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# Crime and Civilization

The Birth of Criminology in  
the Early Nineteenth Century

JANNE KIVIVUORI

Clarendon Studies in Criminology

# Crime and Civilization

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Janne Kivivuori

*Professor of Criminology, Institute of Criminology and  
Legal Policy, University of Helsinki, Finland*

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## Series Editor's preface

The *Clarendon Studies in Criminology* series aims to provide a forum for outstanding theoretical and empirical work in all aspects of criminology and criminal justice, broadly understood. The Editors welcome submissions from established scholars, as well as manuscripts based on excellent PhD dissertations. The Series was inaugurated in 1994, with Roger Hood as its first General Editor, following discussions between Oxford University Press and Oxford's then Centre for Criminological Research. It is edited under the auspices of three centres: The Centre for Criminology at the University of Oxford, the Institute of Criminology at the University of Cambridge, and the Mannheim Centre for Criminology at the London School of Economics. Each supplies members of the Editorial Board and, in turn, the Series General Editor or Editors.

*Crime and Civilization: The Birth of Criminology in the Early Nineteenth Century* by Janne Kivivuori is a detailed and engaging contribution to debates on the history of the discipline in Europe. Kivivuori links the roots and development of the field to methodological innovations related to the publication of the first modern crime statistics in France, the *Compte général*, in 1827. Crime, which had previously been the purview of philosophy or the church, was slowly recast as an empirical matter, that could be measured, studied, and perhaps prevented or at least understood.

In focusing on the production of data, Kivivuori ranges across time and space, documenting different practices that predated the *Compte* as well as how its approach was taken up or critiqued by other European states and by the emerging social science authors of the time. As he points out, this approach to crime remains fundamental to the discipline, with national, international, and local crime statistics so familiar these days as to be banal. Yet, hiding behind such reports, we know, is considerable variation. Not just in the legal definition of crime, but in the information states record and allow to be released. Data may be constitutive of the boundaries of the discipline, but it is not neutral, and, as this book suggests, never has been.

Initially inspired by the author's search for a book to use in a course on the history of criminology, this monograph will be of interest to a much wider

group of readers. As with many studies of the past, it allows us to reflect in new ways on the present, thinking critically, or perhaps just appreciatively of the information at our disposal and on which we build our analyses. We are pleased to include it in the Clarendon Studies in Criminology.

Mary Bosworth and Carolyn Hoyle  
General Editors  
Centre for Criminology, University of Oxford  
June 2024

# Acknowledgements

This book has its origin in my course ‘Criminology and History’ at the University of Helsinki. I was looking for a book to be used in that course but was not happy with the existing options. Since the beginning of my career as a criminologist, I had used specific instruments to collect data on crime. These instruments include administrative statistics, clinical and case observation, and crime surveys. But I could not find an approach to the history of criminology giving a rightful place to instruments and data.

In a previous book, *Discovery of Hidden Crime* (2011), I described the rise of the crime survey in close detail, as a case study of how research is driven by an interaction of policy wishes and recalcitrant internal drivers. That book told the story of how criminology broke its dependence on administrative statistics. Yet, since then, the problem of official crime statistics has haunted me as a historical question. If the crime survey was invented in the 1930s to study *unrecorded* crime, how was the study of *recorded* crime invented? When and how did the era of crime statistics start, and who were the first criminologists to use official control-based data in the study of crime? Just like there had been a long pre-survey era in criminology, there had to have been an even longer pre-statistics era, a seemingly endless night to which statistics created an order of things. Did criminology *make* this transition, or was it *born because of it*? If overcoming the limits of administrative statistics by survey was criminology’s declaration of independence from the state, how had the discipline made its original pact with central state powers? These questions motivated the writing of this book.

I thank Professor Petteri Pietikäinen and the members of the research seminar of the History of Sciences and Ideas at the University of Oulu for their insightful comments on parts of the manuscript: Lauri Moilanen, Merja Pyykkönen, Samu Sarviaho, Suvi Kuokkanen, and Annukka Sailo. Comments received in the ‘Measurement and Research in History’ panel in the 2023 annual conference of the American Society of Criminology were helpful. The anonymous reviewers offered important feedback which led to the modification of several parts of the book. The OUP editors Fiona Briden, Lisa Butts, and Kezia Johnson gave invaluable support throughout



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Janne Kivivuori

March 2024

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# 1

## Introduction

### Background

In late 1826, the French engineer and mathematician Charles Dupin unveiled a map at a scientific seminar in Paris. What the audience saw was revolutionary: the first thematic or ‘choropleth’ map, where different areas of France were painted in different colours. The colours carried meaning. The dark ones were areas where few people were educated. The light areas were those with a more educated population. The pattern suggested that there was a dark southern France and an enlightened northern France. A mathematician in the audience immediately suggested adding crime figures to this, to explore empirically and quantitatively the link between education and crime. Dupin responded: this is my intention.

This incident in Paris developed out of a long history of the study of whether enlightenment improves or damages people’s morality. Does it increase or decrease crime? Scholars had discussed this using religious dogma, historical sources from classical antiquity, and anecdotes from voyagers to remote parts of the world. Now a paradigmatic game changer appeared in that Paris lecture room: empirical analysis of the crime–education correlation. Just a couple of months later, the French Ministry of Justice published the first national crime statistics, the *Compte général de l’administration de la justice criminelle en France* (1827, see Figure 1.1). The emergence of this revolutionary data asset led to an explosion of studies analysing crime empirically and comparatively (see Figure 10.1 in the last chapter). Very soon the message crossed French borders, triggering Belgian, German, and Swiss scholars to open criminological investigations. Some rushed to study the *Compte*, while others scrambled together what statistics they already had, only now understanding the value of their assets. In the next decade, English scholars joined the movement.

Criminology as a systematic analysis of open-source crime data was thus born on 11 February 1827, in Paris, the day when the *Compte général* was published. A key part of its context of discovery was the civilization debates of the preceding century; after its publication, the analytic field was no



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longer the same. The new element was the data, the newly available crime statistics, which were immediately perceived as finally solving the perennial question of whether civilization increased or decreased crime. This question was famously posed by the Academy of Dijon in 1750 for an essay-writing competition. The philosopher Jean-Jacques Rousseau won the competition with his *First Discourse* linking progress to moral decline and crime. In so responding, he secularized the centuries-long religious moral critique of civilization. Many of the pioneers of crime statistics examined in this book claimed, in contrast, that civilization reduced violence while increasing petty property crime as a side effect. The Germans, in turn, defended religious *Kultur* by linking crime to the rise of (French) secular civilization. To a degree, the sides taken in this debate determined whether people saw an increase or decrease in crime.

The 1827 publication of the *Compte* was a shock, immediately recognized as a game changer by scholars who took an interest in criminal matters, the group to whom the new statistical report was addressed. There was a race to use the new asset, and some scholars appear to have paused the printing presses specifically to add *Compte*-based analyses to their work, to show that they were abreast of cutting-edge developments in criminology. There was also consternation against the explicit open-source goals of the new instruments: critics did not always welcome the idea that, without certainty, data could support or refute their theories. The *Compte* was designed also to *end* the perennial discussions of the crime–civilization link by letting the facts decide.

This book has a unique protagonist: the first modern national crime report, initially realized in the report published in France in 1827. This book describes *why and how it was developed*, and *how it was used* by the first generation of criminologists. Of course, the true object behind the report is the idea of open-source, systematically collected data on crime and crime control, with theoretical, comparative, and non-judicial variables built into its design. The report was the first historical approximation of this idea, the origin, uses, and effects of which in criminology are described and interpreted in this study. But there were people behind the events: those who prepared the *Compte*, and those who brought it to life by using its unprecedented research potential.

The standard textbook narrative of the birth of criminology focuses on the Belgian astronomer-statistician Adolphe Quetelet and the French lawyer-statistician André-Michel Guerry as ‘moral statisticians’. These two scholars also figure prominently in this book. However, a closer look reveals

a wider group of scholars who were involved in creating the new statistics. Most importantly of all, there was a coterie of civil servants inside the French Ministry of Justice who designed the *Compte*. They inherited from the *ancien régime* the tool of data returns from the provinces, but changed the information template so that theoretical considerations were built into the emerging data. They transformed an ancient bureaucratic structure into a research instrument and programme. The programme can be seen from their instructions, and reverse engineered from the tabular structure of the *Compte*. All of which was carried out under the auspices of the Bourbon Restoration, and the conservative administration of Comte de Villèle. The central protagonists in this endeavour were bureau chief Jacques Guerry de Champneuf (1788–1852) and his co-workers Jean Arondeau (1803–63) and André-Michel Guerry (1802–66).

Then there were the *users* of the new data, igniting the figures of the report into a theoretical discussion. The users approached the new instrument from different perspectives. First, there were those driven by moral platforms, most notably Charles Lucas (1803–89) and Édouard Ducpétiaux (1804–68), who fought against the death penalty and against repressive justice generally, making a strong empirical case for crime prevention as the most promising technique of criminal justice. In some ways, the German scholars Nikolaus Heinrich Julius (1783–1862), Carl Josef Anton Mittermaier (1787–1867), and Karl Salomo Zachariä (1769–1843) can be counted as amongst this group. Theirs was also a moral perspective, if not the same as for Lucas and Ducpétiaux. Julius especially reacted to the sudden opening of the new research frontier by defending the German religious *Kultur* as opposed to French secular *civilization*. Even Alexis de Tocqueville (1805–59), with his friend Gustave de Beaumont (1802–66), became involved in this story as they sought a grant to travel to the US.

There were also scholars whose interest was more curiosity-driven and theoretical. This group included the astronomer Adolphe Quetelet (1796–1874) and the lawyer-statistician André-Michel Guerry. The adult-education pioneer Charles Dupin (1784–1873) can also be linked to this group, even though he ‘jumped the gun’ by starting the analyses before the new instrument was published. Guerry’s treatise on crime in France, *Essai sur la statistique morale de la France* (1833), culminates rather than starts the first wave of research based on the new instrument of crime statistics. Emerging from within the Ministry group, his work became a classic. But there is also a less well-known group, the Genevans. The young legal scholar Alphonse de Candolle (1806–93) and

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Professor Pellegrino Rossi (1787–1848) both contributed to the rise of first criminology. Their angle was the methodological critique of the new data source. By highlighting the validity threats in the genesis of administrative crime data, they initiated a long-standing tradition of criminology. Methodological critique opened new substantial lines of inquiry, as exemplified by Rossi's focus on informal social control. The work of curiosity-driven scholars led to new theoretical understandings of crime as something not fully reducible to individual properties such as 'evil', disease, or personal motivation. Crime was now seen as emerging from society immanently.

In these two groups, we recognize the two branches of modern criminology: policy-oriented *criminal justice* studies and curiosity-driven *criminology*. Now as then, the latter is more detached from moral and policy programmes, while the former is still, after 200 years, fighting its never-ending campaign against the punitivists. Both, however, were given rise by the new data asset, the *Compte*, and through it, by the empirical realities of crime. The new theoretical perspectives emerging from crime statistics began a new phase in human thinking about crime: a phase where the correspondence between data and criminal behaviour allows for cumulative knowledge about crime. The speculative age (Chapter 2) ends as the juggernaut of data criminology is launched.

## Historical context

This book recounts the story of the first criminological research field, triggered by the publication of the first modern crime statistics in the French *Compte* in 1827 (see Figure 1.1). This report transformed a philosophical discourse of crime theories into an empirical research programme. Thus, most of the sources of this study focus on the period from 1825 to the publication of the ten-year anniversary edition of the *Compte* in 1836. I explore how this report was invented and how it was designed to enable the birth of criminology. This happened almost immediately when a group of internationally connected scholars started to use the new instrument. The home of this innovation was France, but it was not an exclusively French development. Rather, the Revolutionary and Restoration periods also created the conditions for crime statistics on a European level.

## Restoration period

In terms of political context, the *Compte* was created during the so-called Restoration period in France (de Waresquiel & Yvert 1996) after the revolution of 1789 had ended the old regime based on unlimited royal power. The revolution and its various successor regimes lasted until 1804 when Napoleon Bonaparte crowned himself Emperor. During the next decade, he engaged in a series of wars expanding the direct or indirect rule of France to large areas of Western Europe. In 1814/15, he was defeated by a coalition of European powers and the new European security order was created by the victorious powers in the Vienna Congress of 1814–15 (de Graaf 2020). In France, the Bourbon dynasty was restored to power. The reign of the last two Bourbon kings, Louis XVIII and Charles X, from 1814/15 to 1830, is called the Restoration era of French political history. However, in recent scholarship, the notion of ‘restoration’ has been questioned. What occurred in the post-Napoleonic settlement was not a return to absolutist monarchy or pre-1789 arrangements. The ‘Vienna process’ has even been described as a revolutionary and innovative stage guided by ‘Enlightenment conservatism’, recourse to statistics, and humanitarian concerns (Aaslestad 2015).

