vertical arrangement showcasing the inscribed back cover. But unlike books, the inside contains, in addition to mere letters and numbers, a gripping mechanism attached to the cover that spears, staples, and if required, releases papers, “making it possible to alphabetically order the individual pages at any other given place.”²⁶ The contraption inside the binder, which started out as a tin case before it was turned into a refined holding device, mechanizes the paper world

of the order of letters. According to the production logic of the Stuttgart Workshop for the Manufacture of Metal Parts for Ordering Devices, not only are mechanical and alphabetical worlds effectively united, but the alphabet itself has been mechanized. The order created by the binders is already present in their production. A "machine automatically takes one leaf from every pile of paper and combines it in alphabetical order with the other lettered pages, so that in the end the whole registry has been artfully combined."²⁷ Once the alphabetized inlays are supplied beforehand, it becomes unnecessary to retroactively arrange the papers in alphabetical order. The entire order of the bureau can now rely on prefabricated ordering automatisms.

The file mechanism, the miraculous order-creating contraption on the inside, prompted Leitz's philosophers to emit utterances that bring to mind the words of Prussian state archivists around 1800. Whereas the latter praised the archive as the soul of the Prussian state, a Leitz leaflet from around 1900 claims: "The mechanism is the soul of the binder."²⁸ Here, the gaze has become microscopic. It is no longer directed at the state, but rather at its smallest unit, the metal clamps of file and letter binders. Out of this module, the whole of the state emerges, as if to confirm Goody's trinitarian formula of bureaucracy: "The state, the bureau, and the file." In the course of governmental reforms around 1929, the triad was arranged in such a way that the entire order could be derived from the smallest element, that is, the state from a single file.²⁹ The bureau mediated between the two. According to reformers, administrative restructuring had to begin with the microcosm of the state: the desk of the civil servant. But the reformers' campaign to put vertical filing systems to use ran into stiff resistance from traditional work habits. Leitz's Registrar-Sammelmappe A, which had made a triumphant entry into the offices of private enterprise, was rejected time and again by the public administration of the German League. What merchants immediately grasped—namely, the rationalization benefits that could be derived from variable forms of bundling papers—was lost on state bureaucrats.

Not coincidentally, the adoption of the new file binders took about as long to spread as the ubiquitous typewriter. Both innovations required new containers. The first prerequisite was that official books and ledgers be composed of unbound individual pages, for only the latter can be inserted into typewriters. To bundle them, the slip box, which had been in use since the days of the *scrinia* to store loose papers, was reactivated. The

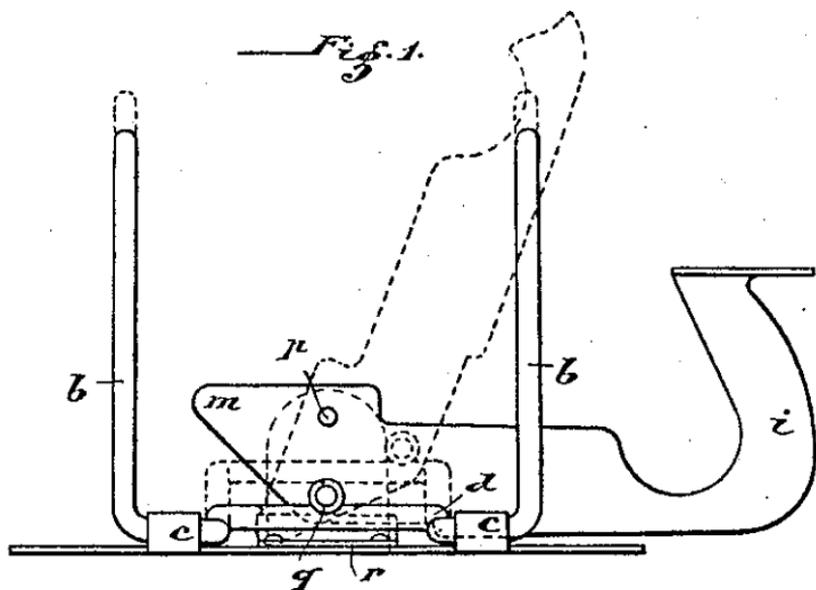


FIGURE 9 (a). Fig. 1 from patent 153 568 Class IIc (27 July, 1902).

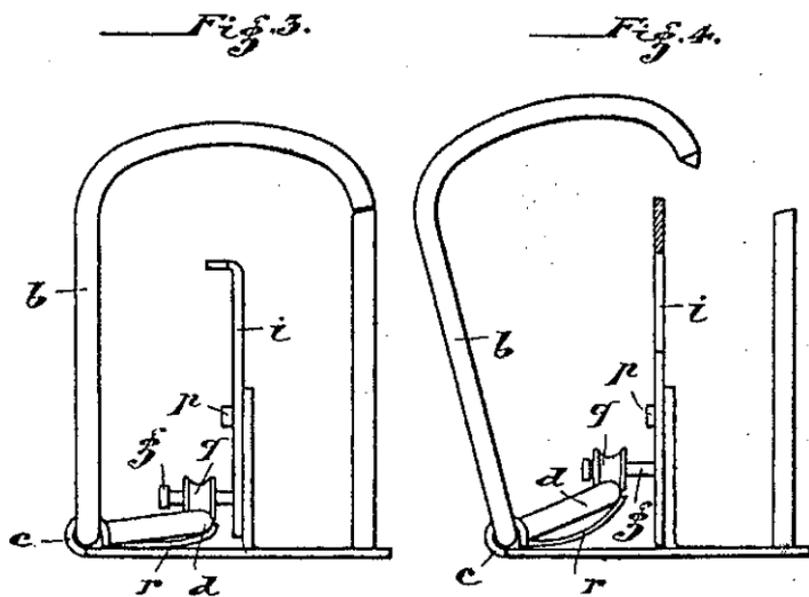


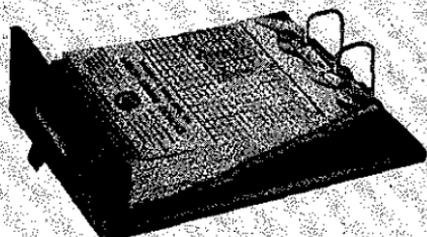
FIGURE 9 (b). Figs. 3 and 4 from patent 153 568 Class IIc (27 July, 1902).

Genuine Shannon Sectional Cabinets

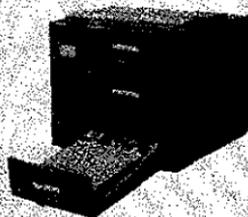
THE Shannon Arch method has been for twenty years, and is today, the safest way to file letter or cap size papers.

Prices quoted include stock index (please specify in your order the style of indexes desired).

Price "with lock" means the "I and A" combination locking device described on page 6.



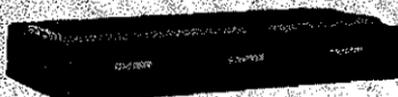
Compressor on cover keeps papers compactly together; printed form shows record of transfers for locating back correspondence.



No. 1020, 3-Dr. Letter-size Shannon Hali Section with Document or Utility Vertical File, \$70.40.
No. 1018, Cap-size, \$10.65.



No. 20, 9-Dr. Letter-size Section, \$16.25.
No. 18, 9-Dr. Cap-size Section, \$16.75.



No. 19, 3-Dr. Letter-size Section, \$6.50.
No. 23, 3-Dr. Cap-size Section, \$6.75.

FIGURE 10. Genuine Shannon Sectional Cabinets. JoAnne Yates, *Control through Communication: The Rise of System in American Management* (Baltimore, London: 1989), 36.

boxes evolved into binders, which, like slip boxes, first were made of wood before being replaced by cardboard. As a container, therefore, the new binders were simply deconstructed file furniture, single parts of wooden cabinets made up of drawers and boxes, the likes of which had been used around 1500 to bring order to the archive. In short, we are dealing with modules made up of slip boxes, which combine to form file cabinets.

