

Michel Foucault and the Disciplinary Rhythms - Part 1

Saturday 14 December 2019, by [Pascal Michon](#)

Sommaire

- [Prison as Rhythmic Total \(...\)](#)
- [Other Rhythmic Institutions](#)

[Previous chapter](#)

In 1970, Michel Foucault (1926-1984) was admitted to the Collège de France. Five years later, he published his most famous book, *Surveiller et Punir - Discipline and Punish* (trans. Alan Sheridan, 1977). Although the latter has been read for decades as an essay on supervision and control of space, centered on the figure of the Benthamian Panopticon, it proposed one of the most beautiful temporal study on social and body rhythms. In fact, as in Lefebvre's work, space and rhythm were considered by Foucault as two sides of the same coin. From a rhythmanalytical point of view, even if he never mentioned the concept of rhythm, his analysis has proved to be a real breakthrough. The rhythmic transformations that we observe in the West in 19th century cannot be accounted for only, as mainstream Marxist thinkers claimed, by the development of industrial work, or as unorthodox Marxists critics as Kracauer and Benjamin asserted in the 1930s, by the development of transportation, communication and reproduction devices, or even as Lefebvre in the 1960s and 1970s, by the domination of everyday life by consumption and urbanization, but they have to be explained—*also*, because this naturally does not preclude the previous critiques—by the emergence of a new legal and political system, namely modern democracy.

In order to build his case, Foucault concentrated on one institution: the Prison. The latter might seem marginal in terms of its operation but it is in fact the place where the rhythmic techniques, that spread in the West from the 17th century, were brought to their greater intensity, and therefore where they were the most easily observed, while they were often gently and invisibly working in the rest of society. Radiating from this center, Foucault then attempted to describe the series of institutions—school, army, factory, hospital and court—where, from the late 16th century, new manners to organize the flow of the bodies, the discourses and the social interactions—I will call the latter the “sociality”—which have become features of the democratic era, have been developed. Let us start with prison.

Prison as Rhythmic Total Institution

According to Foucault, modern criminal law and prison still maintained “a trace of ‘torture’” (p. 16) inherited from the *Ancien Régime*, which manifested itself through a number of practices involving a certain amount of physical suffering: food rationing, sexual deprivation, promiscuity, blows, solitary confinement. If High-Security Districts have mostly disappeared, this description still remain valid today in many democratic societies—it is worth not to forget it. However, most of the power to

punish was now expressed through corrective and disciplinary practices intended to transform the bodies rather than through devices used to make them suffer. Admittedly, prison techniques appeared merely as deprivation of liberty, but they were not just that; they above all produced new modes of individuation.

In several respects, the prison must be an exhaustive disciplinary apparatus: it must assume responsibility for all aspects of the individual, his physical training, his aptitude to work, his everyday conduct, his moral attitude, his state of mind; the prison, much more than the school, the workshop or the army, which always involved a certain specialization, is “omni-disciplinary.” (*Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, pp. 235-236)

The prison was a kind of *rhythmic “total institution,”* in Goffman’s sense, whose program aimed at transforming individuals by a constant beam of rhythmic techniques. It intended to reorganize body, discourse, and interactions with groups in their entirety. Lucas, a “reformer” of the time of the king Louis-Philippe, noted with approval the following:

“In prison the government may dispose of the liberty of the person and of the time of the prisoner; from then on, one can imagine the power of the education which, not only in a day, but in the succession of days and even years, may regulate for man the time of waking and sleeping, of activity and rest, the number and duration of meals, the quality and ration of food, the nature and product of labor, the time of prayer, the use of speech and even, so to speak, that of thought, that education which, in the short, simple journeys from refectory to workshop, from workshop to the cell, regulates the movements of the body, and even in moments of rest, determines the use of time, the time-table, this education, which, in short, takes possession of man as a whole, of all the physical and moral faculties that are in him and of the time in which he is himself.” (Lucas, II, pp. 123-124, in *Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, cited p. 236).

In a few lines, everything was said: the goal of the modern prison was now, besides deprivation of liberty, to “regulate the time” of waking and sleeping, activity and rest, meals, labor, body movements, prayer, but also the use of speech, “even so to speak, that of thought.” This was a total rhythmic program, involving body, discourse and social interaction, for a total disciplinary institution. It was also a program of reduction of individual rhythms to a common metrics, that is to say to a regular segmentation of life and return of the same.