Thus, the ‘restored’ powers of the French king were limited by the so-called Charter, a kind of constitution, but the Napoleonic law reforms and codifications remained in force. The Chamber of Deputies was elected by men whose annual taxation exceeded 300 francs. In 1827, this group comprised 88,000 wealthy men in a country of thirty-two million (Kent 1975: 116). The main political question was related to the regime itself, in which three groups were central: the power-holding, conservative royalist-clerical group supporting Charter-based monarchy; the right-wing opposition with some who longed for absolute monarchy; and the liberal forces supporting more individual freedoms, especially freedom of the press, and more (if not fully) democratic forms of representation. During the 1820s, the liberal group was ascendant. The year when the *Compte* was published, 1827, saw a momentous showdown between the royalists and the liberals in the November elections (Kent 1975). The liberal landslide victory was the beginning of the end for the Bourbon Restoration, culminating in the July 1830 revolution and the onset of the July monarchy (1830–48). In the new regime, there was a change of elites from royalists to liberals while the core of the polity continued to rest on wealth-based voting by a small male minority.

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Napoleon's regime combined military conquest with new elements of governance such as legal codifications and state investment in science. The Restoration inherited this emphasis giving a central role to the 'savant' in the state. The role of the scholar was moving from the independent *philosophe* model to the public science administrator model, reflecting the 'Napoleonic model of state-supported science' (Donnelly 2016: 29, 43). The best remembered new model 'mandarins' signifying the move towards government big science were natural scientists such as the palaeontologist Cuvier and the leaders of the Paris astronomical observatory, Arago and Bouvard, who hosted the young Quetelet during a learning mission to establish similar institutions in Brussels (Donnelly 2016: 89–90).

In the early nineteenth century, Paris may have been the science capital of the world (Wulf 2022: 294), but not the economic capital. France remained mostly an agricultural country. The invention of modern research-enabling crime statistics cannot be attributed to any one specific economic base or context. Yet its rise was influenced by the consciousness of liberal elites that the country was behind England in the race towards industrialization. One of the key actors in this narrative, Baron Charles Dupin, was a pioneer of analysing the productive powers of France. Among these, he included human capital created by education, inspiring him to become a pioneer developer of adult education. This connection influenced the rise of crime statistics through the debate on the moral consequences of civilization. Economic considerations were built into the crime statistics, going deeper than Quetelet's celebrated metaphors about the 'budget of the scaffold'.

The important role of natural sciences in France during the first Empire and the subsequent regimes of the nineteenth century are well documented (Fox 2012; Carnino 2015; Cottret & Cottret 2023: 677–80). Yet there was a less well-known state-operated and state-funded research project in the field of nascent *social sciences*: the project led by Jacques Guerry de Champneuf in the Ministry of Justice, aiming to create the first research-enabling crime statistics and designed to become a large-scale, national observatory of the criminal justice system and society. The key stage of this planning project took place from 1824 to the publication of the first *Compte* in 1827, which led to the international explosion of data-based criminology. To enable data criminology was an explicit goal of the administrators working under the political leadership of the royalist-clerical government, most notably the politician most hated by the liberals, Count Peyronnet (1778–1854), the Minister of Justice. Yet it cannot be concluded that the study of crime statistics itself was a 'conservative' enterprise. The bureaucracy was independent

of immediate political concerns. Many, if not most of, the users of the new crime statistics—the first generation of criminologists—were young liberals. One of whom, Charles Dupin, came up with a generational theory predicting population turnover to guarantee liberal victories. The young liberal generation saw itself as destined to take over political, cultural, and scientific hegemony with the dying out of the old generations.

## The international scene

The sheer quality of the first national crime report made it a *paradigmatic exemplar* for other countries, such as the Grand Duchy of Baden and Belgium. On the other hand, the *Compte* itself was based on preparatory works which explored ‘crime returns’ in other countries, including England where the call for crime returns was linked to criminal law reform (Chapter 9). Thus, while the rise of criminology owes a lot to what happened in France, the context of the first criminological research field was thoroughly international.

The international context of crime statistics was additionally created by the geostrategic balance of European polities. The *Compte* could be used in international comparisons because the Napoleonic conquest had implanted the French penal code in other countries. For a period during and after the first Empire, French penal law was applied in large parts of Western Europe, in the modern Benelux area, in Geneva, and parts of Western Germany along the Rhine (Härter 2018). This imperial and post-imperial legal transfer enabled comparisons that were not possible after the later rise of nationalism and ‘small statism’. Third, the post-Napoleonic security system, created by the winning Allied powers, was also international and interesting in ‘weighing’ nations. Indeed, for some years after 1815 the situation of France was not unlike that of Germany after the Second World War, as its destiny was heavily influenced by the Allied forces aiming to create a new kind of European security order. The Restoration era was characterized by conservative innovation rather than a return to the pre-1789 situation (de Graaf 2020).

The rise of the *Compte* occurred in a specific cultural context of discovery (the ‘moral effects of civilization’ debate), the transformative conservatism of the Vienna process, immediate political strife (conservatives vs liberals), and the emerging specialist field of criminal justice policy. Yet the precursors and foundational practices of the crime statistics concept

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reach back to the eighteenth century and beyond France. Ideas and efforts to compile such statistics took place in very different types of regimes in England and some parts of German-speaking Central Europe.

Put shortly, the full story told in this book is this: the administrative monarchy (before 1789) created the vehicle of data returns from the local courts to the centre. During the 1820s, the innovating government official Guerry de Champneuf and his team inserted a research programme into this data conveyor. This was achieved by developing a variable structure based on the assumption of correspondence between court data and criminal behaviour beyond the courts. Some of the variables of the *Compte* were extra-legal, reflecting theoretical research interests. The insertion of scientific substance into a bureaucratic vehicle was the core innovation which immediately triggered imitation and research in continental Europe. Criminology was born from this collision of data and research, when an international group of scholars was attracted to use and imitate the French model. The French model was an eye-opener that helped European scholars to see the research potential of their own prior, simpler crime tables. The *Compte* (1827) thus constituted criminology in its first data-based historical formation.

### A living tradition

After 1827, the outline of the French *Compte* remained stable across several regime changes in 1830, 1848, and 1871. The structure of the instrument, once established, was independent of the political regime changes of the nineteenth century (Sgard 2010: 5). It was emulated in many types of regimes in Europe where crime statistics endured across political regime changes. As a paradigmatic exemplar, the *Compte* is the direct ancestor of all modern national and international crime reports. The group creating the new resource was the first state-operated criminological research and monitoring team.

There is, indeed, an uncanny quality of modernity in the first *Compte*, with the sole exception of it being addressed to the last Bourbon king (Figure 1.1). Most developed states still have similar institutions and similar annual crime reports. The US Bureau of Justice Statistics, the UK Home Office research function, the French Ministry of Justice, the German Bundeskriminalamt, the Swedish Brottsförebyggande rådet, the Finnish KRIMO, and the Danish Justitieministeriets forskningskontor all continue the tradition of publishing recorded crime trends, with the more recent addition of crime surveys. The online publication environment, the rise

of the crime survey, and the large academic criminological research sector have, to a degree, lessened the visibility of unified national crime reports with ambition of describing crime beyond the remit of the police and the courts.

Some of the most visible reports continuing the *Compte*-style social indicator tradition are international, such as the *European Sourcebook for Crime and Criminal Justice Statistics*, and various overviews, such as the *Global Homicide Report*, published under the auspices of the United Nations Office for Crime and Drugs (UNODC). Also, the link between administrative crime statistics and criminology has grown stronger, not weaker. Information technologies made it possible, from the 1960s, to keep the statistical 'returns' at the level of individuals, creating the conditions for the current register-based criminology.

So, in this regard, the study of the historical data genesis of criminology has a presentist dimension: the object of this study, the modern concept of national crime statistics as a research-based and research-enabling tool, lives after 200 years and shows no signs of dying.

## The challenge of periodization

The division of time into distinct periods is a traditional procedure in historical research (Besserman 1996). The most classic of such divisions is the continuum of antiquity, the Middle Ages, and modernity. It may be difficult or impossible to write a historical narrative without any sense of periodicity. Even when studying a single period, the author justifies his or her focus with reference to differences to past and/or later periods. Furthermore, history shares the goal of periodization with sociology (Dimbath 2016). Sociologists and criminologists have developed multiple period theories explaining the unique characteristics of the current period. These include *Zeitgeist* concepts such as 'post-modern society', 'risk society', and 'culture of fear'. Such constructs are ideal types in that they are based on selected aspects of society. But how should criminology be periodized? This question is intimately connected with the fundamental question of when criminology was born.

The answers to the question of when criminology was born can be classified by how far back the origins are traced. One approach has been to go back in time as far as possible. It is, indeed, possible to chart the history of thinking and ideas about crime back to antiquity (Friedrichs et al 2018: 17).



## 10 Introduction

The second, and possibly the most popular, solution has been to see criminology as a child of the Enlightenment period from the eighteenth century. Central figures of this model include Montesquieu, Fielding, Howard, and Beccaria. This narrative is reproduced in most textbooks and textbook histories of criminology which typically centre on theories and ways to explain crime. The development from Beccarian ‘classicism’ to Lombroso’s ‘positivism’, and then to various other types of positivism, such as psychological and sociological explanations, refer to theories and explanations. Sometimes this textbook history culminates in various forms of political and critical criminologies of our own time.

Some of the most sophisticated interpretations of the history of criminology advocate the Enlightenment as the decisive moment. Thus, Lawrence Sherman used practical control interventions as his hermeneutical horizon in examining the history of criminology. From that perspective, he saw Henry Fielding as founding criminology in 1750s London (Sherman 2005). The person more often mentioned as the founder of criminology is the Italian philosopher and lawyer Cesare Beccaria, whose work had a massive impact on European thinking on crime. The interpretation of Piers Beirne (1993) sees the roots of criminology in the eighteenth century, and more specifically in Beccaria’s work. He argues that the distinction between classical rationalism and positivistic causal analyses have been exaggerated, as Beccaria was also working towards, or in the context of, ‘a science of man’ (Beirne 1993) and had been influenced by materialist *philosophes*.

However, Sherman is correct in noting the lack of empirical data in Beccaria’s work and the classic monograph *On Crimes and Punishments* (1764). Beccaria followed the rational argumentation of philosophers and law professors typical of the period, mixing his own opinions with factual assumptions, ‘deeming it enlightened truth “because I say so myself”’ (Sherman 2005: 102). He did not have empirical contact. Jenkins (1984) connected the rise of criminology to the philosophers of the nineteenth century, whose radical ideas were tamed by Beccaria but revived by the early critical criminology of William Godwin and Marquise de Sade (Jenkins 1984). Godwin and de Sade were also philosophers working without data corpuses. Garland (1988) dates the origins of criminology in Britain to a medico-legal tradition emerging from the 1860s.

A third answer has been to focus on criminology as a self-conscious academic discipline. This definition is sometimes connected to the question of when the word criminology was invented. The concept of criminology was first used in 1885 by the Italian criminologist Raffaele Garofalo. Fairly soon

thereafter, it began to replace other terms such as ‘criminal anthropology’ (Pires 1995). The focus on the concept, and national disciplinary histories, is, of course, fully legitimate. But added information on disciplinary development can be ascertained by avoiding the ‘mistake of taking the word for the thing’ (Skinner 1988: 54). Using a new word for a type of study does not necessarily change the type of study as a referent. Similarly, using the same word does not necessarily mean that its referent remains stable. In this book, I found it analytically useful to focus on the activity of analysing crime with large datasets rather than focusing on the word criminology, or on the national academic histories of the discipline.

Sometimes the word-centred narrative of the rise of criminology involves the contrast between ‘moral statistics’ and later criminology. This may be partially related to Durkheim’s (lack of) citation to key predecessors (Whitt 2002: xvi–xvii). The concept of moral statistics is historically valid in the sense that Quetelet, Guerry, and others of their generation used it to describe what they were doing. However, it also carries a considerable risk of anachronism. For us, the concept of ‘morality’ includes the normative support for social conventions and even varieties of prudery; it is an evaluative concept. However, for the first generation of criminologists, moral statistics were part of a dichotomy where the other pole was the statistical study of natural phenomena, like astronomy and medicine. Thus ‘*moral*’ and natural statistics corresponded to what we would describe as the divide of *human* and natural sciences. Moral was also linked to the concept of mores (*mœurs*). Moral statisticians were scholars who applied natural scientific methods to human affairs and human behaviours (mores) in a descriptive and explanatory manner. In this hermeneutic context, the ‘moralist’ and the ‘criminalist’ were people who used data to study the facts of norm-breaking and crime, not puritans. They may have supported conservative or liberal values but aimed to study people’s behaviour in the spirit of objective observation, foreseeing research-based prevention of crime and social problems in the future. So, the technical use of the concept of data-based criminology may be less anachronistic than the use of ‘moral statistics’.