JoAnne Yates's *Control through Communication* offers a genealogy of the vertical filing system, from the letter boxes of the Amberg File and Index Company and the wooden file sections with drawers to the cabinets of the Shannon Arch method. Yates pinpoints the debut of the vertical system in the very same year when Leitz first marketed his lever mechanism-equipped legendary Leitz Binder "A": 1893, when the World Fair for the first time presented vertical card files for librarians.³⁰ Just like in Germany, vertical filing systems got off to a rough start in the United States. Here

too, the bureau-technological combination of vertical files, typewriter, and carbon paper, first deployed in private enterprise, was only gradually adopted by the state bureaucracy. Yates points out that railroad companies were the driving force behind the adoption of the new communications technologies. The United States, too, charged a commission with overseeing the administrative reforms that had begun around the turn of the last century. First convened in 1910 and named after President Taft, the commission did not pursue its goal with the zeal of the Prussian reformers. Rather, it began its work by distributing questionnaires designed to find out how government officials handled and filed their correspondence in order to make recommendations based on the findings. Unexpectedly, the very act of filling in the questionnaire already had a certain reforming effect: "The self-examination that the questionnaires forced upon them caused some offices to undertake immediate correction of their faulty practices." Though there was no German counterpart to this case of administrative self-improvement, the skepticism engendered by the new filing systems and their ordering methods was similar. In the United States, too, offices clung to the old-fashioned habit of folding papers and storing them in document containers; hence the commission's first recommendation was "that all correspondence should be filed in flat vertical files."³¹ It was the first recommendation because it entailed all subsequent innovations. As in the case of the German reform of the 1920s, reorganizing the entire administrative apparatus hinged on the smallest module, the mechanized vertical file. Names like Wilson and Jones are the American equivalent of Leitz. What eventually emerged around the turn of the last century as the ring binder was composed of various patents.³² Notwithstanding all the similarities between the pioneering inventiveness in Stuttgart and Chicago, however, the differing mechanical details of the clasp entail an ongoing clash of cultures: "Europeans cannot understand, why the unnatural two-hand-pushing-on-the tongues movement would be preferred to the simple natural pulling motion needed to open two rings. Americans insist on the tongue and three rings."³³

The promoters of the vertical filing system mobilized all possible arguments to stress the technological superiority of the new file type. Their campaign is reminiscent of attempts by historians to explain why the codex won out over scrolls. In much the same way, the superiority of codices was linked to the fact that they allowed users to quickly look up and retrieve specific passages, German administrative reformers listed the

advantages of vertical files for daily usage: "(1) Each file remains at its place in a defined order; (2) it can instantly be recognized and removed, without (3) disturbing the other files; and (4) there are no pasteboard markers or other visual indicators anymore, which used to facilitate the finding when records piled up."³⁴ Hoping to alleviate the fears of his colleagues, one proponent of the new filing system offered a description of the new system that is almost touching in its accuracy: "Binders now replace our loose files. . . . They are extremely easy to handle. The binder contains clamps designed to hold the papers in place. Simply pressing down on a so-called hole puncher is enough to make holes in a piece of paper that can then be inserted before closing the binder again."³⁵ If this official handling of texts, involving typically female work with "needle and thread,"³⁶ turns into a thoroughly male activity, it binds officials all the more strongly to their working appliances—that is, to *files*, a word derived from *filum* (Latin for thread) that entered the English language via French *filer*, "to string documents on a wire for preservation or reference." "Once the administrative employee is made responsible for his own records, he will immediately realize that his small world of files, too, can only be governed by order."³⁷ As intended by the official reform proposals, the intimate intercourse with files will necessarily create order. Hence tidiness is no longer a job requirement for civil servants: They become orderly when they are given their own files. The concept of creating a close link between officials and records in their "small world of files" reveals the Protestant mentality at work on the level of new office technology. The old goal of avoiding the conflict that arises from scraps of paper lying around everywhere is replaced by an instrument, the self-binder. It puts an end to the reign of loose slips. It is no longer necessary to issue step-by-step instructions on how to handle records. The file itself prescribes the necessary activities. Starting with the punch, its individual physical parts predetermine a clear order: *punch, open, fix, insert, close*.

Once the automatism of working appliances guarantees order, those who work with files can easily be granted autonomy in their small world of files. In a letter circulated by the Ministry of the Interior, administrative reformers decreed that offices were to be in charge of handling their own affairs, with the result that the "expediter stores and administers the files in his own office."³⁸ Sovereignty made its entrance into bureaus and offices. "All the files pertaining to a specific sector of administration are to be stored in the office of the administrator responsible for that sector."

As envisaged by the reform proposals of 1919, the topological classification according to *areas* of operation amounts to self-administration in the form of "working officials" who are to be "their own file administrators."³⁹ The vertical filing system shapes "intelligent and understanding self-administrators . . . in the spirit of Stein."⁴⁰ Or, expressed without the reformers' enthusiasm: a processor, a file—and Prussia has attained its normal level of despotism, "for every civil servant left to his own devices is a potential despot."⁴¹ With the bureau reform of the Weimar Republic, however, civil servant despotism attained its true object: files that contain punched, readily available texts. When civil servants rule their own small world, the tension between responsibility and arbitrariness is solved by granting the greatest possible autonomy to individual clerks. Their alleged autonomy, however, is merely the flip side of their subordination to a filing system that automatically generates order. The danger of bureaucratic despotism is thus contained by an automatic ordering system.

The automation of order brought about by the self-processing of files promotes the records rather than their human processors to agents of bureaucracy. Folders instructing users where they should be brought next literally get files on their way. They move themselves from department to department. The addresses on the cover replace commands, obedience, and control by officials. To quote the pertinent 1932 guidelines: "The regular circulation of a written document within the administration is not supervised; there is no need for any switchboard; each office immediately passes on the document to the next." And should this transmission by an invisible hand be sidetracked because a document "has to be submitted to an official . . . in a department that is not part of the regular chain of transmission, this can be noted by the office responsible." Address, location, and hold-file notes belong to the arsenal of operators that process the automobility of files. The nonmathematical algorithmic guiding regulations, without which no file could circulate, are noted on index cards that know and control, remember and steer what happens inside the administrative apparatus. These modern *laterculi* reveal and disclose files by channeling and recording their movements.

The reformers never doubted that such an organized system would speed up the circulation of files far more effectively than imperial decrees ordering things to be handled *cito, cito, or citissime*. Faced with the possibilities of acceleration provided by the means of modern bureaucracy, reformers advocated—to use Paul Virilio's term—a veritable dromology

of files: Arnold Brecht, the former secretary in the Reich Chancellery and until 1932 department head in the Prussian State Ministry, estimated that if the reform proposals were to be accepted, the time it would take for documents to be filed would be reduced by five to seven days.⁴² In 1927, Brecht, chief protagonist of the office of administrative reform, wrote a textbook on this very topic addressed to the German administration. In 1940, having emigrated to the United States and joined the New School of Social Research in New York, he published an abbreviated English edition in collaboration with one of his students, the administrative expert Comstock Glaser. What was intended to be an incentive "for reorganizing governmental agencies"⁴³ in the United States became the basis for the denazification trials in Germany after the war. According to Brecht, the Allied authorities derived their understanding of the German administrative apparatus from his book. Underneath its triple goal (administrative and bureau reform in the Weimar Republic, restructuring of government agencies in the United States, and denazification), Brecht outlines a dromology of files as a result of time-saving measures:

The number of moves necessary for answering a letter was reduced from fourteen to eight or six, that is by 43 or 57 percent. The time saved thereby included not only the actual time of performance of clerical steps, but also backlog (waiting time) and transportation. In an average German Division, which may be supposed to receive 25,000 communications a year, the saving due to elimination of steps amounts to an aggregate of 250,000 communication-hours and 4,000 job-hours.⁴⁴