Although this program had not been implemented without discussions and had been declined in many ways in Europe and the United States, Foucault identified four major technical devices which were present almost everywhere.

The first, borrowed from the monastic system, consisted in subjecting the prisoners’ lives to a strict and repetitive schedule. It aimed at what we could call a complete “metrification” of life.

For centuries, the religious orders had been masters of discipline: they were the specialists of time, the great technicians of rhythm and regular activities. (*Discipline and Punish*, 1975, trans.

Since its origin—which corresponds, as we shall see in the next chapter, at the end of the ancient “idiorrhhythmic” movement—the monastic schedule involved “three great methods [...]: establish rhythms, impose particular occupations, regulate the cycles of repetition” (p. 149).

During the 17th and 18th centuries, the hospital, the school, and the army added some supplementary sophistication and requirements: the hourly division became more precise, and one began to count by quarters of an hour; the quality of the time employed was now ensured by uninterrupted control; more and more, exactness and application were required. The older religious goals of ascetic dressage of the flesh and separation of the monastic community from the secular world began to give way to much different goals of integration of the population and reform of the individuals through the incorporation of the rule.

From the 19th century, this metric model spread into the society. One of the most famous example of the crucial role played by the time-table was provided by “the rules for the House of young prisoners in Paris” (1838), by which Foucault opened his book and whose articles were sometimes very similar to those highlighted by Edward P. Thompson in English Methodist catechism schools of the same period (1833), in his famous study “Time, Work-Discipline, and Industrial Capitalism,” which Foucault unfortunately did not mention (1967, see Michon, 2007/2015c, pp. 151-162). These rules showed that the time-table was now much more than just an hourly distribution of tasks for a day or a week, however precise it could be. It also contained extremely detailed prescriptions concerning what Marcel Mauss called the “techniques of the body” (work, hygiene of the face and hands, feeding, sleep, gestures, marching by rank and division), and what we could call, by emulating Mauss, the “techniques of the discourse” (silence, prayer, reading, instruction) and those “of sociality” (succession of seclusion in cells and grouping by divisions, in the workshop, in the chapel or in the courtyards).

“Art. 20. *Work*. At a quarter to six in the summer, a quarter to seven in winter, the prisoners go down into the courtyard where they must wash their hands and faces, and receive their first ration of bread. Immediately afterwards, they form into work-teams and go off to work, which must begin at six in summer and seven in winter.

Art. 21. *Meal*. At ten o’clock the prisoners leave their work and go to the refectory; they wash their hands in their courtyards and assemble in divisions. After the dinner, there is recreation until twenty minutes to eleven.

Art. 22. *School*. At twenty minutes to eleven, at the drum-roll, the prisoners form into ranks, and proceed in divisions to the school. The class lasts two hours and consists alternately of reading, writing, drawing and arithmetic.” (Léon Faucher, *Règlement de la prison-école pour jeunes*, 1838, in *Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, cited p. 6)

In addition to the time-table, which was the main metric device of modern prison, there were two

other devices often associated with it: cell isolation and work. The first was also borrowed from monastic communities that had succeeded the original eremitic communities (see next chapter). Regularly, and in extreme cases throughout their detention, prisoners, who had already been cut off from their ties with the free society, lost also contact with their peers. A maximum pressure was then exerted on them.

At Cherry Hill in Philadelphia, built in 1822 and managed by the Quakers, the isolation was complete: the prisoners were locked up day and night. Tocqueville, who went to observe the system recommended it for France, because it allowed to maximize the disciplinary effects.

“Alone in his cell, the convict is handed over to himself; in the silence of his passions and of the world that surrounds him, he descends into his conscience, he questions it and feels awakening within him the moral feeling that never entirely perishes in the heart of man.” (*Journal des économistes*, II, 1842, in *Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, cited, p. 6)

Most of the time, though, isolation alternated with common work and shared meals. In Auburn, a New York State prison built between 1816 and 1825, the regulations prescribed confinement in an individual cell during the night, and absolute silence: convicts could only talk to guards with their permission and in a low voice. However, prisoners left their cells for part of the day, especially for meals and joint work sessions.