Of course, criminology can be studied as a self-conscious academic discipline with its own conferences, journals, and associations. From that perspective, the publication of Lombroso’s *The Criminal Man* in 1876, or the 1880s, would be a useful starting point. This approach has merit in analysing the emergence of an academic field. Yet there seems to be a need for a periodization which gives us a starting point, and a means of grasping the later periodization and developmental dynamics of the discipline. In what follows,

I argue that this can be based on the study of the instruments used by those who aimed to examine crime and its control with independent datasets.

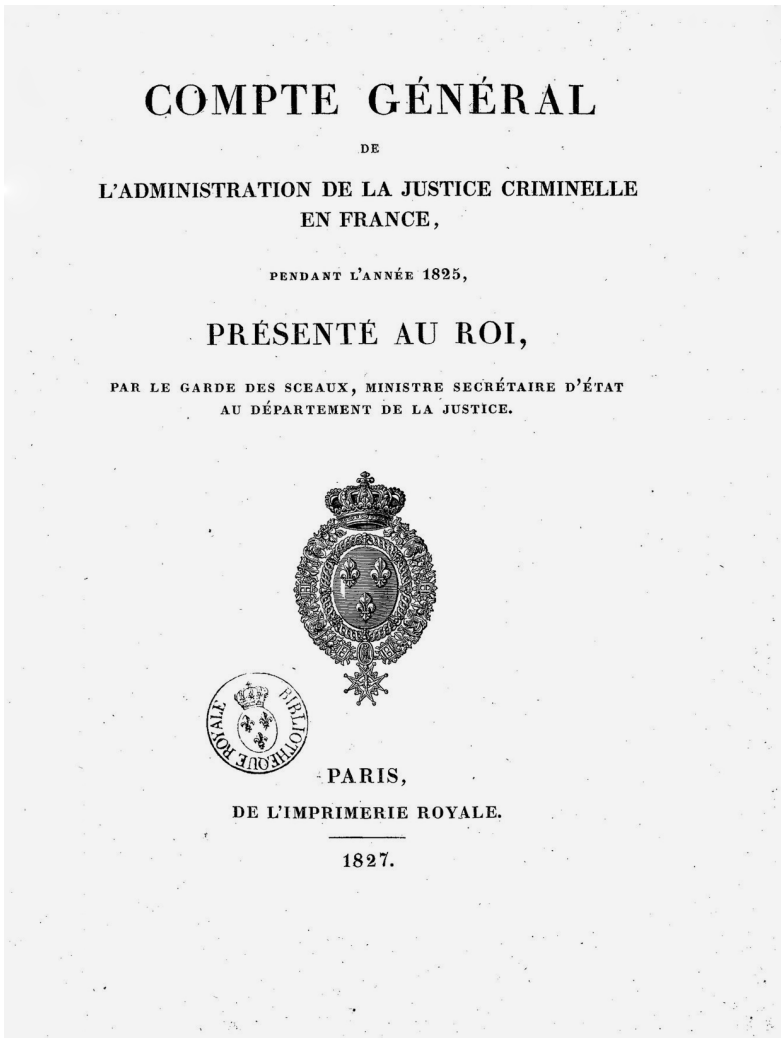
## Focus on instruments and data

In the history of natural sciences, the role of instruments was comparatively neglected for the better part of the twentieth century. In 1943, the philosopher Alexander Koyré published an influential paper claiming that Galileo had invented his instruments for illustration. According to Koyré, Galileo did not build or have instruments; rather, they were his rhetorical devices. He wrote that ‘good physics is made a priori’, so that ‘theory precedes fact’. Thus, Koyré supported and helped to create an extreme constructionist epistemology with theories living a life of their own. Insofar as this doctrine was followed, the history of science became the history of theory (van Helden & Hankins 1994). During the 1960s, the work of Thomas B. Settle helped to prove Koyré wrong. Galileo really built the instruments he described and anchored his theoretical claims on empirical observations and experiments (van Helden & Hankins 1994: 2–3). While constructionist and theory-centred epistemologies remain influential, some scholars have subsequently started to rethink the role of instruments. As noted by van Helden and Hankins (1994: 4), since instruments and tools determine what can be done, they also influence what can be thought.

In understanding the history of criminology, it is helpful to see the rise of national crime statistics as a new instrument producing new types of systematic data for social science. In this book, I argue that its creation influenced what can be thought. Previously, Enlightenment thinkers had used rational argumentation, anecdotes from travellers, and Roman history to make their points (see Chapter 2). The role of classical sources was central. In his *The Spirit of the Laws* (1748), while discussing criminal law and crime prevention, Montesquieu referred almost exclusively to Roman sources and even said, ‘I feel strong in my maxims because I have the Romans on my side’ (Montesquieu 1748 [1752]: 140 [105]). In this context, he referred to Roman constitutional history rather than philosophy. Yet from the data perspective, Montesquieu was indeed closer to the Romans than to the post-1827 generation.

The data revolution giving birth to criminology made references to antiquity redundant. The first criminology was born when the first truly modern crime statistical yearbook opened a new frontier where ‘vague

theories' were finally put to the test. As with natural science instruments, an important aspect of the new criminology instrument was its *constraining* nature. Scholars could not invent or, for example, claim just anything, as reality became inflexible and recalcitrant in measurements and data.



**Figure 1.1** The first modern national statistical crime report was published in France, 1827, addressed to the last Bourbon king, Charles X

Source: gallica.bnf.fr / Bibliothèque nationale de France (*Compte général* 1827a).

Moreover, there was a strong sense of momentous change in the reception of the first national crime statistics. Channing et al (2023) have recently endorsed a focus on events in historical criminology. Such events are perhaps easier to locate in the history of crime (think of the terror attacks of 9/11). Yet I suggest in this book that innovation can also be an event in the history of the discipline. The historical actors in this story perceived the new instrument as marking an epochal transition.

National crime statistics differ from scientific instruments like the telescope, microscope, air pump, and similar (Shapin & Schaffer 1985). Yet they can be profitably seen as means of extending human senses, and as means of controlled observation. An individual can observe the court in a criminal case, and even visit multiple trials. Or, if he or she is a magistrate, can observe many trials (like did Henry Fielding). Compared to this kind of participant observation, standardized statistics are extensions of the senses because they enable us to see patterns as distinct from individual crimes and trials. If you stand too close to a pointillist painting, you see meaningless dots. If you stand back, a picture or a pattern emerges. This metaphor helps to show how national crime statistics extend and boost limited human perceptions. The control aspect is inherent in the instrument: the 'dots' (crimes) are standardized by the central state through its codified criminal law, and its enforcement. No single court or human can see the national picture without the act of standardization by the legal codifier and the orders and circulars issued by the centre, synchronizing the statistical 'returns' flowing from the local courts to the centre.

The use of this primary instrument—standardized statistics—was linked to the deployment of other new tools: the table, the diagram, and the map (Bigg 2016). Such tools were multipurpose and were used in many scholarly fields, not only criminology. The map is a partial exemption: the invention of the colour-shaded choropleth map by Charles Dupin, as a scientific tool, is intimately linked to the rise of criminology. By 1829, if not earlier, information from national crime statistics was shown in the form of the choropleth map (Balbi & Guerry 1829, see Figure 5.1).

As will be argued in this book, many early criminologists appreciated the quality of constraint in the new instrument provided by national crime statistics. It worked against extreme idealist epistemology. They saw administrative crime statistics as antidotes to ideologies, vague theories, claims based on political agendas, and rampant political crime rhetoric. They anticipated that the new instrument would solve the grand debate on the crime–civilization link. In this regard, the expectations resembled the rise

of the experimental method earlier in England (Shapin & Schaffer 1985). At the same time, the stubbornness of statistics, their unconstructed quality, led to new theoretical frontiers. Chief among these were the notions resembling modern routine activity and opportunity theories, and the role of informal social control in explaining differences in observed crime rates.

## Three data revolutions of criminology

For the purposes of this study, I define criminology as a study of norm-breaking behaviour, and its control, using systematic data corpuses, which incorporate planned research options for disaggregation by extrajudicial variables, and which can verify or falsify specific predefined hypotheses. I sometimes use the concept of 'data criminology' to remind the reader of this, but generally the stand-alone word criminology always refers here to data criminology as defined above. This definition gives a demarcation criterion against the various types of philosophical, rational, and unsystematically empirical approaches to crime which preceded data criminology and influenced its formation as part of its context of discovery (Chapter 2). With the help of this definition, criminology emerged at the specific moment when France published its first national crime statistics in the spring of 1827. Together with the previously discussed emphasis on instruments, data, and methods, this definition also underscores the role of technical innovations in directing the development of criminology since it was launched in the European continent.

## First criminology

The idea or concept of national crime statistics is older than criminology. Suggestions for creating such compilations have been traced to Sir William Petty in the seventeenth century. Jeremy Bentham also discussed at length the need for and benefits of such data collection (Radzinowicz & Hood 1986: 91–2). However, as noted earlier, the first serious realization of the idea took place in France during the Restoration period, with the first *Compte* addressed to the last Bourbon king of France, but also to scholars interested in the study of crime.

The prediction that there would be such a group was accurate. Several people were eager to seize the moment by being among the first to use

aggregated statistics to study crime. This group was not, of course, made up of academic criminologists, because there was no such discipline. Rather, the group came into being by the attraction of the new kind of data. The first generation was thus defined by its wish to use systematic data in the analysis of crime. There, scholars who started to use the new instrument were animated by the concept of the civilizing process, and contradictory predictions regarding how civilization impacted crime. In so doing, they welcomed the opportunity to explore empirically the free-ranging theoretical nuclei which had been discussed for so long. What was lacking was systematically collected open data that could be used by multiple analysts for various purposes, produced with theoretical questions in mind and addressed to scholars outside the administration. The idea embodied in the *Compte* incorporated many of the theoretical nuclei, allowing them to be subject to analysis.

The defining characteristics of the first criminology can be listed as seven propensities. First, it was based on data allowing the comparison of large geographical units. Second, the data asset was planned for research, incorporating extrajudicial variables. Third, it was based on the division of roles between data creators and data analysts, even though some individuals occupied both roles, such as André-Michel Guerry. Fourth, with some initial prevarications,<sup>1</sup> the data was open source in the sense that anyone could attain it. Fifth, the data was immediately used in theoretical research by scholars who did not produce the data. Sixth, the data users soon engaged in methodological critiques of the new data asset, opening new research frontiers. Finally, scholars using the new asset found each other through publications, seminars, correspondence, and personal visits, forming an intellectual field.

Friedrichs et al (2018: 18) suggest that the works of Guerry and Quetelet were ‘isolated efforts that did not cohere into a recognizable field of criminology.’ In this book, I hope to show that this interpretation is hasty. Guerry and Quetelet were not the only, or even the first, scholars to use the new instrument. Many scholars took an immediate interest: Charles Dupin, Jacques Guerry de Champneuf, Jean Arondeau, André-Michel Guerry, Adolphe Quetelet, and Charles Lucas in France, and many others in neighbouring countries: Édouard Ducpétiaux, Alphonse de Candolle, Pellegrino Rossi, Nikolaus Heinrich Julius, and Carl Mittermaier, amongst others.

<sup>1</sup> Early users of *Compte* complained that it was not available in bookstores. Rather, it was circulated by the French government as a gift.

Their work coalesced to form a unitary field of empirical findings, defined by the shared instrument allowing confirmations and refutations, a neutral arbiter allowing knowledge cumulation. They discussed the limitations of the new crime statistics as a data source, and such discussion opened new perspectives, for example reporting propensity and informal social control. The *Compte* enabled the systematic study of crime and its control. It may even have more widely heralded a new age of state-funded big science, which also involved the social sciences. Scientometric studies have shown that, in Europe, the concepts of 'science', 'scientific', and 'statistics' started their phenomenal rise in public discourse from the 1820s (Carnino 2015: 23–7; Ycart 2016). Studying the birth of criminology thus focuses on the ground zero of a much broader change in the role of research in society and polity.

The first-generation criminologists did not call themselves criminologists. Many labels were used to describe the activity, such as 'judicial statistics', 'criminal anthropology', '*prison science*', and 'moral statistics'; all of which can refer to the same thing, even if the word changes. Let us take an example. In 1829, the German criminologist Mittermaier used the word *Criminalisten* to describe people who examine crime with recourse to data (Mittermaier 1829a: 158, 176; 1829b: 357). The same concept, *Criminalistes*, was used by Guerry in his 1833 classic on French crime patterns (Guerry 1833). Nowadays, a pure nominalist-constructionist would associate this with the modern continental meaning of *Kriminalistik*, which corresponds to forensic science. This would be an erroneous attribution of meaning. Mittermaier used the concept to refer to lawyers dealing with criminal trials, but in a context where he expected them to use empirical materials. Guerry was using it in the same way, talking about users of the quantitative-aggregate analyses of crime. Mittermaier also used the concepts of *Criminalstatistiker* and *Criminalpolitiker* to denote a new kind of expert using empirical materials to develop jurisprudence (Mittermaier 1829b: 372, 374). Nevertheless, the activity captured by these concepts was criminology as defined here: systematic analysis of data corpora designed to enable research.