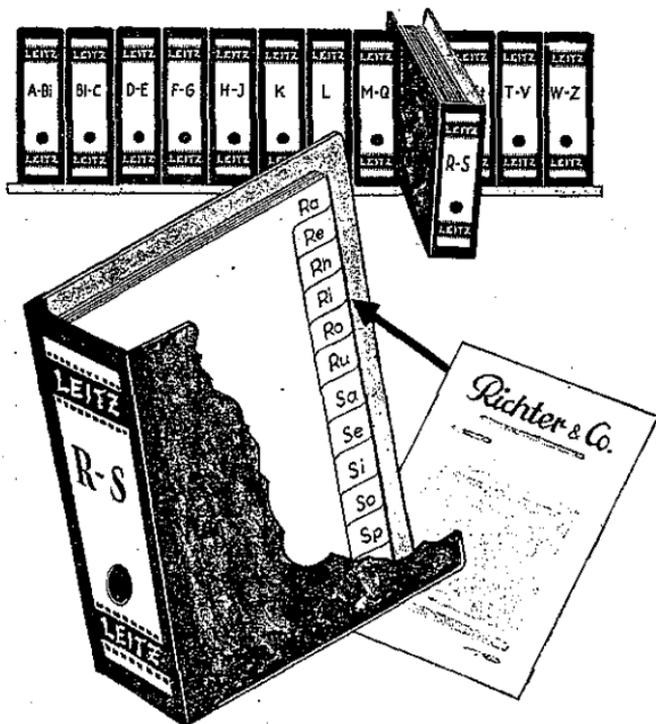
Once files act like people by staying overnight and spending extended time in corridors, that is, once files take on the habits of their users, a new time has begun—the time of files. The circulation of files dictates both work time and work routine. It is in the face of such imposed behavior that Niklas Luhmann, the theorist of administration, later emphasized the autonomy of the worker, which manifests itself in the fact that anybody "can pick up a difficult file and look up a co-worker or their superior to talk things over."⁴⁵ But from an organizational point of view, such individual deviation from the files' regular pattern of circulation is irrelevant. Codes of procedure and official instructions issued during the time of office reform treated and designated officials as *Aktenstelle*⁴⁶—literally, "file place"—that may be subject to "removal."⁴⁷ Their subordination under files "in the service of record keeping"⁴⁸ implements the progress of files as

a "self-command" to "rationalize itself," as indicated by the title of a frequently reissued manual by Gustav Grossmann that was first published in 1929.⁴⁹ A rationally organized circulation of files operates independently of individual processing times. To avoid unnecessary delay, reformers such as Herman Haussmann, the founding director of the College of Administrative Science in Speyer, Germany, made use of Taylorist principles worked out in the context of industrial production, and applied them to record keeping. As in the cases of Taylor and Gilbreth, the analysis was based on close examination of the work sequence. In this Taylorized file-based administration, the "determination of the psychological and mental restraints"⁵⁰ that had been applied to secretaries and clerics yielded to the goal of "removing restraints from business procedures."⁵¹ Psycho-technological issues turn into organizational problems. Following reformist ideals, smooth processing of files eliminates clerks as a source of irritation. Administration experts like Morstein-Marx transferred this industrialization of file processing to administrative dimensions that equaled that of a small town. Eventually, a cybernetics of files was to conjure up nothing less than an automatized administration that can do without any employees.

From the point of view of the officials, however, the automation of work routines has no impact on their increasingly close relationship with their work means. On the contrary, with the envisioned abolition of the central registry, this relationship becomes all the more intimate. In the words of the reformers, doing away with the registry, thus creating an immediate relationship between files and officials, amounts to reestablishing an administrative "state of nature."⁵² It spells a return to the initial state of records, the self-indexing registry files of around 1200. Indeed, for the U.S. reform commission, "self-indexing" is the magic formula which will ensure "that with the installation of modern filing systems in Government offices the necessity for book or card registers would disappear."⁵³ Aiming for the same goal, German reformers suggested that the processing of records should be entrusted to a single person and literally be transferred into the file itself. Registrars would be rendered superfluous, to be replaced by a simple cover page that summarizes the content of the files. This incorporated register is to replace the multiphase registration system composed of daily ledgers, central register, and file release date record.

But the abolition of registries envisaged by the reformers means the abolition of all central control. That is the price—the very high price—

Der gesuchte Brief



*springt Ihnen förmlich entgegen,
wenn Sie Leitz-Registerserien in Ihren Leitz-Ordnern verwenden.*

Alle Buchstaben des Alphabetes sind nach den Regeln der Häufigkeit zergliedert. Die Abbildung zeigt den 9. Ordner der 12 teiligen Serie mit den Buchstaben R-S.

Vorteile: Schnelles Ablegen — Sofortiges Finden
ständig gefüllte Ordner

Bedarf: Sie brauchen in einem Jahr so viele Leitz-Ordner, wie Sie im Durchschnitt täglich Briefe abzulegen haben.

Auswahl: Es gibt Leitz-Registerserien für jedes Bedürfnis. Die kleinste Serie besteht aus 2 Ordnern (A-L, M-Z). Die größte Serie umfaßt 600 Ordner.

Ihr Schreibwarenlieferant wird Sie gerne beraten!

FIGURE II. "The letter you are looking for jumps out at you." Reprinted with the permission of Jörg Schmalfuß (Department Head, Historisches Archiv, Deutsches Technikmuseum Berlin).

that has to be paid for the sovereign rule of each official in his file world. Observers concluded that while clerks may "find their way in their own particular domain, the overall confusion has increased."⁵⁴ Subsequently, the reform proposal of 1919 was itself revised: decentralization—that is, individualization and intimization of file processing—was countered by the introduction of uniform guidelines to ensure that all individually processed files were dealt with according to the same principles. The basic prerequisite was the *file plan*. "All simplifications regarding the administration of written matter depend in one way or other on the file plan."⁵⁵ Functionally speaking, a file plan is a registry in reverse. It imposes order upfront, while a register does so afterward. To use one of the reformers' favorite expressions, file plans are "thought out in advance."⁵⁶ Once such a plan is in existence, records are assigned a specific place even before they enter the system. Much like laws, file plans require an abstract form capable of anticipating as yet unknown specific cases. Administering files, then, is raised to the status of a quasi-judicial endeavor, reputedly "an intellectual penetration of file matter, an ongoing conceptual separating and summarizing, abstracting and subsuming."⁵⁷ File plans give birth to a transcendental order of files prior to all content.

The new vertical files implement this order in the physical domain. What distinguishes them from older systems is that their installation precedes the compiling of records. Their standardized breadth limits in advance the amount of incoming material, whereas traditionally a file, the size of which had depended simply on whether or not it could be handled, came about solely by amassing individual sheets. Empty vertical filing systems are hollow bodies, containers; as such, they are the media-technological realization of the twentieth century's bureaucratic dispositive of order, the plan. The distinction between a retroactively imposed order and one that is planned ahead cannot but have an impact on ordering activities: instead of tidying up and registering, we have advance planning and systematizing.

But reformers like the American librarian Melvil Dewey were not satisfied with a plan restricted to one administrative division only. They demanded a unifying plan that applies, if not to the entire administration of the German Reich, then at least to one ministry. There was hardly any author of a book or treatise on the organization of bureaus who did not pose as an administrative legislator offering new general record-keeping principles for the Reich administration. At the beginning of the twentieth