Associated with isolation, work was massively used as a means to transform bodies and languages and bend them to a new discipline, based on order and regularity, on the exclusion of any agitation or distraction, but also on the acceptance of hierarchy and control. A report from 1836 noted that with work,

“the rule is introduced into a prison, it reigns there without effort, without the use of any repressive and violent means. By occupying the convict, one gives him habits of order and obedience; one makes the idler that he was diligent and active [...] with time, he finds in the regular movement of the prison, in the manual labors to which he is subjected [...] a certain remedy against the wanderings of his imagination.” (Bérenger, in *Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, cited, p. 242)

In short, penal labor could be seen as a machinery that transformed the violent, agitated, unreflective convict into a part that played its role with perfect regularity—and Foucault met here with Thompson.

If, in the final analysis, the work of the prison has an economic effect, it is by producing individuals mechanized according to the general norms of an industrial society [...] The labor by which the convict contributes to his own needs turns the thief into a docile worker. (*Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, pp. 242-243)

The fourth rhythmic device that characterized modern prison doubled each of the precedents in

order to render them more effective. As a matter of fact, time-table, isolation, and work could not produce the intended results unless they were based on practices that allowed to better anticipate the behavior and to punish immediately any deviation. They were therefore accompanied by a set of architectural and regulatory techniques that made it possible to observe and monitor prisoners at all times and at a lower cost. The Panopticon imagined by Bentham was, as we know, for Foucault, the archetypal figure of these techniques.

It is a type of location of bodies in space, of distribution of individuals in relation to one another, of hierarchical organization, of disposition of centers and channels of power, of definition of the instruments and modes of intervention of power, which can be implemented in hospitals, workshops, schools, prisons. (*Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, p. 205)

Time-table, isolation, work, and supervision necessitated a last crucial element that allowed them to operate together. Indeed, in the past, these corrective techniques had already existed for a very long time and had often been used in various institutions of the *Ancien Régime*. Through the *knowledge* that was produced by modern prison they could now be integrated into a new systematized apparatus.

As a matter of fact, the prison system tended to become an instrument of modulation and individualization of the sentence which did not exist in the *Ancien Régime*. In the past, punishment had the extraordinary, punctual and often irreversible character of torture. It expressed the vengeance of a trampled sovereignty and participated in social rhythms dominated by the periodic return of rituals, holy days, and festivals. The execution of a convict attracted crowds, like a show that often took carnival forms.

With modern prison, the punishment was extracted from the cycles of this traditional sociality and this exclusion from common life reinforced its individualizing effect. Because of confinement, the sentence, which had taken until then the extreme but relatively brief form of corporal stigma or torture, could be exactly quantified by the judge “according to the variable of time” (p. 232) and then modulated by the prison administration, in intensity as well as duration, depending on the attitude of each prisoner during his or her detention. The punished individuals, which formerly were marked or destroyed by the thunderbolt of royal justice in a dazzling act of ostentatious violence, were now constrained by modulations of duration and intensity of their sentence, which individualized them in a completely new way. The “metrification” of prison was the basis of an individualization of the punishment.

These modulations were linked to some knowledge generated by the legal and penitentiary institutions based on their novel observation and monitoring practices. From the beginning, in Philadelphia, one of the prisons that later served as a model all over the world, there was a file for every prisoner, including a report on his crime and the circumstances in which it had been committed, a summary of the questionings he had been submitted to, notes on how he behaved before and after the sentence, observations about his day-to-day conduct while in detention. New forms of “scientific discourse” were associated with the modern penal institutions and their new rhythmic techniques: psychiatric expertise, criminal anthropology, criminology. The question was no longer simply to establish the objective truth of a crime, to ascertain the identity of the perpetrator and to apply to him the penalty defined by the law. It was now a matter of giving the offense a

subjective status, inserting it into a psychological explanation, and ensuring that the perpetrator finally corrected him- or herself. Thus, the rhythmic techniques appeared as closely connected with the rise of some new forms of knowledge and human sciences.

Other Rhythmic Institutions: School, Hospital, Army, Factory

In the last pages of his book, Foucault generalized these conclusions and presented modern democratic societies as underpinned by what he called “the carceral” (part 4, chap. 3). The declaration of equality before the law and of civil liberties, he argued, had been accompanied by the diffusion of a set of disciplinary practices and the establishment of a tight set of punitive institutions constituting a continuous substratum.