## Second criminology

The second stage of criminology was inaugurated by a shift in data basis and instruments, as was the first. From the mid-1850s, the attention of



scholars increasingly turned towards the bodies and faces of men. The roots of this tradition go back to the eighteenth century and even further. Lavater's physiognomy and Gall's phrenology identified deviance in the externally visible signs in the body, continuing a long humanistic and artistic tradition. Cesare Lombroso, the Italian psychiatrist, conducted research starting from the hypothesis that the external structure of the human skull revealed behavioural tendencies, continuing the same tradition which animated Lavater and Gall. He defined multiple external signs, mostly in the facial and cranial bone structure, which he linked to a strong individual-level tendency to crime. He also saw such a tendency as hereditary in a subset of criminals.

Lombroso used multiple types of research instruments. He conducted autopsies (Lombroso 2006 [1876]: 200) to study the internal deviance of offenders, thus using standard instruments of surgery such as scalpels, forceps, and saws. In addition, he used many types of physiological instruments intended for the clinical study of living persons. He used or cited studies deploying the plethysmograph to study how blood circulation connected to psychological states (p. 200). He used an algometer to measure the general sensitivity of criminal offenders, while the esthesiometer was used to measure their tactile sensitivity; he found criminals to be less sensitive than controls (pp. 206–8). Tractile strength of offenders was measured by Broca's dynamometer (p. 209). In all these studies, either alone or with other medical researchers, he observed that repeat offenders differed from non-incarcerated controls.<sup>2</sup> It seems obvious that instruments such as these were intimately connected to criminological knowledge production; they influenced what could be known and thought. The paradigm was partially embedded in the technology of the instruments.

Lombroso had an 'orchestra' type of assemblage of instruments at his disposal. At various stages in his career, he served as an army doctor and a prison doctor. Thus, aspects of the central state led to a large number of people being subject to his examinations. Here, it was not a clerk of the court who scribed the observations, but rather the researcher himself. Yet the clinical practice was created by the state.

Lombroso was not alone, nor the first, in the rise of second criminology. One of the key influencers was the French physician Benedict Morel, whose degeneration theory of 1857 provided an early means of combining

<sup>2</sup> These were not randomized controlled trials in the later/current meaning of the concept.

social–environmental factors with biology. In his Lamarckian theory, social problems caused by environmental factors could be biologically transmitted to the next generation.

Many historians of criminology consider the era of second criminology as the onset of the field because specific institutional features, such as journals and scientific congresses, date from this period (Kaluszynski 2005 and 2006; Renneville 2006 and 2015). Regarding the topic of this book, the first criminology, it is important to underscore that developments related to bio-criminology are largely absent here only because of focus. Thus, important contemporaries of the first criminologists, like Gall, and the public hygiene pioneer Louis-René Villermé, are excluded from scrutiny.

### Third criminology

The first criminology was built on crime statistics. The second criminology relied on bio-criminological measurement of those in prisons, clinics, or in the army. In both cases, crime science was dependent on state activity which organized and orchestrated the crucial data assemblages: court statistics and individuals in total institutions. Therefore, criminology remained strongly connected to crimes recorded by the authorities, largely unable to penetrate the sphere of unrecorded ‘hidden’ crime. The ‘dark number’ of crime was beyond the reach of observation. This was the official control barrier of crime measurement.

The next great data revolution was linked to the invention of a research instrument that could break that barrier and see out hidden crime. From the beginning of the twentieth century, qualitative research was able to interview ‘live offenders’ outside prisons. Yet the official control barrier of crime measurement was really broken only when American criminologists adopted, from the 1930s, the survey instrument for criminology. The foremost actors in this revolution were Edwin H. Sutherland and Austin L. Porterfield. The crime survey, bypassing carceral and clinical institutions, was a breakthrough to measure unrecorded and unknown crimes.

For criminology, the crime survey was a declaration of independence from state-produced data; this had a lasting impact on the discipline (Kivivuori 2011). The innovation was inspired by a strong moral and policy platform, the campaign to normalize crime and to make criminal justice policies less severe and more humane. The first-generation hidden crime researchers wanted to show that ‘we are all criminals’, and that ‘criminals

are just like us'. Yet, when they put their new instrument to use, the results were disappointing. The empirical results reflected a recalcitrant reality, unyielding to moral expectations and 'constructions' based on non-epistemic political motives. From the 1950s, the surveys revealed that serious and repeat crime was, after all, concentrated in the active minority of offenders, and in disadvantaged social groups, just as official statistics had previously shown. We were not, after all, similar and normal. The registers were thus not artefacts of power constructing criminals out of similar individuals. They had an isomorphic (correspondence) relation to behavioural facts. This inaugurated, from the 1970s, a renaissance of register studies.

This tripartite instrument and data-based periodization of the history of criminology can be critiqued. Periodization is best seen as a tool used in responding to a specific research question. An alternative would be chaotic empiricism, where no patterns or themes are seen, or simply repeating or republishing the original sources in full. Thus, the functions of periodization are at least three. They are necessary to organize data and to get a conceptual grasp of developments and narrative. They serve as pedagogical aides, in making the history of a discipline understandable. Third, they stimulate further research because other researchers can and often do criticize them. Yet I do think that data revolutions are clearer and less ambivalent markers of change in criminology than theories or explanatory paradigms like 'classicism' and 'positivism'. This book focuses solely on the first tectonic shift, the very birth of criminology as it is here defined.

## Prior research

Currently, the most influential general interpretation of the rise of criminology is Pierce Beirne's book *Inventing Criminology*, which was published in 1993 (Beirne 1993). A compilation of separate articles, it stands out as a landmark study. The great benefit of Beirne's analysis is that it forms an overview of developments from the eighteenth to the nineteenth centuries. Quetelet and Guerry figure prominently in his analysis which seeks to establish a continuity from the eighteenth-century 'science of man' to criminology. Beirne critiques the distinction between classical (economical, rational, and deterrence) theories and positivistic (psychological and sociological) theories, often used in the historiography of criminology.

When and if the 1820s generation is examined in the history of criminology, the focus is almost exclusively on the works of Quetelet and Guerry.

The other protagonists in the innovative period from the mid-1820s to mid-1830s have been largely omitted or forgotten. While most textbooks on the history of criminology mention Quetelet and Guerry, the research corpus on them is not particularly extensive. This is possibly because these central actors of first criminology have been regarded as the ‘good guys’ of criminology, and the good guys are less interesting than the bad guys.

In contrast, the leader of the bad guys, Cesare Lombroso, has attracted a huge scholarly interest. There is a large and growing research body on him and his influence on criminology (Gatti & Verde 2012). This research has created a more complex picture of him (Gibson 2006; Rafter et al 2016). The lineage of bio-criminology is often traced to Gall’s phrenology and Lavater’s physiognomy (Rafter et al 2016: 21–69; Renneville 2020), these traditions thus emerging as origins of what I call the second criminology. However, there is still a common textbook narrative: after a good start by statistically and sociologically oriented scholars such as Quetelet and Guerry, a nasty bio-criminological turn took place. In this narrative, the second criminology has been vilified from the point of view of modern moral positions, and with recourse to what is today known about heredity. This moral reading relegates the first criminology to a background role; it becomes a foil for the critique of what happened later.

In this book, I will focus on the data breakthrough that took place in 1825–7 and the resulting formation of the first data-based criminology field in continental Europe from 1827 to about 1835. Therefore, I shall not deal with the second criminology, or with its precursors in phrenology and physiognomy. The third criminology, based on the crime survey, I have already examined in *Discovery of Hidden Crime* (Kivivuori 2011). To understand the birth of first criminology in the decade following the year 1825, it is not relevant to consider the later stages, even though phrenology was part of the cultural context where the first data corpus of criminology emerged (Lanteri-Laura 1994; Renneville 2020). Also, the people who launched criminology in the 1820s were not hostile towards individual-level explanations or biological correlates of crime. Guerry even teamed up with scholars from the medical sciences. The pre-Lombroso age did not look at biological explanations as inherently superior, or as inherently morally flawed. That came later and is not part of this story.

Much high-quality historiography of criminology has been published as journal articles or book chapters (see, for instance, Garland 1988). While important as such, the format has resulted in the slicing of problematics. Apart from textbooks repeating the traditional narratives, there are few

recent book-length syntheses offering novel insights into the rise of first data criminology. A notable exception is Beirne's (1993) synthesis. Indeed, it seems to me that the decade between Beirne's book (1993) and the publication of Richard F. Wetzell's (2000) and Silviana Galassi's (2004) histories of German criminology was some kind of apex for grand syntheses on the history of criminology. In that period, the Belgo-Canadian project *Histoire des savoirs sur le crime & la peine* yielded an impressive interpretation of the rise of criminology (Debuyst et al 1995 and 1998). In France, the major work organized by Laurent Mucchielli, *Histoire de la criminologie française*, belongs to this period (Mucchielli 1994). These works tended to reach back to the eighteenth century (Beirne 1993; Debuyst et al 1995) or focus on the institutional consolidation of criminology during the late nineteenth-century rise of bio-criminology (Rafter 1997; Wetzell 2000; Galassi 2004). Indeed, Nicole Hahn Rafter's (1939–2016) unrivalled contributions to the history of criminology mostly examine what I call the 'second criminology', often linked to the emergence of bio-criminological approaches. The history of French criminology appears to have a similar focus on the criminal anthropology and the nature–nurture controversies of the early Third Republic. Its debates and antecedents in phrenology, physiognomy, and social medicine have been extensively studied (Mucchielli 1994; Renneville 1994; Renneville 2020).

There is also a wider body of research focusing on control practices, including the connections between criminal justice and health concepts such as *folie*, or 'madness' (see Renneville 2003). This research line is largely independent of Michel Foucault's influential research on the rise of the prison (Foucault 1986 [1975]). Foucault dealt only tangentially with criminology, seeing it as an epiphenomenon and reflection of power practices. However, it is possible that Foucault's influence on the historiography of criminology is deeper than explicit citation. It may be linked to the rise of the Kitsuse–Cicourel paradigm from the 1960s, with attention shifting from behaviour to control practices and biases, a shift taking place more generally in the human and social sciences.

Regarding the specific historiography of the first modern national crime statistics, the *Compte général*, most of the important work has been conducted in French and francophone scholarship. Ground-breaking work on *Compte* includes analyses by Perrot (1977) and van Kerckwoorde (1994). The special republication of the 1880 *Compte* contains an historical background analysis by Perrot and Robert (1989). Lecuir (1974) extended the

view further back in time, exploring the intriguing figure of Montyon during the last decade of the *ancien régime*. The early international impact of the *Compte* has been analysed for Belgium (Rousseaux et al 1998), for the Grand Duchy of Baden (Moses 2006), and for the German states (Reinke 1990). For England, the analysis by Radzinowicz and Hood (1986) is still a classic. They examine the impact of the *Compte* in England, noting that it ‘marked a complete break with the past and provided a model of what the criminal statistics of a modern state should be’ (Radcinowicz & Hood 1986: 93, emphasis added). The recent work of Shoemaker and Ward (2017) on early UK data formations adds to, and in some ways qualifies, this picture; their work was inspirational for this study. Taken together, these studies have laid the foundation for the historical study of crime statistics. They are mostly focused on single countries or scholars, and thus leave open questions regarding the context of discovery, and the manner in which the rise of crime statistics triggered the emergence of the first criminological field of European scholars.

Since the *Compte* revolution related to the rise of the map as an instrument of analysis, the work of Gilles Palsky (1996 and 2008) must be mentioned. He makes the important link between Dupin’s cartography and the later crime mappers, most notably Adriano Balbi and André-Michel Guerry. In addition to this special work, broader analyses have been completed in the framework of the wider history of statistics (Porter 1986; Desrosières 1998), also examining the rise of the crime statistics as part of a more general ‘avalanche of numbers’ in the post-Napoleonic stage.

Using quantitative methods, Ycart (2016) has shown that the use of the concept of ‘statistics’ skyrocketed in 1828, after the publication of Dupin’s map on ‘dark’ and ‘enlightened’ France. Ycart attributes the rise of statistics to Dupin. Yet it should be remembered that the French national crime statistics were officially published in February 1827 and reflected some of the same concerns as the Dupin map. Thus, the *Compte* may be not only the symptom, but one of the triggers of the rise of interest in statistics. Nevertheless, Ycart raises the same year, 1827, as the crucial watershed, as do I in this book. The contemporaries also recognized in the *Compte* a watershed moment for the emergence of data-based social science (see also Guerry 1864: xi).