250 teilig (für 250 Ordner)							
1	Aa-Ad	66	Hamm-Hag	131	Mes-Met	196	Scham-Schaz
2	Ae-Alk	67	Har-Hat	132	Meu-Mez	197	Schea-Schek
3	Ali-Aq	68	Hau-Haz	133	Mia-Mim	198	Schel-Schez
4	Ar	69	Hea-Hed	134	Mln-Miz	199	Schia-Schm
5	As-Az	70	Hee-Heh	135	Moa-Mok	200	Schln-Schk
6	Baa-Bah	71	Hela-Heil	136	Moi-Mor	201	Schia-Schle
7	Bai-Baq	72	Heim-Hek	137	Mos-Mud	202	Schfl-Schfy
8	Bar-Baz	73	Hel	138	Mue-Mul	203	Schma-Schmi
9	Bea-Beq	74	Hem-Hen	139	Mug-Muq	204	Schmo-Schmy
10	Ber-Bez	75	Hep-Her	140	Mur-My	205	Schna-Schne
11	Bia-Biq	76	Hes-Hez	141	Naa-Nar	206	Schnj-Schny
12	Bir-Bi	77	Hia-Hir	142	Nas-Naz	207	Schoa-Schok
13	Boa-Bok	78	His-Hof	143	Nea-Nek	208	Schol-Schoz
14	Bol-Boz	79	Hog-Hom	144	Nel-Net	209	Schra-Schri
15	Bra	80	Hon-Hr	145	Neua-Neul	210	Schro-Schry
16	Brea-Bret	81	Hua-Huk	146	Neum-Nez	211	Schua-Schul
17	Breu-Bri	82	Hul-Hy	147	Nia-Nil	212	Schum-Schuz
18	Bro	83	Ib-Ii	148	Nim-Niz	213	Schwa-Schwep
19	Bru-Brz	84	Im-Iz	149	Noa-Not	214	Schwer-Schy
20	Bua-Buk	85	Ja	150	Nou-Ny	215	Staa-Star
21	Bul-By	86	Je-Ju	151	Oa-Oe	216	Stas-Steh
22	Ca-Ci	87	Kaa-Kah	152	Of-Oo	217	Stei-Steo
23	Ci-Cz	88	Kal-Kam	153	Op-Oss	218	Step-Stez
24	Da	89	Kan-Kas	154	Ost-Oz	219	Sti
25	Dea-Des	90	Kat-Kaz	155	Paa-Pam	220	Sto
26	Dei-Di	91	Kea-Kei	156	Pan-Paz	221	Strä-Strl
27	Do	92	Kem-Kez	157	Pea-Pes	222	Stro-Sty
28	Dr	93	Kia-Kiq	158	Pet-PH	223	Ta-Te
29	Du-Dz	94	Kir-Kiz	159	Pl-Ph	224	Tes-Th
30	Ea-Eh	95	Kla-Klim	160	Pl	225	Ti-Tra
31	Ei-Ek	96	Klin-Km	161	Pla-Pog	226	Tre-Tz
32	El-Em	97	Kna-Kno	162	Poh-Poz	227	Ua-Uil
33	En-Eq	98	Knu-Kod	163	Pr-Pt	228	Ulm-Uz
34	Er-Es	99	Köa-Kön	164	Pu-Qu	229	Vaa-Vi
35	Ef-Ez	100	Köp-Kof	165	Raa-Rae	230	Vo-Vy
36	Fa	101	Kog-Koo	166	Raf-Rai	231	Waa-Walk
37	Fea-Fel	102	Kop-Koz	167	Räm-Ras	232	Walf-Waz
38	Fem-Fez	103	Kra-Kres	168	Rat-Raz	233	Wea-Weik
39	Fi	104	Kret-Kro	169	Rea-Reh	234	Weif-Weq
40	Fla-Fli	105	Kru-Kug	170	Rei	235	Wer-Wess
41	Flo-Fo	106	Kuh-Ky	171	Rek-Rer	236	West-Wh
42	Fra	107	Laa-Lag	172	Res-Rh	237	Wia-Wier
43	Fre	108	Lah-Lan	173	Ria-Rier	238	Wies-Wil
44	Fri	109	Lap-Laus	174	Ries-Rim	239	Wim-Wis
45	Fro-Fry	110	Laut-Laz	175	Rin-Roc	240	Wit-Wi
46	Fu-Fy	111	Lea-Lei	176	Rod-Rok	241	Woa-Wolf
47	Ga	112	Leg-Lel	177	RoI-Rosem	242	Wolg-Woz
48	Gea-Geq	113	Lem-Leq	178	Rosen	243	Wr-Wuq
49	Ger-Gl	114	Ler-Lez	179	Roser-Rud	244	Wur-Wy
50	Gl-Gn	115	Lia-Lim	180	Rue-Rz	245	Y-Zam
51	Goa-Gok	116	Lin-Li	181	Saa-Sah	246	Zaa-Ze
52	Goi-Goz	117	Loa-Log	182	Sai-Sar	247	Zia-Zil
53	Graa-Gral	118	Löh-Loz	183	Sas-See	248	Zim-Zi
54	Gram-Graz	119	Lua-Lug	184	Sel-See	249	Zo-Zu
55	Grea-Gres	120	Luh-Ly	185	Sam-Set	250	Zw-Zz
56	Gret-Oriz	121	Maa-Mae	186	Seu-Sh		
57	Groa-Gron	122	Maf-Mak	187	Sia-Sil		
58	Groo-Groz	123	Maf-Mar	188	Sim-Sn		
59	Grua-Grun	124	Maf-Marz	189	Soa-Som		
60	Grup-Gs	125	Mas-Mauk	190	Son-Soz		
61	Gua-Guo	126	Maul-Maz	191	Spa-Spi		
62	Gup-Gy	127	Mea-Meh	192	Spi-Ss		
63	Haa-Had	128	Mei	193	Sua-Sus		

FIGURE 12. Probable frequency of letters arranged in alphabetical order. Reprinted with the permission of Jörg Schmalfuß (Department Head, Historisches Archiv, Deutsches Technikmuseum Berlin).

century, the Dewey decimal system was introduced in the United States to replace the over 250 different filing systems in existence with one uniform ordering system.

But file plans not only create order, they also give rise to new ordering problems. First, whatever is thought out in advance has to anticipate unexpected events. To accommodate them, filing plans must contain a catchall subdivision, such as Dewey's "000 General." Second, the filing system has to be able to accommodate unplanned and as yet unforeseeable developments. Since it is difficult to decide beforehand whether or not an incident should be officially recorded, or whether an exchange of letters is significant enough to be put on file, there is a need for an interim category. Otto Frank, author of several studies on classification and ordering, and charged with implementing the Dewey decimal system in Germany, labeled this phase as "pending classification."⁵⁸

This intermediary category is informed by an ordering system based on probabilities. It is designed to ward off the danger that periodically threatens every file user: the need to reclassify and reorder files after sections that were "thought out in advance" turn out to be useless or the classification grid proves to be too coarse. Leitz, who was as interested in binder mechanics as he was in their content, had anticipated the problem. He had already conceived of the alphabetic arrangement of loose papers, which the Shannon File, too, had partly realized: "The entire system is so well thought out that the distribution of the alphabet is fully sufficient; because the letter-based subdivisions are worked out in accordance with the statistical distribution of German names, ensuring that the individual sections fill up at similar rates."⁵⁹ To assess the probable frequency of letters of the alphabet, office reformers have to do what has been the task of decoders since the beginning of the sixteenth century: they have to count letters.

The expected frequency of individual letters determines the subdivision into alphabetical sections. The greater the number of folders, the more detailed the subdivisions. In the 1920s Leitz offered letter series made up of 2, 14, 36, 50, 75, 100, 150, and even 250 folders. Increasing the number of folders resulted in lengthening the letter combinations, which on occasion could turn into whole syllables. A set of 250 folders offered combinations like *Rosen*, *Roser-Rud*; *Schall*, *Scham-Schaz*; *Wies-Wil*, *Wim*, which are reminiscent of declensions and, contrary to their function, create a new order of meaningful signifiers resulting in words and names.

These Markoff chains read like the bureaucratic subtext of early Dadaist "ur"-sonatas that, according to their composer, Kurt Schwitters, were indeed indebted to such "abbreviated labels."⁶⁰

Sign systems that operate on the basis of statistically determined letter frequencies, however, are of little use to administrations that classify their records according to events and occurrences rather than personal names. Their classification system replaces Dadaist syllable chains with *reference numbers* made up of a sequence of numbers or letters containing information about the file's content, location, and year of origin, as well as the office responsible. In addition, the reference number is to mirror the entire taxonomy of administration, from the individual dossier to the encompassing architecture; the overall order is to be apparent on every level. A sign code becomes the systematized address of a file, thus rendering the register superfluous.

Based on the reformist ideals of self-indexing, self-evaluating, and self-interpreting, the micro-order consisting of the systematized signifiers of business and reference numbers is to reproduce the administrative macro-order—the topography of shelves as well as the spatial arrangement of offices—until the entire administration is nothing but one big filing plan. Micro- and macro-order are interlocked in such a way that the individual file represents the entire universe of an office, while a twentieth-century office building, in turn, turns into one "enormous file."⁶¹

Such visualization fantasies have their basis in the files themselves. Vertical folders with inscribable backs indicate a higher order in far more persuasive fashion than makeshift ordering devices like pasteboard markers. And it is precisely the visibility of vertical files that excited the fantasy of planners intending to create an administrative panopticon. Above all, the arrangement had to be "transparent."⁶² The entire system of order had to be visible at one glance. The technologies that created administrative transparency and control were first used in the economic sphere, where "charts and Planboards for Visual Control systems that indicate facts and forecasts, loadings and progress, costs, stock and production relationships can be seen, understood and acted upon."⁶³ Visibility and accessibility of records are the result of the same optical organization, up to and including the attached signs that control the resubmission of files.

The reformers' emphasis on visibility and clarity put an end to the technologies of secrecy. In the eyes of the reformers, the office was a chancery without barriers. It was accessible; when, for instance in Berlin, "all offices

in the buildings on Wilhelmstrasse 74 and Luisenstrasse 33/34 are to be equipped with notices indicating which pieces of equipment are located in the rooms by referring to their inventory number,"⁶⁴ the public was able to immediately grasp what was going on inside the administration of the Reich capitol. The interior of the office is the inventory turned inside out. Modern technologies of visualization ensure that administrative procedures are subject to a logic of representation: A tidy desk stands for an orderly administration. Within an administrative context, Niklas Luhmann argues, the "ceremonial of accompanying symbols, seals and letterheads, and especially the usage of . . . written bureaucratese" possesses "a symbolic value for the ideal presentation of administrative work results."⁶⁵ This dogma of transparency, however, also entailed new means of concealment. Special devices are created for truly secret records.