The continuity of the institutions themselves, which were linked to one another (public assistance with the orphanage, the reformatory, the penitentiary, the disciplinary battalion, the prison; the school with the charitable society, the workshop, the almshouse, the penitentiary convent; the workers’ estate with the hospital and the prison). A continuity of the punitive criteria and mechanisms, which on the basis of a mere deviation gradually strengthened the rules and increased the punishment. (*Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, p. 299)

This conclusion has led to many misinterpretations. Foucault has been accused of caricaturing democratic societies as “carceral societies” or of painting a “pessimistic picture” of liberal modernity. His point, in reality, was not so reductive. He simply wanted, precisely by renouncing this kind of historical dualism according to which light would finally have triumphed over darkness—or tyranny over original freedom, which amounts to the same thing—analyze, in their specificity and detail, based on the new rhythmic practices peculiar to prison, the new soft and invisible forms of power which pervaded modern societies.

The prison and the organization of the punitive system were not for him the ultimate principle of the new democratic societies as, for instance, class exploitation in Marxism, but an observation post from which it was possible to analyze the transformation of the forms of power from the traditional societies to the modern ones. Instead of trying to account for the latter by a single factor determined according to a historicist philosophy, his objective was to reconstitute, starting from the prison, the multiple and contingent ways in which a disparate constellation of institutions had brought about, since the end of the 16th century, the new techniques of the body, the discourse and the sociality, characteristic of the democratic era.

Secondary and elementary schools were probably some of the oldest institutions—and later those with the most powerful effects on modern democratic societies—to have aimed at shaping singular and collective individuals through calculated rhythms of life.

In the Jesuit secondary schools born out of the Counter-Reformation, the classes, which could have two or three hundred pupils, were divided into groups of ten; each of these groups was placed in a camp, the Roman or the Carthaginian. From the 18th century, the methods changed: the school space became serial; classes were only composed of individual elements, defined by their position in the

system of age classification, performance and evaluation of behavior. The current tables layout was established.

Unsurprisingly, the time-table determined the whole course of school life. As early as the end of the 17th century, Jean-Baptiste de La Salle advocated in his *Conduite des écoles chrétiennes* – *The Conduct of Christian Schools* a day and week schedule that dictated not only the hourly distribution of tasks, but also the series of gestures and postures which had to be adopted by the pupils.

“At the last stroke of the hour, a pupil will ring the bell, and at the first sound of the bell all the pupils will kneel, with their arms crossed and their eyes lowered. When the prayer has been said, the teacher will strike the signal once to indicate that the pupils should get up, a second time as a sign that they should salute Christ, and a third that they should sit down.” (La Salle, *Conduite des écoles chrétiennes*, pp. 27-28, in *Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, cited, p. 150)

While the pupils were taught, their bodies were subjected to a systematic training. Learning to write, for example, required a complex gymnastics that involved them entirely.

“The pupils must always hold their bodies erect, somewhat turned and free on the left side, slightly inclined, so that, with the elbow placed on the table, the chin can be rested upon the hand, unless this were to interfere with the view; the left leg must be somewhat more forward under the table than the right. A distance of two fingers must be left between the body and the table; for not only does one write with more alertness, but nothing is more harmful to the health than to acquire the habit of pressing one’s stomach against the table; the part of the left arm from the elbow to the hand must be placed on the table. The right arm must be at a distance from the body of about three fingers and be about five fingers from the table, on which it must rest lightly.” (La Salle, *Conduite des écoles chrétiennes*, pp. 63-64, in *Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, cited, p. 152)

As later in the army and prison, the succession of gestures was ordered by a sequence of signals, whistles, drum rolls, commands, which must both accelerate the learning process and teach speed. Jean-Baptiste de La Salle described a reading exercise as follows.

“When prayer has been said, the teacher will strike the signal at once and, turning to the child whom he wishes to read, he will make the sign to begin. To make a sign to stop to a pupil who is reading, he will strike the signal once [...]. To make a sign to a pupil to repeat when he has read badly or mispronounced a letter, a syllable or a word, he will strike the signal twice in rapid succession. If, after the sign had been made two or three times, the pupil who is reading does not find and repeat the word that he has badly read or mispronounced —because he has read several words beyond it before being called to order—the teacher will strike three times in rapid succession, as a sign to him to begin to read farther back; and he will continue to make the sign till the pupil finds the word which he has said incorrectly.” (La Salle, *Conduite des écoles chrétiennes*, pp. 137-138, in *Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, cited, p.

A report from 1816 described in very similar terms a writing exercise.