Of the scholars who created the first criminology, some have received research attention while others are covered by a veil of oblivion. The astronomer and founder of social physics, Adolphe Quetelet, has

probably received the most attention (Beirne 1993; Desrosières 1998: 73–81; Donnelly 2016) and Michael Friendly’s important work on Guerry (Friendly 2007; Friendly & de Sainte Agathe 2012; Friendly 2022) is invaluable for anyone studying first criminology. But some of the actors in this narrative have received a great deal of attention because they also acquired fame outside criminology. Quetelet is important for the history of statistics and sociology, while Alexis de Tocqueville is a classic of political philosophy and science. The earliest Swiss criminologists have been comparatively less studied (but see Bomio & Robert 1987). Pellegrino Rossi has been remembered as a constitutional scholar and political economist, but not as an innovating criminologist.

While current research is important, it is often instructive to examine earlier layers of reception. This can be seen as a methodological technique, helping us to create distance from the paradigmatic hegemonies of contemporary scholarship and its sometimes implicit received view regarding what is relevant, and what is irrelevant, in intellectual history. Thus, I have found it illuminating to study books like Rubbens (1922) on Ducpétiaux, Lottin (1912) on Quetelet, and Schazmann (1939) on Rossi. Sources from older periods can help create distance from later interpretive schemes.

## Methodological reflections

What is lacking in the prior studies of the 1827 shock? Much of the work seems to have a ‘listwise’ nature, mainly listing events and some (but not all) of the scholars who participated in the process. The context and the results of their studies have been less intensely explored. Why have they expected so much from the new instrument? What were their motives and intentions? Following Skinner, the purpose of historical inquiry is to describe the motives and intentions of historical actors as they were in the historical period. So, the aim is not to project modern views, morality, or end results onto the past. Rather, my aim is to explore the development towards modern crime statistics as events which unfolded in the early nineteenth century. The *Compte* ‘event’ of 1827 was a major trigger, yet the emergence of the field was an international affair. The aim is to see how the main actors behind the genesis of first data-based criminology saw things; to understand what they were doing with the data (Skinner 2002).

## Sources

This research is based on secondary literature and the primary works published by the scholars of the first data-driven criminology covering the decade from 1825 to the mid-1830s. Most of the original sources have been downloaded from or examined in the open-source Gallica and Rezonance databases of the French National Library. *Criminocorpus*, the French digital museum for the history of justice, crime, and punishment, has also been extremely useful. All archival work in this study is based on internet archives containing uploaded publications of the relevant scholars, or journal and newspaper texts commenting on or critiquing their work. Correspondence is examined only in printed compilations (for example, Riemer 2005).

As in all historical research, source critique is embedded in the narrative. It is clear that the historical sources often (or perhaps always) show some bias or frame of interpretation. For instance, the obituaries of Guerry de Champneuf by Auber and Curzon (both of 1852) provide highly religious readings of his life and work, resembling the hagiological tradition of stories about saints. They probably overestimate religion and underestimate the role of secular enlightenment in the activities of that key planner. André-Michel Guerry's later testimony may, on the other hand, emphasize the enlightenment side of the equation (Guerry 1864). This is in some sense natural, since scholars of both angles were interested in the moral consequences of secular civilization, perhaps hoping for different answers.

I have not used offline/physical archives, with the sole exception of Adriano Balbi's *L'Empire Russe*, a poster found in the collections of the National Library of Finland. There is thus room to deepen the current analysis by accessing non-digitized archival sources, a course of action originally prevented in this context by the Covid-19 pandemic. Some such avenues of further research are raised in this work, helping other scholars to track down new evidence and to supplement and correct the interpretations given in this work. Indeed, all chapters in this book could have been endlessly expanded, even to book-length; but it would probably take a major international research project to go to the next level.

## Interpretation

The goals of this book are descriptive. In teaching the history of criminology, I felt that the initial harnessing of statistics to the service of social



science was not adequately covered in the existing textbook tradition. Yet, I could not completely avoid the question of how the new instrument of national crime statistics impacted the development and content of criminology. Prior research on the data-driven history of criminology during the twentieth century has drawn on the classic distinction between the *context of discovery* and the *context of justification* (Kivivuori 2011: 11–12; Schikore & Steinle 2006), roughly corresponding to ‘external’ and ‘internal’ factors driving the development of disciplines. The external factors refer to all societal, cultural, political, moral, and even psychological factors influencing research. In this case, several external factors favoured the rise of crime statistics, such as the prior system of data flows from periphery to centre, the consolidation of the central state, and even the legal transplants of the former Napoleonic Empire. In the cultural sphere, the debate on the moral consequences of civilization was a central motivator (see Chapter 10 for a summary).

Ideas and hypotheses of crime causation had existed long before the data shift of the 1820s, and that is why many scholars legitimately start their histories of criminology from earlier times, often from the eighteenth-century philosophers such as Beccaria. I shall argue in this book that the rise of large-scale data produced a discontinuity point which, in creating the field, changed its logic as well. The new dynamism was based on the increasing relevance of the internal factors. By these, I mean the capacity of the measurement instrument to both enable new questions and to limit the field of what is said. The discussion of research findings constitutes an intellectual field or space with shared problem formulations and solutions (Camic 2020: 25–7; also, Shapin & Schaffer 1985 and Ringer 1990), a process that is enabled and constrained by the data. The constraining nature of the new statistical source, the large-scale observation instrument, allowed the results to act back on the substance and theories about crime. The instrument conveyed the recalcitrance of behavioural realities to the results.

The actors of criminology’s first and constitutive data revolution worked from the assumption of isomorphism between criminal justice data and behavioural realities. Here, isomorphism refers to relative correspondence between phenomena observed in data (administrative statistics) and their referents in criminal and control behaviour. This assumption does not refer to some kind of full or unproblematic similarity between data and behaviour (see also the section ‘Most remarkable uniformity’ in Chapter 10). To a degree, the notion of relative correspondence predated the rise of national crime statistics in the interpretation of the aggregated figures of the

continental '*Kriminaltabellen*' and English '*Returns*'. At the most basic level, this meant that recorded crime showed variations within countries and over time, while penal law was constant. These observations suggested that variation emerged from some other source than the law. Such variations were like anomalies in planetary orbits, which called for an explanation (another celestial object). The scholars who started to study these crime statistical perturbations as social facts constituted what I call first criminology. Even Quetelet's famous stability doctrine was a dramatic backdrop against which he set about studying the 'perturbations' of social life.

The isomorphism assumption was part of the actors' self-understanding when they started to introduce extra-legal variables to the crime statistics from 1827 onwards. They were aiming to develop a kind of inquiry where data would reflect previously unobserved realities. It was part of their intention to engage in analyses where their own degrees of freedom were limited by the data, like Ulysses ordering himself to be tied to the mast to be able to perceive reality whilst holding his own volition in check. Data would thus 'civilize' the study of crime itself by serving as a neutral arbiter of truth.

Did they achieve this goal? In the final chapter of this book, I reflect on this, asking whether the new data instrument really was able to capture previously unobserved behavioural phenomena (see the section 'Most remarkable uniformity' in Chapter 10). This pertains to descriptive, methodological, and explanatory levels. As regards description, I find it interesting that in many aspects the empirical results of the studied period resemble the modern criminology of our day more than they resemble the eighteenth-century debates and discussions. This does not mean that there is a causal link or 'influence' from their work to later empirical findings or theoretical traditions. As regards theories, some of the findings of the first data-based criminologists corroborated earlier 'free-ranging' hypotheses. Other eighteenth-century traditions were transformed beyond recognition (the 'luxury of the poor') or left untested because the new instrument was not fitted to study them (labelling theory, white-collar crime, individual traits). In terms of methodology, the emergence of modern national crime statistics triggered a methodological critique of 'crimes in the shadows', starting a century-long discussion on the official control barrier of crime measurement (Kivivuori 2011). They also discussed the means of making analyses more robust, for instance by the dual operation of aggregation and disaggregation.

While focusing on the aims and intentions of the key players, it is of some interest that the first data-based criminologists found similar gender

differences, similar age–crime curves, and similar time cycles as we typically find today. Also, their explanations resemble some of our theories more than others. Saying that there is a descriptive similarity between two results or explanatory statements is not anachronistic. In the concluding discussion, I continue the interpretive frame I used in the *Discovery of Hidden Crime* to ponder what these similarities mean for understanding how data-driven criminological work develops in the internal sense. Yet, the main body of this work is written as a description, with no aim to assess, defend, or relativize the studies.

## Structure

This book describes the journey to the events of 1827, and their immediate aftermath and impact on research. Chapter 2 focuses on how crime was discussed before data-based criminology. In that context, I underscore that thinking about crime before criminology was not somehow completely non-empirical. Rather, its sources are described and contrasted with what came later. Chapter 3 focus closer to the historical foreground and the immediate motives for the rise of data-based crime research. The long-standing debate on the moral consequences of civilization is described, with the help of the journalist-novelist Henri Beyle, better known as Stendhal, who was an eyewitness to the events studied in this book. Chapter 4 then describes in detail how a team working in the French Ministry of Justice created the *Compte*, and how it was received by scholars and intellectuals.

Chapter 5 examines how the new data instrument was harnessed for research use by a group of scholars who, by using it, constituted the first intellectual field of data-based criminology. Chapter 6 makes the claim that this field combined ‘behavioural criminology’ and ‘criminal justice studies’ which were later artificially separated. Thus, the curiosity-driven and applied aspects of criminology were born as twins. Chapter 7 explores the German echo of the *Compte* event, as the French impact triggered German scholars to engage in data-based approaches, and to theorize about crime. Chapter 8 deals with the Geneva-based scholars Alphonse de Candolle and Pellegrino Rossi, whose analyses of validity threats sought to perfect rather than to debunk the new data asset. The first data-based criminologists were not naive about the limitations of their instrument. In Chapter 9, I explore how continental developments created a decisive impetus for data-based crime research in Britain.

In Chapter 10, I summarize the historical conditions for the rise of crime statistics and data-based criminology for the benefit of the student reader. The chapter also briefly revisits the question of data–reality correspondence because that is a likely reason why the rise of research-enabling statistics was a game changer in the disciplinary development of criminology. In some sense, crime research became critical from the singular discontinuity point of 1827. In constituting new ways of reaching evidence-based results, the new data-based approach also encompassed caveats and silences, sowing the seeds for the next revolutions in the punctuated evolution of criminology.

## 2

# Thinking about crime before criminology

## Introduction

In 1807, the French administrator Bernard-François Balzac (1746–1829) published a short memorandum on how government could prevent reoffending among ex-convicts. He started by describing how freed convicts had to return to designated localities, with identifying release papers in hand. The visibility of their identity as ex-convicts meant that legitimate businesses did not want to employ them. Without access to conforming institutions, they were forced to reoffend. They also became crueler and craftier in the process. The onset of criminal careers was in less serious offences, but social rejection and ostracism led to serious crime careers. This is why prisons were schools of crime and villainy.

As a policy solution to this, Balzac recommended the creation of regional workshops for released inmates. There they would receive food, clothes, and a salary to be freely used. Good work would be rewarded annually. The workshops would not be carceral; inmates could exit the moment they could secure normal employment. He predicted three effects of this reform. First, the new integrative institutions would reduce crimes and recidivism (Balzac 1807: 12). Second, they would improve the morality of the people by eliminating the negative moral influence of released serious offenders. Third, the new institutions would benefit national economies by rendering ex-convicts useful to society. Indeed, the costs of the workshops would be more than counterbalanced by the benefits of crime reduction (Balzac 1807: 15–16).

Balzac's memorandum captures some of the core aspects of thinking about crime before criminology: an emerging understanding of social mechanisms of crime causation and reoffending, without reference to systematically collected data. There was also a sense of optimism about the capability of society to combat crime. On the other hand, Balzac was realistic about its potentials. Major crime would be reduced by reintegrative

institutions, but common mass offending would remain. In his words, crime reflected the 'inextinguishable imperfections of men' (Balzac 1807: 14). Only the gradual progress of civilization could, over time, reduce mass criminality. Twenty years later, on the eve of data criminology's birth, Bernard-François would see his son Honoré publish a crime prevention manual, which also saw crime as built into the very constitution of society.