In the epoch of the office—and this distinguishes it from the time of the chancery—censorship occurs *before* things are put on record. Most files no longer contain any secrets, or at least none of "our errors and mistakes," which Goethe had entrusted to them. "If possible, no mistake or misconception, and none of the efforts to correct them, is to be put on file."⁶⁶ This is how the sociologist of organization, Luhmann, describes the materialization of files under the gaze of the other, that is, under the gaze of a public that is thought to be reading along. As a result, "anybody who has something to say that he wants to put on record will consider what he has to say and how he will express it."⁶⁷ From now on, offices are characterized by a certain reticence that has nothing to do with the technologies of secrecy practiced in chanceries. What is secret is neither that which is screened off by barriers nor that which has been put on file, but that which is off the record. This restructuring of secrecy from a defined and recorded arcanum to an off-record concealment⁶⁸ stems from the fact that everything that is put on file threatens to turn against those who keep the records. In case of doubt, the file testifies against the clerk. The more transparent and accessible the records, the more reticent the officials. Weber may have had in mind this tendency to hide and conceal when he claimed that "bureaucratic administration always tends to exclude the public, to hide its knowledge and action from criticism as well as it can."⁶⁹ It is in this discursive domain that, following the Second World War, the struggle for making records public will be carried out.

Surveillance and Information Society: Access to Files (Inspection of Records)

Ever since the publication of records could create a *public*, that is, ever since the historian August Ludwig von Schlözer (1735–1809) called for an end to state secrecy (and followed up on his demands by founding a journal dedicated exclusively to publishing records), files have been the medium instrumentally involved in the differentiation processes that pit state against society and administration against citizenry. The state compiles records, society demands their disclosure. Alongside these struggles over access to files, society arises as a discursive unit, a political force antagonistic to the state. Whereas nineteenth-century debates had centered on free access to archived records, the twentieth century expanded the demands to include the right to inspect current and active files. But a society that wishes to be informed about matters of government is poised to trespass on one of the last arcane domains of the state: the state secret. No longer protected by physical barriers, chests, and keys, it has become virtual and exists solely on the basis of a declarative act that something is “secret” or “top secret.” This classification, however, remains hidden from the public. Secret services by definition work with secret records, hence constitutional oversight is only possible in part. The state secret, therefore, belongs to the state “taboo-protected phantoms”⁷⁰; uncontrolled, it flits about and arouses suspicion. As a result, elaborating a legal framework that guarantees the right to inspect one’s files becomes a touchstone for a functioning democratic rule of law.

In Germany, the debate over where to draw the line between “official secret” and “public records” erupted in the 1970s in the wake of the U.S. Freedom of Information Act of 1967, which was itself the juridical result of a social struggle over the public access to government records. Once the latter were perceived to be means of “social control, identity-giving and memory-tracing,” they moved into the public eye and become an object of widespread public concern. “Because records . . . affect both the course of an individual’s life and the course of society, they present a problem of social significance.”⁷¹ The public debate over the decisive power of records found immediate confirmation in the official information politics of the Vietnam War. In the wake of the almost total blackout imposed on U.S. military activities, the public was compensated with a guaranteed right to obtain information after the fact on all governmental activities. In justifying the Freedom of Information Act, then Secretary of Justice

self-determination presupposes an "informed public." By linking self-government (to quote the First Amendment to the U.S. Constitution) to the idea of an "informed public," the secretary of justice officially recognized the public as a body with the right to control government activities.

Despite efforts to amend the situation, the people's right to know, as guaranteed in the United States by the Freedom of Information Act, was for a long time not implemented in Germany, where the notion that access to government records is part of a general right of the public to obtain government information lacked a basic prerequisite. In the wake of the Second World War, administrative proceedings became public property in the United States, but not in Germany. On the contrary, the Federal Constitutional Court left no doubt that "in principle private individuals cannot ask the public administration for access to their files or to provide copies."⁷²

Up until the passing of the Federal German Freedom of Information Act (on January 1, 2006), it was only in the individual domain that subjects were granted the right to access their records. This was not, however, so much the legal implementation of the ideal that all should participate in the business of government as a statement of the right of the individual to defend herself against the state. Thus article 29 of the German Administrative Procedures Act grants only the party concerned the right to access pertinent records. Other parties, whose basic rights may or may not be infringed upon by the administrative circulation of government files, do not enjoy that right. Framed as a subjective right to inspect one's own records, the social demand for public transparency is transformed into an individual's claim to valuable assets. From then on, two interests confront each other: the government's interest in keeping things secret and the individual desire to be informed. Given this particular arrangement, the interests of both sides appear to be equal, making it possible to weigh the pros and cons. Section 2 of the article 29 anticipates this balancing act by listing the grounds on which government may deny the individual's right of access.

Files and Filing Systems

In the individual context, the demand for greater access to records manifests itself as concern over the protection of one's own data. In the United States, as in Germany, the increased efficiency brought about by electronic data processing has placed special emphasis on this personal

dimension and fanned the fear of increased state surveillance. "The single most important factor leading to the emergence of concern for record-keeping systems is the computer and the possibilities it presents not only for the extremely rapid and efficient processing of huge amounts of information on people, but for the sharing of information from a variety of sources."⁷³ The fear that computer technology will increase files' usefulness as state surveillance technologies translates into a critique of computerized files, which are perceived as instruments of state incursion into the private sphere. Prior to their automation, the power of conventional files was expressed metaphorically. The shock of finding one's life on record, of being thrown into a labyrinthine administrative system, was highlighted by an antibureaucratic rhetoric in which mountains of files became a popular metaphor for *too much* bureaucracy and, more generally, an inhumane bureaucracy.

The complicity of technologies of government record-keeping and the examination of the population only became a topic of public discussion when administrations switched to electronic data processing. Although the micro-census that was carried out in Germany in the late 1960s could well have triggered a public confrontation with the power of records, the awareness that such a census may easily infringe on individual rights did not arise until files were transformed into data. The debate emerged in the face of the electronically optimized statistical surveys, rather than after the end of the Second World War, when the potential for destruction that resides in government record-keeping had become all too evident. The highly effective census apparatus implemented by the Nazi regime gained the attention of historians in the wake of the boycott of the 1983 German census.

Jurists transformed the concern over one's own data into a right. From the basic right to free development of one's personality, they derived a right for the protection of "personal data" that is in some respects reminiscent of a claim of ownership. When in late 1972 the German Department of the Interior, reacting to the concern over personal data, presented the first draft of a Federal Data Protection Act (which came into force six years later), several such laws were already in effect on the state level. A leading expert on data privacy described the aim of the law: "With the data protection act the legislature clearly rejects any tendency to perceive and treat the individual as a mere object of information."⁷⁴ This goal indicates a closure. The genealogy of the subject from records returns to its point of origin: after census technologies have for centuries provided

information that turned humans into an object of knowledge, this very same knowledge is returned to them as their personal data, of which they may dispose as they wish. In the eyes of the law, the census object becomes the sovereign of its data.

Humans, then, are researched and raised to a status where they enjoy the *right to informational self-government*. When the German Federal Constitutional Court centered its 1983 boycott verdict on this particular right, it followed the lead of existing data protection acts suggesting that the individual should not be a "mere object of information." The court, however, did not concur when it came to establishing the range of data protection. Data protection, it argued, begins not with processing but with the collection of data. Both federal and state data protection laws followed the lead of the constitutional court by placing the collection of data on the same level as other steps, thus ensuring that it too comes within the purview of applicable laws. The court located its decision in a time of change. A relatively harmless time of files, it argued, was giving way to an epoch of electronic data processing that threatened self-determination. No longer are data manually collected on index cards and in files; they have become "infinitely storable and, regardless of the distances involved, instantly retrievable."⁷⁵ By taking on the issue of the unlimited data processing capabilities at the end of the age of files, the court reiterated the discursive conditions that had led to the debate over data protection in the first place.