"9: Hands on the knees. This command is conveyed by one ring on the bell; to: hands on the table, head up; 11: clean the slates : everyone cleans his slate with a little saliva, or better still with a piece of rag; 12: show the slates; 13: monitors, inspect. They inspect the slates with their assistants and then those of their own bench. The assistants inspect those of their own bench and everyone returns to his own place." (*Writing exercise*, in *Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, cited, n. 5, p. 154, cf. p. 315)

The school was one of the first institutions to systematize supervision practices. In his *Instruction méthodique pour l'école paroissiale - Methodical Instruction for the Parish School* (1669), Batencourt proposed to choose among the best pupils a series of "officers," called "intendants," "observers," "admonitors," "visitors," etc. Some of these pupils, the "officers," had to perform material tasks (distribute ink and paper, read spiritual texts), but most of them were assigned to supervision tasks.

The "observers" must record "who left his bench, who was talking, who did not have his rosary, or Book of Hours, who did not comport himself properly at mass, who committed an impure act, who indulged in idle talk or was unruly in the street"; the "admonitors" were placed in charge of those "who talk or hum when studying their lessons and those who will not write and who waste their time in play"; the "visitors" called on the families of pupils who had been absent or who had committed serious offences. The "intendants" supervised all the other officers. (Batencourt, *Instruction méthodique pour l'école paroissiale*, 1669, pp. 68-83, in *Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, cited, p. 176)

At the same time as these techniques of physical training and supervision, the school adopted a system of corrective, hierarchical and graduated penalties, shared by the army and the workshop, which was to become one of the foundation of the individuation devices of the democratic era.

The workshop, the school, the army were subject to a whole micro-penalty of time (latenesses, absences, interruptions of tasks), of activity (inattention, negligence, lack of zeal), of behavior (impoliteness, disobedience), of speech (idle chatter, insolence), of the body ("incorrect" attitudes, irregular gestures, lack of cleanliness), of sexuality (impurity, indecency). (*Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, p. 178)

The school was, finally, one of the oldest institutions to link and systematize disciplinary practices, methods of supervision, punishments, and knowledge. Through the observation of children and the constitution of a memory of their attitudes and performances, a new pedagogy developed, whose main characters were to break down the teaching subjects into elementary elements, to control in detail the students, to classify each of their phases of progress, and to intervene punctually through

operations of correction, punishment or elimination.

Foucault, who had already thoroughly studied the hospital in *Madness and Civilization: A History of Insanity in the Age of Reason* (1961, trans. 1964/2006), did not dwell on it in *Discipline and Punish*, nevertheless he noted that in Rochefort, the famous naval base developed by Louis XIV's main Minister Jean-Baptiste Colbert (1619-1683), the military maritime hospital was located at the crossroad of a series of flows—of seamen embarking and disembarking, of deserters and smugglers, of diseases and epidemics—that it must supervise and control as best as possible. As in school and later in prison, the organization of space and the life rhythms that were associated to it were essential for the new techniques of individuation. The space was distributed and partitioned with increasing rigor: first, simple localization of medicines in closed boxes, log of their use; then soon, registration of the patients in a central register, verification of their identity and of the units to which they belonged; finally, regulation of their comings and goings, display of their name on their bed, isolation of contagious patients and separated beds.

The fourth institution on which Foucault focused his attention was the army. From the 17th and more than ever the 18th century, the latter developed the techniques that were generalized to the entire male population with the introduction of conscription by the French Revolution after 1792: the soldier, noticed Foucault, then became “something that can be made.”

By the late eighteenth century, the soldier has become something that can be made; out of a formless clay, an inapt body, the machine required can be constructed; posture is gradually corrected; a calculated constraint runs slowly through each part of the body, mastering it, making it pliable, ready at all times, turning silently into the automatism of habit. (*Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, p. 135)

His movements and gestures were systematically observed, broken down and re-elaborated to make them both faster and more effective. Guibert had the firing process very precisely timed with a chronometer. In the military instructions of 1766, to which he contributed, the use of weapons was the subject of meticulous prescriptions aiming at establishing a perfect association between body and rifle.