The first modern national crime statistic, the *Compte*, created an intellectual field of scholars who wanted to carry out empirical analysis. The new type of data-based criminology was not, however, born in a void. The *Compte* described itself as an antidote to vague theories, promising to replace armchair theories with data-driven clarity. But what were those theories? To understand the context of the rise of first criminology in the years following the birth of modern crime statistics, it is necessary to discuss the 'diffuse knowledges' formed by thinkers who thought about crime before the advent of data criminology. Such knowledge can perhaps be divided into three categories: paradigmatic shifts in the analysis of human behaviour; the more cacophonous 'echo chamber' or bricolage of specifically crime-related claims, notions, and theories; and criminal justice critique. These proto-criminological traditions were an important part of the cultural context of discovery in which the first data criminology emerged: the data criminology of the *Compte* revolution built on, but also reacted against, that context.

(1) The deep transformation of the eighteenth-century human sciences involved a change from religious to rational conceptions of human behaviour, and from 'sin' to variation in behaviour, a process accompanied by a certain fascination with crime, and by a lively interest in crime narratives. Insofar as these notions rested on the idea of a general human nature, they prevented the 'variable' paradigm of later times. If humans were seen as essentially similar, lack of systematic data to capture variation was not perceived as a major problem. The transformations from religious to rational thought about humans has been extensively described (Debuyst 1995; Galassi 2004). Therefore I will concentrate on selected developments closer to the crime phenomenon itself, with attention to emerging notions of crime causation and theoretical nuclei, and their evidentiary bases.

(2) Data criminology was born amidst a cacophony of voices about crime. From the mid-eighteenth century, European public discourse was thoroughly saturated with crime and criminal justice-related themes (Renneville 2006). Roughly divided, there were two main currents of crime-related discourse: a popular true crime tradition and a critical

discourse of the *philosophes* of Enlightenment. The popular true crime genre built on a very long tradition of prison stories and semi-fiction which celebrated daring criminals. Various types of criminal case collections were common and popular, and increasingly published during the eighteenth century. The late Enlightenment period was fascinated with crime and the criminal person (Martus 2018: 789). A central influencer in this regard was the French publicist François Gayot de Pitaval (1673–1743). In 1734–43, he published a large collection of notorious crime cases, based on court protocols. In the German-speaking countries, Pitaval's collections were soon translated, and supplemented with local additions and new collections. The 'Pitaval' became a paradigmatic exemplar of a crime case collection, a generic concept and brand name informing the reader what the collection was about: true crime. In the German states, Gottlieb Meissner launched a similar series in 1778 (Martus 2018: 787). The rising discourses on crime combined various goals and genres which today are often separate: moralistic sermons, studies of human nature, moral education, tabloid headlines, and true crime literature (Alt 2000: 467–75). This knowledge base has been aptly described as 'diffuse' (Debuyst et al 1995). It was diffuse because it lacked a coherent field interconnected and limited by data created for research purposes.

(3) At the same time, European thinkers started to critique the traditional criminal justice doctrines and practices based on harshness. There was an avalanche of critiques against practices inherited from past centuries (Wright 1983; Renneville 2006; Mooney 2020: 29–59) by scholars such as Cesare Beccaria, Henry Fielding, Friedrich Schiller, William Godwin, the Marquis de Sade, Jacques-Pierre Brissot de Warville, Jeremy Bentham, and the young Samuel Romilly. These thinkers combined systematic and rational thought with implicit empirical statements. If they were developing a 'science of man' (Beirne 1993), they did this *without systematic quantitative data* to test their hypotheses. There were perceptions and contacts with empirical reality through case studies and court experience, but no systematic database designed for research.

Thus, to a relevant degree, data-based criminology emerged as a reaction against 'armchair theorizing' about crime.<sup>1</sup> The intellectual group, which created the *Compte*, saw itself as breaking away from an overdose of crime talk. They would inform the king that their statistics were intended

<sup>1</sup> Several Enlightenment philosophers advocated quantitative studies of society in a programmatic manner, before the required data existed; see Donnelly 2016. See also discussion of the pioneering explorations of Montyon in Chapter 4.

to replace vague theories and speculations of philosophers. At the same time, they were strongly influenced by the traditions they aimed to replace. Most prominently, the rise of data-based crime analysis was inspired by Enlightenment notions of the civilizing process, resulting in educational optimism. The philosophes saw the western world as becoming more sensitive and 'gentler' towards all kinds of marginal groups and transgressions. The new data-based criminology was continuing by other means a debate which began much earlier.

## Critique of repressive norms

The rising bourgeoisie of the eighteenth century had a complex relationship with social norms: on the one hand, they supported norms, on the other hand they critiqued them. Silviana Galassi (2004) has linked this duality to the distinction strategies of the bourgeoisie. They separated from the court etiquettes of nobility by advocating 'authenticity', and from the lower classes by advocating 'reason' and conformity to norms (Galassi 2004: 111). A gradual shift of sensibility was taking place. Intellectual elites changed the way they thought about marginal people, including criminals. In the arts, the romantic generation engaged in a 'transvaluation of values' by seeing criminals in a more humane context. Thus, William Wordsworth (1770–1850) included a poem on a convict in his *Lyrical Ballads*. The theme was popular in the late eighteenth century (Bate 2020: 202–4). From this perspective, criminals could even be idealized as authentic humans. This was linked to the Romantic notion that social norms and conventions repress the inner authenticity of man. If this was the case, those who broke social norms and laws were more authentic than those who conformed.

The Romantic notion of social norms repressing individual authenticity, and the political view that laws repress society and freedom, resemble one another. The poet Wordsworth corresponded in these topics with the philosopher William Godwin (Bate 2020: 213), who saw laws as repressive devices used by powerful groups against weaker groups. They both saw the French revolutionary leader Maximilien Robespierre as a 'good criminal'. The idea that social conventions suppress personal authenticity and that laws suppress popular liberty, were interlinked. Godwin and the Marquis de Sade have been legitimately described as early precursors of politically oriented critical criminology (Jenkins 1984). Such critical ideas *preceded*



the rise of data-based 'administrative criminology' by decades. They were part of the vague theories data-based criminology intended to replace.

Why did the new sensibility rise during the late eighteenth century? Norbert Elias observed that the rising non-court elites, such as the commercial classes and other bourgeois groups, wanted to distance themselves from the merits of court society, such as refined customs and social norms. They wanted to see people who broke norms as 'genuine' and 'deep'. The turn towards the humanization of the criminal was partially motivated by a wish to 'excite attention' to literary works (Bate 2020: 203). Increasing interest towards criminals was linked to the rise of the independent scholar and writer who had to gain his livelihood from the literary market, rather than from selling his work to a ruler. The other side of this equation was the literate public willing to read case histories of criminals.

## **New criminal justice policy**

Several key thinkers, such as Montesquieu, Beccaria, and Bentham, had dealt extensively with crime and its control by means of philosophical and rational analysis. They had examined crime and criminal justice in a rational manner. While offering anecdotal evidence and/or having experience in criminal justice, they still lacked a systematically empirical approach. To describe the discourse field where criminology emerged, their general and largely shared ideas can be briefly summarized as follows (see also Wright 1983: 9–12).

First, people are born good but become corrupted by social influences. The idea that bad influences corrupt people is extremely old, with its roots in the environmental determinism of Graeco-Roman philosophical schools (Berno 2023: 11, 165) and early Christian thought (1 Corinthians 15:33). Yet during the eighteenth century this idea became increasingly connected to criminal justice reactions. Critics were particularly attentive to how prisons could serve as a source of bad influences. The prison reformers John Howard (1726–90) and Jonas Hanway (1712–86) both discussed the sources of crime in differential association and the communication of offenders in prisons. References to bad company did not have to be taken from the Bible or prior thought; observation of prisons seemed to give ample evidence for this effect.

Second, another important theoretical nucleus was the idea, popular among Enlightenment thinkers, that the incidence of crime was also

influenced by factors other than criminal law. Montesquieu argued that shame and fear of blame were restraining motives under good government (Montesquieu 2001 [1748]: 99). Bentham's concept of moral sanction represented this line of thinking. He referred to negative stimuli from informal sources of social control resulting from transgressions (Bentham 1789). Beccaria went as far as to probe situational crime prevention. He underscored the need to uphold public order by 'street lightning at public expense', and by placing guards in relevant urban locations (Beccaria 2003 [1764]: 29). It was also suggested that crime could be prevented by rewarding virtue (Beccaria 2003 [1764]: 109). These notions implied that criminal behaviour varied as a function of factors other than criminal law.

Third, the idea that prevention is better than punishment was gaining momentum. Montesquieu claimed in *The Spirit of the Laws* that good governments were more bent on preventing than punishing crimes (Montesquieu 2001 [1748]: 99). Possibly inspired by this, Beccaria some years later simply stated: 'It is better to prevent crimes than to punish them' (Beccaria 2003 [1764]: 103). This doctrine was repeated over the course of time, becoming a fundamental maxim of enlightened criminal justice philosophy. Charles Lucas, who used the *Compte*, repeated it in 1827 in his *Du système pénal* (Lucas 1827: xx). A decade later, the convict criminologist Vidocq lamented that current laws were full on means of repressing crime but remained silent on how to prevent them (Vidocq 1837: 227). Apart from Beccaria's street lightning example, references to crime prevention are often vague. They probably refer to notions of increasing education and welfare, and thus reducing the number of motivated offenders. These theories, particularly the education-civilization axis, would be examined by the first data criminologists.

Fourth, the idea of naturally emerging cultural regulation intrigued eighteenth-century thinkers. Criminal subcultures organized themselves as caricatures of legal orders, a fact discussed by Diderot in his encyclopaedia article on natural law: 'the submission to the general will is the bond of all societies, without excluding those formed by crime'. Virtue was so attractive that even 'thieves respect its image in the very centre of their dens', creating a mock image of the legal world with their own laws and codes (Diderot 2009 [1755]). It would later become commonplace to see criminals as forming societies of their own (Balzac 2015 [1825]; Vidocq 1837: 230–1), subcultures with unique norms and rules. Crime life-worlds were thus 'natural' and 'normal' in their inner logic.

## Focus on labelling

In the history of criminology, the rise of the labelling theory is often dated to the twentieth century, to the work of Frank Tannenbaum, Edwin Lemert, and Howard Becker; in the 1960s, anti-psychiatry and Foucault's work further strengthened the notion that delinquent identities were constructed by power practices. The rise of interest in labelling was thus seen as a critical antidote to earlier positivistic modes of analysis. However, the case can be made that labelling theoretical themes were extremely prevalent and even hegemonic from the eighteenth century. Interest in labelling was connected to the rising interest in, and sensibility towards, deviance, often expressed through case studies.

In this regard, the best example is Friedrich Schiller's ground-breaking case study, *Der Verbrecher aus verlorener Ehre*, published in 1786. Today, von Schiller's 'lost honour' theory would be called labelling theory, or even a theory of cumulative disadvantage (cf. Sampson & Laub 1997). In introducing his topic, he defined his goals as *Seelenkunde*, the study of the human mind and behaviour. He distanced himself from moral teaching and entertainment. Instead, he saw crime as a means of studying human nature more broadly. Motives that guided all human behaviour were more easily seen in crimes of violence. Therefore, the study of crime helped scholars in understanding the limits of free will. Schiller also raised the idea that human behaviours should be classified into *taxons* as Linnaeus had done with the kingdom of plants. Such a taxonomy would include both the conformist and the rule breaker (von Schiller 2013 [1786]: 3; he uses the concept *Menschenforscher*). He also lamented our propensity to see the criminal as an alien. Studying crime could humanize the offender by linking them to common humanity (p. 4).

Schiller also posed the question of why we do not study human behaviour the way we study nature. Just as we study the eruption of a volcano, we should study the conditions under which human passions erupt as crimes. We should look for the causes of crime in the stable propensities of the human mind, and in the variable conditions which surround and trigger it (p. 4). In this, Schiller compared his case study of a homicide offender to an autopsy, with uncanny similarity to psychological and sociological autopsy concepts of our own time. Back in the eighteenth century, crime case studies were indeed considered as useful as studying diseases for the restoration of health (Alt 2000: 515). Schiller saw that an objective research attitude of *Seelenkunde* could, in the end, alleviate the negative labels attached

to criminal offenders, and to support more humane reactions to crime (von Schiller 2013 [1786]: 5).

Schiller's case study was not his first take on crime. His play *The Robbers* (1781) dealt with the then still common problem of robber gangs, while the play *Fiesco* (1783) explored what would today be called corporate, state, and white-collar crime, projected onto an Italian past. In his defensive preamble to the *Robbers*, he suggested that art should reveal the mechanics of criminal motivation, and explore truthfully the facets of crime as a social phenomenon (von Schiller 2014 [1781]: 2, 4). In *Der Verbrecher* (1786), Schiller shifted to a true crime account. The study describes factors that trigger the criminal career of 'Christian Wolf'. The real person behind this pseudonym was an innkeeper's son, Friedrich Schwan, who was born in 1729 and executed for murder and robbery in 1760. Schwan was a widely known, notorious criminal (Alt 2000: 513). Schiller's data was derived from his old Professor Jacob Friedrich Abel, whose father had apprehended and prosecuted Schwan (Safranski 2004: 105).