The rupture between manual and electronic data processing on which the Federal Constitutional Court had based its census boycott decision is already apparent in the Federal Data Protection Act of 1978, which starts with a basic distinction between paper files (*Akten*) and electronic filing systems (*Dateien*). It only protects data that can be processed electronically. The nonprotection of data in old-fashioned *files* is a result of the emergence of data protection from the increased capabilities of electronic data processing. But since files can also be automated, they too fall under the protection of the law, as is evident from later versions of the law, which under certain circumstances puts files and databases on an equal footing: "A filing system is a set of personal data that can be evaluated according to specific characteristics by means of automatic procedures. . . . This shall not include files and sets of files unless they can be rearranged and evaluated by means of automated procedures."⁷⁶

Stasi Records

One year after the amendment to the Federal Data Protection Act, another law was passed. It too deals with files and filing systems, but in this case the difference between the two was of less importance. The Stasi Files Act (*Stasi-Unterlagen-Gesetz*) is not concerned with the technological standards of data processing because it does not focus on protecting personal data. It regulates access to one's "own dossier" but refers back to the terms used in the Data Protection Act to define its object of regulation. Article 46 (2) of the Data Projection Act specifies that a file is "any document serving official purposes. . . . [T]his shall include image and sound recording media. It shall not include drafts and notes that are not intended to form part of a record." The Stasi Files Act alters the Data Protection Act by turning the word *document* (*Unterlagen*) into a heading that now subsumes both files and filing systems. As specified in the first sentence, subsentence a, of Section 6 (1), the term "Records [*Unterlagen*] of the State Security Service" includes "in particular files, data files, documents." This commonality established between files and data files is only suspended in the context of special technical procedures, such as erasing data.

The Stasi Files Act regulates a specific right to access records. It refers exclusively to the files of the Ministry for State Security of the former German Democratic Republic (Ministerium für Staatssicherheit, or MfS). Since no secret service would ever willingly grant access to its own records, we are obviously dealing with an office that has gone out of business. The events that led up to this legal regulation were extraparliamentary in nature; it is a story of street-level brawls and scuffles. Of the many versions of the events that took place outside the Ministry for State Security on January 15, 1990, only that related in the first activity report of the Federal Commissioner for the Records of the State Security Service of the former German Democratic Republic has gained official status. It begins with a preambular narrative of the "civic protest and revolutionary change of Winter 1989/90": "When in late November and early December of 1989 black clouds of smoke rose from the State Security district offices in Erfurt, Dresden, and other cities, signaling that fulltime employees had begun to 'deal with the past' in their own way, enraged citizens started to blockade and occupy the buildings. They attempted to put a stop to the activities of the largely defunct but still unruly State Security and to

secure its holdings. This development culminated in the storming of the headquarters in Berlin in mid-January 1990.⁷⁷ The security of the state was no longer an issue; the rush was aimed at securing State Security's records.

Banners and slogans indicated the goals of the protest actions: "Security for our records," "I want my record," and "Freedom for my file." Given the long history of occupying government buildings, pillaging archives, and trashing files, this collective concern over records, especially over one's own, may present something completely new. The actions were geared to accessing records rather than destroying them, even though there were reports of a more or less symbolic destruction of the insignia of the hated state apparatus: "Office furniture was vandalized, files were shredded." Such vandalism notwithstanding, what was spared was precisely that which was to turn into the founding myth of a new government agency: "Truly important records were left unharmed, that is, they were transferred to secret locations."⁷⁸ They were not only to be out of the reach of East German civil rights activists and U.S. spies, but the principal aim was to withhold them from posterity. For days and nights, members of the State Security Service fed files to their shredders until the latter had glutted themselves to the point where they had to be replaced with superior Western models; these too were unable to cope with the loads of papers. Yet it wasn't possible to destroy the files in other ways; the smoke from burning paper, for instance, would quickly have alerted outside observers.

Only a small portion of the removed and shredded files was later found. These cancels, as it were, were to be rendered legible again by a Project Group for the Reconstruction of Destroyed Documents. Their task was to view and paste together "17,200 sacks or 25 kilometers"⁷⁹ of shredded files. A lengthy procedure, no doubt, for while computers may assist in the reassembly of Babylonian potsherds (see chapter 6), the reconstruction of Stasi files still proceeds manually. The Stasi Files Office assumes that the former State Security Service was following a "paperwork destruction tactic,"⁸⁰ in which the shredded files ranked highest. In short, the destroyed files were the "truly important" ones. A list of the files that were erased or rendered illegible uses a V for *Vernichtung* (destruction) to indicate their value. Thus the negative registration of the V-files takes on the function of a *signifiant barré*. The significance of the legible text derives from that which has been canceled. In some cases, the contents of the files were also recorded on decodable magnetic tapes that escaped destruction.

With the dissolution of the Ministry for State Security and the East German Bureau for National Security, the now homeless records are caught in that strange limbo between administration and archive where archivists also locate the registry. Bereft of an agency, they are no longer administrative records. At the same time, however, they are not archived records since they are not subject to any archival retention period and are constantly being reused. They are discarded records that can be reactualized at any given moment—archival quasi-objects of a quasi-office. After all, the Office of the Federal Commissioner for the Records of the State Security Service, itself the product of a historical rupture, is organized like a government agency, yet it does not have its own area of responsibility. Legally, it is part of the Ministry for the Interior. It is a concentrate of the dissolved East German ministries, with one purpose only: to administer files *as files*. In this respect, it once again resembles an archive, whose main task is to guard the files that originated in spatially and functionally disparate agencies. To quote a commentary on the Stasi Files Act, "The Commissioner is an independent archival office." Section 37 (1) obliges the commissioner to take custody of, evaluate, and administer the records "according to accepted principles for maintaining archives." Which means, above anything else: not according to political principles. Like an archive, the Office of the Federal Commissioner is charged with collecting records, locating "rogue files," and disclosing the located and reacquired files upon request. The office, then, is a relay for the collection, distribution, and filtering of records, with the single task of storing and registering files and making them accessible to those who wish to inspect them.

The many goals to which these records hovering between archive and procedure are put to use—scholarly, administrative, legal, biographical—are very different from those once pursued by the former Ministry for State Security. The records attain archival status when used for scholarly research; they turn into forensic documents when used in a civil or criminal procedure; and they assume the status of public administrative records when transferred to another office that extracts information for an ongoing administrative procedure. Finally, the files in limbo turn into their own record the moment they are submitted to a private person. They contain a knowledge that, if reactivated in a different context, exhibits uncontrollable and unanticipated results.

This *personal inspection of records* forms the core of the Stasi Files Act. In the discussions surrounding the introduction of the bill, it was stated that

the primary goal was to allow people "insight into the documents that concern them so that they may catch up with their life's story."⁸¹ Translated into legalese, Section 1 (1) of the Stasi Files Act states that its purpose is "to facilitate individual access to personal data that the State Security Service has stored regarding him, so that he can clarify what influence the state security service has had on his personal fate." If understanding one's fate is legally facilitated by the right of access to one's records, then the nineteenth-century autobiographical principle of record-keeping has undergone a remarkable change: the law envisages that the Stasi files (which were kept to enlighten about the individuals observed) can be used for the purpose of self-enlightenment in much the same way as keeping and reading a diary. The legally granted access to records merges these texts (comprising anonymous informer reports, file notes, and Stasi instructions) with the life of the file subject. The result intended by the law is to clarify one's "fate." This remarkably nonjuridical goal—expressed with the equally nonjuridical term *fate*—is based on the assumption that the Stasi files are capable of storing individual life stories. The same applies to the protesters outside the Ministry for State Security: they too unquestioningly assumed that "my records" and "our files" exist, and with their banners and slogans they prepared the ground on which the Stasi files could become their own.

According to the Stasi Files Act, the right to inspect records is accorded to anybody who, in the language of the law, was a "data subject." This classification is in turn based on the file the concerned party is applying to inspect, as are other classifications that may impact the right to inspect the records: "The classification of citizens as victims, informal collaborators, or full-time employees of the Stasi is not based on any hearing but solely on the information derived from the written documents of the Ministry of State Security."⁸² In other words, to regulate access to the records, the commissioner's office is forced to adopt the perspective of the ministry that compiled the records in the first place. "It is of no relevance which classification is, from today's point of view, the correct one."⁸³ This circular reasoning effectively seals itself from all extra-administrative criteria that may be involved in classifying those who demand access. With this legally effectuated elimination of the outside world, problems arise, if at all, only in connection with internal contradictions. In a hearing prior to the introduction of the Stasi Files Act, former attorney general Alexander von Stahl pointed out that he was familiar with files in which

"an individual first appeared as a victim, then as a beneficiary, and then again as a victim."⁸⁴ This, however, obliterates the classic archival rule of "one subject—one file."⁸⁵ Given that one and the same person can have different functions in different contexts, Article 6 (8) of the Stasi Files Act states that it is not the file in its entirety but the individual item of information that determines the status of the party demanding access: "It shall be ascertained for each piece of information if the person involved was an employee of the State Security Service, a beneficiary, a data subject, or a third party. The determining factor for ascertaining the above shall be the purpose for which the information was documented in the records."