“Bring the weapon forward. In three stages. Raise the rifle with the right hand, bringing it close to the body so as to hold it perpendicular with the right knee, the end of the barrel at eye level, grasping it by striking it with the right hand, the arm held close to the body at waist height. At the second stage, bring the rifle in front of you with the left hand, the barrel in the middle between the two eyes, vertical, the right hand grasping it at the small of the butt, the arm outstretched, the trigger-guard resting on the first finger, the left hand at the height of the notch, the thumb lying along the barrel against the molding. At the third stage, let go of the rifle with the left hand, which falls along the thigh, raising the rifle with the right hand, the lock outwards and opposite the chest, the right arm half flexed, the elbow close to the body, the thumb lying against the lock, resting against the first screw, the hammer resting on the first finger, the barrel perpendicular” (*Ordonnance du 1er janvier 1766*, titre XI, article a, in *Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, cited p. 153)

This rationalization of movements and gestures based on their decomposition into primary elements was accompanied by a similar reorganization of military units (sections, battalions, regiments, divisions) based on the corporal units constituted by the soldiers. As later in the factory, it was a question of constituting a force whose effect had to be greater than the sum of the elementary forces that composed it.

The soldier whose body has been trained to function part by part for particular operations must in turn form an element in a mechanism at another level. (*Discipline and Punish*, 1975, trans. Alan Sheridan, 1977, p. 164)

At the same time, the space where the soldiers lived was reorganized to allow control and individualization. Built in Paris between 1761 and 1780 by Ange-Jacques Gabriel (1698-1782)—the architect of the *Petit Trianon* in Versailles and of the *Place de la Concorde*—*L'École militaire* - The Military Academy was an immense apparatus of rhythmic supervision and discipline. The rooms were distributed along a corridor in a series of small cells, where the cadets were locked up for the duration of the night; at regular intervals, an officer's quarters was located in order to keep an eye on them; a platform was installed in the dining room to observe them more easily; even the latrines were equipped with half-doors so that the supervisor could see their heads and their legs.

In the army, the penal system was often more severe than in other rhythmic institutions, but it was also organized on the same invasive and detailed model that was to become common in the 19th century. In the Military Academy, for example, the cadets were distinguished from one another through their introduction into a hierarchy of classes susceptible to receive different punishments. Those of the last class, "the class of the bad" was marked, as sign of infamy, by a brown wool epaulette, had sometimes to wear sackcloth, and could be subjected to a very wide range of punishments from solitary confinement in a dark dungeon or a cage, to the mere kneeling, which was reserved for the upper classes.

Finally, the army was one of the institutions that produced the largest quantity of expertise concerning the control and development of the faculties of individuals. A whole literature appeared during the 18th century whose main purpose was to gather information acquired in the field and systematize it into a body of doctrine likely to improve the performance and power of military units.

Last test benches of the new rhythmic disciplines and techniques of the body: the workshop and, from the end of the 18th century, the factory. From the beginning, the architectural space and the course of the day of the workers were organized in such a way as to directly link the bodies to the production unit and to allow their cooperation during a complete manufacturing cycle. The bodies became the wheels of an immense machinery. In Jouy, for example, Oberkampf built a series of workshops dedicated to different types of operation: "printers, handlers, colorists, women who touched up the design, engravers, and dyers" (p. 145).

Simultaneously, the factory space was divided into sections to make supervision as efficient as possible. The ground-floor block printing workshop contained 132 tables arranged in two rows, the control of which was facilitated by a central aisle. In the old workshops and the craftsmen's guilds, supervision was carried out from outside by inspectors and it concerned the quality of the products,

the nature and quantity of the raw materials and the tools that were used. From that period on, it was exercised from the inside by a small army of clerks, supervisors, inspectors and foremen, whose task was, besides the traditional tasks, to measure the activity of the workers, their know-how, their zeal and their conduct.

In these early industrial production units, the new criminal micro-mechanics, which was to play later a decisive role in disciplining the labor force, was already in place. In the regulations of the factory owned by the industrialist Oppenheim (1809), it was “expressly forbidden during work to amuse one’s companions by gestures or in any other way, to play at any game whatsoever, to eat, to sleep, to tell stories and comedies” (pp. 150-151); the latter had to behave “honestly and decently” (p. 178); whoever was “absent for more than five minutes without warning” was marked down “for a half-day” (p. 178). Any failure, delay, negligence or rudeness was sanctioned by “fines,” that is to say deductions from wages.

Naturally, all of these techniques also led to the production of a corpus of knowledge based on observation of practice and aiming at improving workers’ performance.

[Next chapter](#)