Schiller starts his analysis of Schwan's criminal career from childhood: he was known as impulsive and defiant, and other boys admired these character features. As a young man, he suffered from his small physical stature. Needing money to catch the attention of women, he turned to poaching. However, a competing suitor informed on him to the authorities and he was sentenced to pay fines. Driven by both revenge and sexual lust, Schwan re-offended until the same informer again turned him in to the authorities. He was now sentenced to one year's imprisonment. Upon release from prison, he returned to his hometown, trying to find employment. He was ready to become a shepherd, the least respected job, but the farmers did not trust their animals to his care and he was rejected because of his criminal record (von Schiller 2013 [1786]: 7).

Then he was caught again, thus becoming a double recidivist. The judge applied the law in all its severity, sentencing Schwan to three years of hard labour. In addition, he was branded, *literally labelled*, with a gallows mark. The new period of incarceration became a turning point in his career in crime. Amid hardened offenders and murderers, he was exposed to negative influences and instigations from fellow convicts and guards alike. First resisting, he finally yielded out of a yearning for friendship and social ties, adapting to the ways of his new peer group (p. 7). From that day on, he yearned for freedom so that he could take revenge on those who had rejected him. Thus, the punishment had the unintentional consequence of exposing Schwan to learning the trade of crime. His identity started to

change as well, as he formed a self-narrative supporting a continued career of crime. *‘Ich betrat die Festung als ein Verirrter und verliess sie als ein Lotterbube’* (pp. 7–8).

After release, Schwan once again returned to his hometown. But, again, the people there rejected him. Even children, who did not know him, avoided him. He quite concretely felt as though he was being labelled, asking whether he had somehow been ‘labelled in the forehead’ and thus was no longer seen as a human being—*‘bin ich den irgendwo auf der Stirne gezeichnet, oder habe ich aufgehört, einem Menschen ähnlich zu sehen . . .?’* (p. 8). Social rejection forced Schwan to continue in crime, climaxing in homicide and membership of a band of robbers. It was only here, among other offenders, that he received social approval. When he arrived at the robbers’ lair, their admiration for Schwan knew no limits. Even women were drawn to the famous killer (pp. 14–16). Later, Schwan learned how fragile the brotherhood of crime could be and left the band, but was soon caught and prosecuted. This was the final stage of his criminal career. He was apprehended and interrogated by the father of Schiller’s tutor, enabling the transmission of information about his crimes.

For Schiller, his case testified to the intimate interaction between social rejection and socially constituted criminal careers. His focus on immaterial labels linked to discussions about very concrete labels like branding criminals with a hot iron. In the eighteenth century, certain categories of criminals or recidivists were still branded, burning their criminal identities onto their flesh, or tattooed (Porret 2012). Enlightenment thinkers critiqued the *marque* much like twentieth-century criminologists would critique subtler forms of labelling. Thus, the Duke de La Rochefoucauld-Liancourt wrote in 1798, from his exile in Amsterdam, that the Dutch were prone to abolish branding because it forced ex-convicts to live a life of crime for the rest of their lives, ‘imprinting’ on them a permanent memory of their crimes (de La Rochefoucauld-Liancourt 1819 [1789]: 98). Similarly, Beaumont and Tocqueville (1833: 33–4) saw the *marque* as counterproductive if the aim of the prison system was to reintegrate inmates into society. In France, the *marque* was abolished in 1832 (Porret 2012).

## Learning and crime

The relationship between learning and crime was, with labelling theory, the other great framework to make sense of crime. Crime was considered to

be learned. But from where was it learned? From other criminals, or was civilization itself responsible for the emergence of crime? And could it be unlearned by the right kind of education? These questions circulated freely, often based on anecdotal evidence and dubious foil comparisons.

## Contagion of vice

Henry Fielding wrote in 1751 that ‘Vices no more than diseases will stop [among upper classes]; for bad habits are as infectious by example, as the plague itself by contact’ (Fielding 1988 [1751]: 77). John Howard saw prisons as fertile grounds for learning, where inmates were morally corrupted by other convicts who had already received such ‘education’ (Howard 1777: 69). William Godwin lamented prisons where ‘offenders of every description are thrust together’ to form amongst themselves ‘what species of society they can.’ There they learned habits of violence and vice. He referred to the notion that ‘jails are seminaries of vice’ as proverbial, as a received view (Godwin 2013 [1793]: 396).

The young Samuel Romilly, upon visiting the notorious Bicêtre prison in 1788, was appalled by the fate of the young inmates who would leave the prison ‘ten times worse than they were when entering’ (Romilly 1788: 11). During the early stage of the Revolution, the committee on mendicity, chaired by de La Rochefoucauld-Liancourt, saw learning and contagion in the unmixed general hospital model as parallel problems. Bernard-François Balzac (1807) saw recidivism as resting on the ‘school of crime’ formed by the negative interplay of official and social sanctions. In addition to, and often in conjunction with, labelling theory, learning theoretical nuclei formed the other dominant perspective on crime during the proto-criminological era. It linked to natural law notions, referring to the spontaneous capacity of criminals to establish countercultures with their own peculiar social norms.

## Learning to suppress crime

The debate that most directly influenced the rise of first data criminology was about how education and civilization impacted morality and therefore crime. Before the Enlightenment, virtue and sin were seen as discontinuous options external to man. A person could shift from one state to another by divine

mercy. Then, increasingly, these qualities were internalized as human potentials. Humans were driven to crime by instincts, but reason could suppress such urges. The role of reason (*Vernunft*) explained why Enlightenment thought predicted that education and civilization reduced crime (Galassi 2004).

Thus, lack of education causes crime. Education meant the learning of facts and conforming values of mainstream society. Beccaria for one was very sure of this. He wrote in 1764 that one of the surest ways of preventing crime was enlightenment. The benefits of knowledge are in direct proportion to its diffusion (Beccaria 2003 [1764]: 105). In his view, 'the surest and hardest way to prevent crime is to improve education'. However, he immediately added that this causal link was beyond his aims (p. 110).

The idea that education reduces crime was much repeated during the early nineteenth century. It was part of the high discourse on crime, often uncontested, and simply asserted. The specific mechanisms are rarely explicated. Godwin seems to have thought that unjust social structures create apologies for violence and crime; and that if people were educated, they could change society rather than commit private crimes. His thinking thus resembled later criminological neutralization theory and critical criminology (Godwin 2013 [1793]: 424–5). The ignorant committed private crimes and neutralized them, rather than changing social structures.

## The counternarrative

Belief in the beneficial effects of civilization were not shared by everyone. In 1750, the Academy of Dijon opened an essay competition on the question 'Has the Restoration of the Arts and Sciences had a Purifying Effect upon Morals?'. Jean-Jacques Rousseau, participating in this concours, answered in the negative in his award-winning essay (Rousseau 2018 [1750]). In his view, secular civilization corrupted morality and fostered crime. He was very critical of modern civilized manners, seeing them as supporting conformity [13].<sup>2</sup> Using historical anecdotes and foil arguments, he depicted China and ancient Constantinople as seats of civilization and therefore of brutal crimes [20]. He then contrasted these foils with 'nations, being preserved from the contagion of useless knowledge, [that] have by their virtues become happy', such as the Scythians and the old Germans [22].

<sup>2</sup> The square brackets refer to paragraph numbers in the Gourevitch edition (Rousseau 2018 [1750]).

Rousseau then connected these foil comparisons to the classical trope from Roman antiquity, linking the fall of Rome to its luxury. Instead of or in addition to material luxury, Rousseau emphasized the immaterial luxury of Greek philosophy which was seen to corrode the moral backbone of the Empire, its traditional religion, and civic morality. Wealth and knowledge both corrupted the rustic virtues of the Romans. Instead of data, Rousseau cited Cato the elder as an expert on these causal mechanisms [31]. Modern politicians ‘speak of nothing but commerce and money’, while politicians of the ancient world talk about ‘morals and virtue’ [41]. Rousseau also critiqued the ‘huge institutions’ devoted to the education of youth, as well as the content of their curricula; he would have wanted to see pragmatic vocational training rather than abstract teachings [51]. He also warned that modern information technology, namely printing, dangerously disseminated immoral writings [58].

Rousseau’s critique of secular civilization resembled long-standing religious discourses claiming that only religion can guarantee morality and obedience to laws. Critics attacked non-religious Enlightenment ideas by suggesting that they had negatives consequences for the social order (Martus 2018: 408–10).

## Luxury of the poor

The learning perspective focused policy attention on prison reform and popular education. The other great preoccupation of eighteenth-century thinking about crime was the impact of affluence and poverty. Beccaria suggested that many crimes were caused by poverty. He let an imagined thief lament: ‘What are these laws which I have to obey, which leave such a gulf between me and the rich man? He denies me the penny I beg of him . . . Who made these laws? Rich and powerful men, who have never condescended to visit the filthy hovels of the poor . . .’ (Beccaria 2003 [1764]: 69). Pre-data criminology could be radical in its economic critique. Romilly, whose role in the development of English crime statistics was central (Chapter 9), suggested in 1786 that the rich should be punished for the crimes of the poor (Romilly 1786: 95).

When eighteenth-century crime thinkers pondered the crime–poverty connection, they sometimes drew on the classical tradition to make sense of their empirical observations. After all, Roman authors had explained laxity of morals with the luxurious lifestyle enabled by conquest (Berno



2023). Thus, immorality was linked to wealth and luxury. If the poor were criminal and morally corrupt, this also had to be the result of 'luxury'. The notion of the luxury of the poor was used by Henry Fielding in his 1751 legislative report *An Enquiry into the Causes of the Late Increase of Robbers, &c* (Fielding 1988 [1751]). He fitted an interpretive frame from antiquity to contemporary observations. By this, he meant a subcultural preference for 'partying' and alcohol drinking, famously captured in the *Gin Lane* (1751) engraving of his artist friend William Hogarth.

Another connotation embedded in the luxury concept was the culturally acquired goal of affluence, and the will to acquire consumer goods. The emerging mass market of industrial products had opened up the possibility of consumer goods for wider population strata, thus creating needs not everyone could fulfil. A couple of years earlier, Montesquieu had discussed luxury as relative deprivation reflecting 'inequality of fortunes', a condition particularly serious in populous and wealthy capital cities where the perception of affluence shaped the motives of others (Montesquieu 2001 [1748]: 114). But Fielding went even further by asserting that this condition led to different manifestations in different people: 'The very dregs of the people, who aspiring still to a degree beyond that which belongs to them, and not being able by the fruits of honest labour to support a state which they affect, they disdain the wages to which their industry would entitle them; and abandoning themselves to idleness, the more simple and poor-spirited betake themselves to a state of starving and beggary, while those of more art and courage become thieves, sharpers and robbers' (Fielding 1988 [1751]: 77).

Thus, the mismatch between aspirations and economic conditions leads to different types of reaction-formations, as some withdraw to passivity while others break norms to achieve goals. This mechanism has a strong descriptive resemblance to twentieth-century strain theory. Fielding's people with 'art and courage' resemble Merton's 'innovators', who solve the economy-culture mismatch with crime (Merton 1938). Fielding spoke of the 'luxury of the poor', while Merton was thinking about all people chasing the 'American dream' but only a few making it true. In Fielding, this theoretical nucleus combined a trope from classical antiquity thrust upon the very different reality of eighteenth-century London as a proto-consumerist metropolis. Reliance on classical authors impacted what could be thought, just like the 1820s innovation of modern crime statistics, as an instrument of observation, would impact what could be thought.

## Balzac's crime prevention manual

In 1825, a young (former) law student named Honoré de Balzac published a crime prevention manual with a friend, the journalist Horace Raison.<sup>3</sup> Honoré was the son of Bernard-François Balzac, the administrator who had published a memorandum on ex-convict recidivism back in 1807. Honoré's interest in crime and criminal justice continued his father's interests. The title of the Balzac–Raison manual was *Code des gens honnêtes*, 'the code of the honest people'; however, the name is challenging to translate in a culturally adequate manner. The book has been connected to a tradition of satirical 'codes' imitating the famous Napoleonic law codes (Lyon-Caen 2014: 43). While the title makes this connection to legal norms, the content differs. It described the factual techniques of thieves and embezzlers, so that 'honest people' could avoid becoming the victims of thieves' ruses. It was a crime prevention manual. As a description of offender techniques, it has been aptly described as proto-sociology (Lyon-Caen 2014: 44).

The preface to the *Code des gens honnêtes* incorporates several key ideas about crime in the immediate foreground of the emergence of modern crime statistics. First, Balzac described theft as endemic to organized societies, reflecting the 'perpetual combat between the rich and the poor' (Balzac 2015 [1825]: 10). Thieves had always existed and will always exist; they were a *necessary product of society* (p. 22). Theft was also very common, and multiple in its forms. Second, he saw theft as a continuum from common street crime to forms typically committed by people from upper strata; these were also thefts, even though we punish them less severely. Third, he saw that the severity of laws does not affect the prevalence of crime. The 'wound was incurable'. Because of this, the only means was to prepare potential victims in the art of situational prevention of victimization, the core aim of the booklet (p. 24).