If the goal of clarifying what influence the State Security Service has had on her personal destiny is to be achieved, and if the "data subject" is to establish a relationship to "her" file, there has to be a third party that brings the two together. "*Pour être deux, il faut être trois* [To be two, it is necessary to be three],"⁸⁶ as the legal historian Pierre Legendre introduces the logic of the Parasite into the administrative realm. This intermediary position is taken by the Commissioner's Office. It negotiates between file object and file subject. That is to say, the personal inspection of one's file is only possible after it has been read by a third party. "The clerks of the Commissioner's Office acquire a complete and in part intimate knowledge of the data subjects."⁸⁷ This first, official reading is not just, in the commissioner's words, an initial "getting to know"; it is also the first intervention in the file. The "prerogative to preprocess the file"⁸⁸ precedes the right to inspect it. It grants the government that inherited the Stasi files the privilege of preparing the records for private viewing. In the interest of protecting the privacy of others, certain information will be deleted, names rendered illegible, duplicates made. The context of the record is erased; hence the file that is handed over for private viewing is invariably depersonalized, devoid of any reference to other files or individuals. It is a text that is tailored exclusively to the individual making the request. The context that in the opinion of archival experts is the indispensable precondition for the making of the true file is missing. The preread file that is deemed safe for inspection is, ultimately, a canceled file.

These cancellations trigger a desire for one's own real file. The latter is not just an *idée fixe*; the very fact that the records have been officially precensored leads to the inevitable conclusion that there must be a real file. Apart from the visible deletions, the indisputable proof that the released file has been tampered with and is therefore incomplete is the *enveloppe*

that accompanies it. It contains the pages that for legal reasons are not to be read by anybody else after having been read by officials. The envelope is fastened with a paper clip; it may not be removed from the premises and the data subject may only open it in the presence of a supervising official. However, the very act of physically handling this envelope, of turning it on its head, results in an identification with the released file. Focusing on what has been withheld from them, indignant readers exclaim: "But that's my file!"⁸⁹ As part of the Ministry for the Interior, the Office of the Commissioner for the Records of the State Security Service knows how to administer secrets of the soul. It has entrusted the envelope with the secret that attracts all kinds of phantasms. The envelope is an "enveloppe idéale, qui les [les textes] contient tous [ideal envelope, which contains all (the texts)]."⁹⁰ It fuels the suspicion that the legible file is nothing but an inferior, secondary text lacking the truly important pages. It does not hold the *whole life*. Rather, it is the forbidden envelope that contains everything. Subsequently, one's own life story turns out to be illegible, something that can only be found in the *complete* file. Like the heavenly book, it alone contains all the pages of life.

No wonder, then, that the inspection of records generated a new literary genre: the file-based autobiography, designed to add what is missing from the canceled Stasi records. The historian Timothy Garton Ash, himself accustomed to working with files, demonstrated how studying files leads to literature—more precisely, how inspecting files promotes the literary genre of the file-based autobiography. Following a first perusal, he accepts his Stasi file as "a gift to memory"⁹¹ and thus pursues the very activity spelled out in Article 1 (1) of the Stasi Files Act. Aligning his life story to the contents to the file, he sheds light on his fate and produces, as announced by the subtitle of his book, a *Personal History*. Ash's *The File* is a book based on a file, his "own" file. It is the result of the effort to reconcile file and memory. The writing of the biography is prompted by a counterstatement: the authorial file, that is, the autobiographical book, is a denial of the inspected file. Written into the gaps and omissions of the inspected records, *The File* is not the one that was handed over but the revised one that was confronted and made to coincide with the subject's life story.

The autobiographically validated record reenacts the Goethean principle of keeping records to become a subject. "The Stasi is my Ecker-mann"⁹² is a line from a Wolf Biermann song frequently quoted in con-

nection with the Stasi Ministry, though the ministry resembled a party general secretary more than it did Goethe's private assistant. The comprehensive recording of all works, deeds, and intentions was undertaken for pastoral reasons, to guard the population and keep the flock united. The Protestant clergyman Joachim Gauck, the first commissioner of the Stasi Files Office, did not completely condemn that ministry's attempt to meticulously record life. Resorting to Biermann's line, he confessed that "even the most perfidious account contains something of the profound will of large parts of the population."⁹³ Why shouldn't the principle of heavenly accounting also work in secular hands? Even "infernal files," Gauck continues, are capable of "providing evidence."⁹⁴ They give evidence of a subject, and the more recalcitrant the latter, the more they provide. "We do not arrive . . . as white, blank pages," the commissioners warned the old Federal Republic. His office has indeed contributed countless written pages to the process of unification, initiating a wave of file-based subject constitutions—a seemingly anachronistic mixture of divine bookkeeping, Protestant governmentality, and Eckermannization that has permeated the republic since its official reunification. A defunct state that left behind huge numbers of personal dossiers, an opposition fixated on records, and a government agency that was created by a Files Act and is responsible for nothing but files—all came together to enable this historically extraordinary case of allowing masses of individuals to inspect their files.

Regardless of whether the Stasi files were released in response to a request by a data subject, for administrative or legal procedures, for purposes of documentation, or to provide historiographical material, in each case it has to be assumed that they are capable of transmitting the truth. But with the dissolution of the Ministry for State Security, they lost the institution that guaranteed their veracity. The Commissioner for the Stasi Files cannot occupy this position, since he does not have the power to make legally binding decisions on the files' truth content. Instead, he is left to publicly reflect on their truth content by borrowing the voice of those who inspected their files: "The citizens who inspected their records frequently confirmed that the Ministry for State Security correctly . . . recorded facts," and that their files "accurately mirrored their lives." Based on these subjective impressions, the commissioner concludes in his activity reports that the files are "credible"—a quality that is usually ascribed to witnesses.⁹⁵ In the legal domain, however, those who inspect their own

files have no say in determining their truth content; the courts alone are qualified to reach a decision that can turn files into facts on file. At most, Article 14 (1) of the Stasi Files Act endows data subjects with the right to request that "their personal data and the evaluation aids used to find records shall be erased and depersonalized" and thus removed from this world. The right to request such erasure, however, does not extend to beneficiaries and Stasi employees: they will continue to be judged by the truth preserved in their files.

This nonerasable file—reminiscent of the repertoire of punitive measures in Kafka's *Trial*—remains the final threat for the functionaries of the Stasi apparatus. Their last and only hope is that their files may be canceled on Judgment Day, when our sins are erased (*exaletphein*) from the divine record that registers all our deeds. A similar hope, though one unrelated to any specific crimes, was expressed in a note left by the philosopher Hans Blumenberg: "Bluntly put, it could be that it is only the file of the condemned that contains his identity, while the 'Book of Life' that is opened on Judgment Day is marked by an abundance of deletions made by overly zealous angels,"⁹⁶ those heavenly chancery employees.

In the face of earthly accounting procedures, however, such hopes for merciful cancellations are most likely in vain. The question arises of what would come about if everything were indeed registered, once and for all? A perfect order? Striving for the latter has given birth to the well-known organization and control technologies that turn meticulously arranged files into the measure of all order. They ensnare clerks and officials, until those officials start to administer themselves, asking for deliverance from the circulation of official papers with the magic formula *tbf* (to be filed), and transmute into a part of the stratified order, just like other office furniture. Ten years prior to its dissolution, Heiner Müller used the Ministry for State Security to trace this progressive mimesis of files in "Volokolamsk Highway," which takes the governmental ideal of the unification of clerk and file at its word, leading to a literal fusion between the two.

Müller's teratology of the socialist obsession with records begins with a myth. Its point of departure is the old administrative dream of perfect order. Here it finally has been realized. As a result, all matters of administration have come to a stop, and the end of civil servants is at hand. Only a consciously committed *breach* of the rules is able to defer the collapse into total order and thus grant the civil servant-comrades a last lease on life. In the name of order, they act against it. Covered by an official command, the inferior comrade is to drive through a red light. The maneuver proves

fatal. Shortly afterward, the victim returns as an angel-like revenant to where he came from: the desk of the official who gave him the order to breach the order.

I had a dream last night. It was a nightmare
Then I woke up and all things were in order.
Comrade Super everything's in order
No incident no disorderly conduct
And not a single crime . . .
We have done it after all Comrade Super
Ten years of day and night shifts not for nothing
Security and order that was it
What we were taught and that was our goal . . .

For in-house-use I'll tell you We produce
Security and order
 And awareness,
Yes and awareness Right And the mother
Of order is disorderly conduct
The father of State Security is
None other than the same State's Enemy . . .

Who would need us if all things were in order
I'd go and hack my desk to firewood
And use the staff files here to kindle it . . .

First you will make amends for your mistake
You did retreat when you were facing facts
And soon lost sight of our sacred truth
By your blind faith in what your eyes were seeing
A fact is not a fact if we won't say so . . .

And when you have corrected your mistake
You needn't hang yourself when you're off duty
A medal's what you get And a bonus
Now go and drive across the intersection
When all the lights are red.

 At red across
The Intersection I.
 And you'll be
In uniform. And that is an order. . . .

He drove at red across the intersection

In uniform On duty In rush hour . . .

We'll have to hush up and dress up his death
A statue for the Unknown Keeper of
The Law . . .

And suddenly there stood
Right on my desk top our honored corpse
Brand new the uniforms the epaulets
Already sprouted into angels' wings
Comrade Super everything's in order
The dialectics have been reestablished
And all systems are now back to normal.
He stooped down and sang into my ear . . .

Got up and turned on toes a pirouette
Flew out the window flapping twice his wings
And when I tried to get up tried to see
How he took to flight something like lightning struck
Me down with pain like from a welding torch
I and my desk had grown to form one body
Into one body grew my desk and I . . .

Was this my desk or was this I myself
Who told you so Old Prussian my friend . . .

I am my desk Who is Who's Property
The desk is people's property And what
Am I Below a desk above a human
No human but a humachine
A furnitureman or a manfurniture
The staff files are my abdominal organs
I'm an occurrence. To be put on file.⁹⁷

§ 6 Files into Icons

In the 1970s an antique archive was discovered on the Athenian agora that to all appearances had remained undisturbed for millennia:

The archive consists of lead tablets rolled up with a single name on the outside. Inside each tablet we usually find the same man's name with a description of his horse and its price. There is no date. Some tablets are from the fourth century, some from the third. Thus apparently every cavalryman had his own lead roll with a brief description of his horse and its value. What is most peculiar about these tablets is that all have been tightly rolled up and were found in their original state (as one can tell because they are made of lead). It is thus very doubtful if any had ever been consulted. . . . Perhaps they only recorded what everyone knew already. Or the records were in fact too crude (and they are very crude indeed) to be of much use as records without other information that could be supplied orally. Or it was simply felt inappropriate to have a record of each horse (which included its value) and of its owner, even if the record was not going to be consulted much. . . . They seem never to have been opened.¹

In the 1980s the German artist Anselm Kiefer completed *The High Priestess*, the largest work in his series of lead books.² *The High Priestess* is composed of 126 giant folios arranged on vast steel bookcases. Here, lead does not appear, as Gutenberg would have it, as print technology's *res metallica*, in the shape of letters on almost weightless paper; rather, the very books themselves are made of lead. As a result, their weight renders them unusable. The immobile tomes are their own tombs. Their content can only be accessed if it is transferred into books that are easy to handle and

read—for instance, photographic reproductions contained in an illustrated book on *The High Priestess*. From the point of view of the technology of production, the folios are not books; instead, they resemble files: “The first of these books consisted of sheets of paper with images stuck to them, stapled together; gradually more and more materials were incorporated, and the books became thicker and heavier.” Like files, they may incorporate anything that can be impressed on lead, arranged in layers, and finally bound together by wire. The incorporated objects and materials go beyond the usual scope of any book designed for reading purposes. “Since the advent of printing we have come to see a book as something meant for ease of use, designed to impart its information content quickly; in Kiefer’s hands it has progressively transformed itself into a weighty tome”³—a tome so heavy that it takes several men to lift a single book. Unlike files—and this is what ultimately distinguishes files from Kiefer’s work of art—the near-unmovable books do not circulate through buildings and corridors, and nobody accesses their information or refers to individual pages. The immobilization amounts to a musealization, creating a work of art out of files.

As a unique museum artifact, Kiefer’s lead books are as unused and unusable as the lead tablets of the Greek cavalry archive. The latter, too, are files at a standstill, an archaeological monument as much as Kiefer’s books. Equally devoid of signs of reuse, they are an aesthetic monument. They represent nothing less than the alphabetic media. For what is one to do with these unreadable tomes other than venerate them as icons of writing and literacy? They preclude all use and reuse, and it is precisely this dysfunctionality that highlights their literal function. Whatever is not in use, or is altogether unusable, turns into a memory sign (a monument). The external appearance of the tomes recalls the origin of the book from file-*codices* and refers to Greek lead records.⁴ The metal they are made from alludes to the printing press, and the peas they contain may be an allusion to the fact that reading, as already evident in the etymology of *lex*, is rooted in sorting and counting. Last but not least, *Zweistromland*, the German title of Kiefer’s lead files, has a memory function. Though ancient Mesopotamia used clay tablets rather than lead books, both media serve the same purpose: they organize transmission processes. According to Max Weber, “the rivers or canals of Mesopotamia” play a role similar to that of “the contemporary means of communication”;⁵ they transport goods as well as data. By naming his composition *Zweistromland*, Kiefer

is translating the communication flows of the Babylonian empire into a territorial order. The rivers flow into a topographic arrangement of tomes in steel shelves. The left shelf is called "Euphrates," the right "Tigris."

The opposite of this artful arrangement is the strenuous task of deciphering. To learn to read Babylonian clay tablets, the Free University of Berlin started a decades-long project of compiling catalogs that list the frequency of signs and recurring sign combinations. The decoded text and the process of decoding are compatible in that they both operate in a nonsyntactic language. "The basic data structures this 'language' refers to are 'lists' of 'words,'"⁶ and the catalogs for deciphering this language are themselves composed of lists. Using INTERLISP, a dialect of LISP (list processing), the clay tablets are transferred onto electronic media, thus fusing the oldest and youngest "revolution in data processing."⁷ This historical splicing together of clay tablets and silicon chips brackets the ends of a genealogy of files. Between Mesopotamia and LISP, between millennia-old lists and their computer-based deciphering, are the epochs of nonmathematical, merely quasi-algorithmic techniques for controlling transmissions and the life of files.

But what could be a clearer indication of the closure of the epoch of files and their dispositive than the reappearance of files as stylized icons on computer screens, designed to visualize the computer's operating instructions? At the interface of computer and user, material files turn into icons, which a mouse, replacing the hand, "opens" and "closes" with a click. The very terminology of computer surfaces is designed to remind users seated before screens of the familiar world of files. The menu tab offering options like "list," "format," "thesaurus," "table" and the instructions *copy, delete, save* turn users into virtual chanceries or chancellors. By condensing an entire administrative office, the computer implements the basic law of bureaucracy according to which administrative techniques are transferred from the state to the individual: from the specialized governmental practices of early modern chanceries to the "common style," from absolutist administrative centers to individual work desks, from the first mainframe computers in defense ministries to the desktop at home.

The current copresence of digital and paper files results in an intermedial competition that has prompted archivists and administrative experts to reflect on the near-extinct medium of files. Old, hitherto overlooked filing techniques are now subject to analytical evaluation. Rather than appearing as mere pictographs on user interfaces, filing techniques are to

be turned into discursively analyzed *principles* that can be applied to computerized data processing. For a simple "1:1 on-screen depiction of shelves, binders and folders does not capture the previous functions. It erodes old forms by giving rise to vibrant e-mail communication that leaves no trace, neither in the files nor elsewhere."⁸ Faced with electronic facilities of communication, the bureaucratic principle of filing things—which was first explicitly spelled out during the emergence of another fleeting communications technology, the telephone—is once again emphasized. Auto-protocol features save data from complete decontextualization and immaterialization, thus retaining the filing principle, even in the digital domain.

But the history of files is not only apparent when it comes to data processing or the one-to-one graphic rendition of the old world of files and paper. In highly unmetaphorical fashion, files and their techniques organize the very architecture of digital machines. As processors, they have become part of the hardware of the transmission, computing, and storage machine called a computer; they ensure access to all internal operations by controlling both instructions and data, as well as their addresses. A central processing unit, whose register controls all that goes on within a computer, retrieves the old universal function fulfilled by files in the days of the Staufer emperor Frederick II. The history of files therefore also contains a prehistory of the computer. Not because old filing principles are consciously transferred to the new medium but because administrative techniques of bygone centuries are inscribed as *stacks*, *files*, *compiler*, or *registers* in a digital hardware that remains unaware of its historical dimension. And with this media-archaeological reference to files, it finally becomes possible to determine where their power resides today.