Fourth, Balzac went on to explain that criminals are useful for society. They serve social order and the government. They have aesthetic purpose, forming as they do the *chiaroscuro* of the social landscape. Without them, honest people would be bored to death. They create the need for the whole criminal justice system. Balzac assessed the criminal justice budget to be 80 million francs and suggested that it cost more than the losses created by

<sup>3</sup> This is indicated in the 1854 edition but not in the anonymous 1825 edition. On the Balzac–Raison cooperation, see Robb 2000: 108.

offenders. The whole social order rested on thieves. Of all professions, none was more useful to society than the thief (p. 25). Thieves were necessary for the arts, providing a multitude of good plots for authors and artists. Finally, the book also repeated the then well-known idea that thieves formed societies of their own. They did not lack social norms; rather, they invented their own norms and enforced them in their own subcultures. They were a nation apart (p. 15).

Overall, Balzac's crime prevention manual testifies to the social salience of property crime in Restoration-era France. When Balzac wrote his 'code', he did not have the *Compte* at his disposal. The new statistical yearbook was published two years later, in 1827. Yet, the spirit was the same. Crime statistics revealed an astounding stability of crime year after year, thus corroborating the Balzacian vision. The social necessity idea of crime would be expressed by Quetelet in connection with statistical data. The first-generation criminologists advocated a non-moral approach to crime and its prevention. Balzac's satire resembles the objectivity of the data criminologists in its refusal to morally condemn criminals.

## Evidentiary bases before systematic data

The aim of this chapter has been to reconstruct what the authors of the first national crime statistics, and later those who used the new asset, were thinking when they wrote about vague theories of crime. To that effect, I have described some of the popular crime and criminal justice theories of the Enlightenment during the eighteenth century. Crime was seen as reflecting bad or malfunctioning institutions, cumulative disadvantage caused by labelling, lack of civilization and education, poverty, excessive severity, or mixing of different types of prisoners and deviants in shared carceral domains. Yet it would be erroneous to suggest that thinking about crime before criminology somehow completely lacked data or was not influenced by the limiting force of external realities. Several forms of evidentiary bases were used: rational thought, travellers' reports, case narratives, references to sources of antiquity, as well as introspection and autobiographical fiction such as the Marquis de Sade's works (Debuyst 1995: 103). Of these evidentiary bases, citation of ancient Roman and Greek sources almost completely disappeared with the break introduced by the data revolution of the 1820s, thus actually forming an indirect measure of the paradigm

shift.<sup>4</sup> In contrast, the foil argument enabled by international comparison, and the use of practical experiments in crime prevention, are particularly interesting because the later data revolution aimed to transform them into international criminology and evidence-based crime policy.

## Contrasting with foreign lands

It would be anachronistic to accuse the eighteenth-century philosophers for not using systematic data in their criminal policy thinking. They were not only ‘armchair philosophers’ somehow insulated from realities. For sure, their primary method was rational and secular philosophical analysis, probably fine-tuned in long critical discussions in various salons and academies, like Beccaria’s ‘Academy of Fisticuffs’, the term referring to very heated discussions (Bellamy 2003: x). Upon reading the eighteenth-century crime thinkers, one feels an urgent hunger for empirical facts; they did not see themselves as ‘unempirical’. To refer to behavioural facts, they referred to several sources, like Roman history and classical sources, more recent historical analyses, and traveller and missionary descriptions of non-European civilizations. They frequently used the foil argument (Nelken 2015 and 2019) which contrasts the criminal justice policy of foreign lands to highlight certain aspects, often problems, of the corresponding policies in the critic’s own country.

The foil argument was a central means of referring to empirical facts. In *Persian Letters* (1721), Montesquieu saw the effects of punishments as interacting with local cultures. The French were mild, civilized people, sensitive to pain. Thus, ‘a punishment which would not rob a Turk of a single quarter of an hour’s sleep, would overwhelm a Frenchman with infamy and despair’. He moved on to comment on crime rates in different parts of the world. Contrasting Turkey, Persia, and ‘the dominions of the Mogul’ with Holland, Venice, and England, he suggested that ‘it does not appear that fewer crimes are committed [in Oriental countries], and that men, intimidated by the greatness of the punishments, are more obedient to the laws’ (Montesquieu 1891 [1721]: 195–7 (Letter 81)). In *The Spirit of the Laws* (1748), he frequently refers to China, Japan, and Turkey to comment on European jurisprudence. He drew on the testimonies of Jesuit missionaries

<sup>4</sup> The shift in citation patterns was linked to the waning of the relevance of Latin as the language of science (Leonhardt 2016: 197).

in China, as compiled by Jean-Baptiste Du Halde, and on the reports of the German explorer Engelbert Kaempfer on Japan. Regarding Russia, he drew on Captain John Perry's description of 'Russia under its present Czar'. Based on traveller authorities, he argued that highway robbery should not be sentenced with death, because that policy empirically increased homicide robberies in Russia (Montesquieu 1748 [1752]: 144–5 [107]). In his commentary of Beccaria's work, Voltaire observed that the shift from executions to transportation had not resulted in an increase of crimes in Russia (Voltaire 1821 [1766]: 213–14). He thus made an empirical claim on crime trends and their relation to deterrence. Some of the references to ancient Rome were foil comparisons contrasting Roman clemency to the punitive excesses of modernity (see Voltaire 1821 [1766]; Romilly 1786: 31–2).

## Practical perspective

Many of the eighteenth-century thinkers on crime before criminology had first-hand experience in applying criminal law, or they visited prisons to witness the empirical facts of crime. Many of them used extensive if unsystematic observations, such as Henry Fielding (1707–54) and Patrick Colquhoun (1745–1820), working towards what we might call a professional police force. From the perspective of experimental criminology, Sherman (2005) is justified in placing the birth of criminology in these efforts to create more effective control institutions. They were pragmatic trial-and-error attempts to combat crime. As such, they resemble experimental criminology today, even though there were no control groups.

Henry Fielding served as a judge in criminal proceedings in mid-eighteenth-century London. Some of the eighteenth-century criminal justice critics engaged in fact-finding travels reaching to foreign lands, like John Howard. Samuel Romilly, who would later figure prominently in the creation of English crime returns (see Chapter 9), took every opportunity to observe the administration of justice; in 1781, he apprenticed himself to a Genevan defence lawyer to inform himself 'as well as I could of their laws, particularly their criminal law, and their mode of administering justice' (Romilly 1841: 41). From the end of the eighteenth century, smaller quantitative datasets collected by amateurs, prison chaplains, and committees aiming to improve prisons and criminal justice were emerging (Shoemaker & Ward 2017).

Patrick Colquhoun developed crime prevention in the Port of London from the late eighteenth century, with funding from the merchants of the West India Company. The core of this attempt was to establish an impartial police force. This involved multiple techniques, such as registering the workers who loaded and unloaded cargo and identifying the people who had legitimate business at the port and docks area. Various types of place managers were created to extend capable guardianship (Radzinowicz 1956: 349–78). The effort resembles evidence-based policing and situational crime prevention. Colquhoun described the new approach as ‘a new science of Maritime Oeconomy’ (Radzinowicz 1956: 380), but it was more like practical crime prevention than scholarly analysis of crime with systematic data. However, the effects of the experiment were assessed by examining losses by theft.

Many of the Enlightenment criminal policy doctrines influenced the emerging codifications of penal law during the eighteenth and early nineteenth century. These codes improved the conditions and possibility of crime measurement. They were acts of standardization. Consider, for instance, the emphasis on the proportionality of punishment. Montesquieu wrote that ‘there should be a certain proportion in punishments, because it is essential that a great crime should be avoided rather than a smaller’ (Montesquieu 2001 [1748]: 107). Since the application of penal laws was the origin of the assembled data of first data-driven criminology, proportionality and predictability principles, if implemented, increased data reliability across cases, judges, victims, offenders, areas, and periods. The penal codes based on standard punishment scales were, for empirical analysis, instructions regarding how to code human behaviour. The philosophers’ ideas helped to make possible the kind of uniform legal enforcement upon which data criminology necessarily relied.

In the first decades of the nineteenth century, there were increasing calls for, and attempts to create, more systematic data bases for the analysis of crime. During the 1820s, the notion of national crime statistics was linked to the idea of replacing or testing the theories of the Enlightenment philosophers. Data criminology emerged as an alternative to armchair theorizing. Yet labelling and learning theoretical and normalizing understandings of crime were dominant discourses in the foreground of the emergence of data criminology. These discourses can be seen as freely circulating nuclei of theoretical explanations of crime. There was no strong force to pull them together, to tell them apart, and to limit the space of possible true claims. Nothing acted to constitute normal science in the Kuhnian sense. This kind

of field-constituting 'gravity' entered the scene, in a fragile form, with the new instrument of national crime statistics. The paradigmatic exemplar of this force was the French *Compte*, the goal of which was to test theories, and to measure the effects of civilization. It allowed researchers to test hypotheses so that they did not control the results, binding them to a mast, as it were, to face the facts without bias. The force of data pulled some of the free-ranging theory nuclei together, forming the first empirically grounded theoretical cores of criminology (see Chapter 5).

# 3

## Civilization debate

### Introduction

The debate on the moral consequences of civilization was an important context of discovery for the national crime statistic, and for criminology. This chapter will approach the threshold of the *Compte* event from this perspective. Is civilization good or bad in its moral consequences? This had been debated at least since Rousseau's 1750 *Discourse on the Sciences and the Arts*, an essay that won him the *concours* declared by the Academy of Dijon. Rousseau had answered that civilization corrupts morals and leads to crime. His was, however, a minority view, and one perhaps intended to shock the prevailing opinion of the enlightened circles. According to this opinion, civilization had brought about an increasing sensitivity, refinement of mores, and less violence and brutality.

Cesare Beccaria attributed the civilizing process to the invention of printing, and the resulting rise of the press. 'It is for this reason that, in Europe, we see a reduction in the horror of the crimes which afflicted our forefathers . . . Anyone who knows how things were two or three centuries ago and how they are now, can see how, from luxury and ease of life, the most precious virtues have sprung up' (Beccaria 2003 [1764]: 18). Beccaria saw a crime drop in Europe and explained it by the rise of education and living standards. The poverty theory of crime was thus connected to the civilizing process. Later, the civilization debate was changed by the great transformation of the French Revolution. The intellectuals who advocated a secular and positive conception of civilization saw the achievements of the Revolution as fulfilling their idea of progress. Furthermore, they also incorporated the Industrial Revolution into their concept of civilization. Practical and technical progress would yield a better world, as education of skills would increase affluence, and thus reduce crime. The opponents of the secular civilization idea claimed that such civilization, linked to materialism and atheism, had resulted in the collapse of the moral order. Thus, civilization led to worsening morals and more crime.



By the mid-1820s, most observers shared the view that the civilizing process was a reality, even though they disagreed over its effects on crime. For one, Balzac started his crime prevention manual (Balzac 2015 [1825]) by discussing the interlinkage of crime and the civilizing process. He wrote that violent and brutal crime had been tamed by civilization, but lesser, everyday forms of mass crime had remained prevalent if not increased. In the old days, ‘honest people’ had to fear murder, but today they were threatened by swindlers (pp. 11–13). Indeed, Balzac offered an analysis linking mass routines to the forms of crime they sustained. A more complex society produced complex forms of crime. This required, in his view, a new kind of attitude towards crime, characterized by non-emotional ‘cold-blooded impartiality’ (p. 16). To be successful in crime prevention, observers should avoid moral emotions and passions; analysts should neither condemn nor defend the offenders. Since theft was endemic and resistant to penal sanctions, people should turn to situational crime prevention manuals, such as Balzac’s own *Code des gens honnêtes*.

As will be seen later, the key developers of national crime statistics, and their first-generation users, were highly interested in studying the education–crime correlation, not only in France but also in England and Germany (see Chapters 8 and 9). They wanted to settle the endless discussion with facts. With data, analysts could measure the links of civilization and crime. To understand this properly, we must first tackle an obstacle. In prior research, the rise of criminology in the 1820s has been linked to fear of crime, and fear of revolution. In contrast, I believe that many of the key players in the paradigmatic changes were motivated by a perceived civilizing process, a process of ‘mildening’ rather than fear. In the 1820s, many intellectuals felt that civilization was marching forward, crime was dropping, and criminal justice policy was becoming more humane and rational. The central groups that created the first criminology were great optimists.

## From state consolidation to European security order

An important goal of pre- and post-revolutionary French regimes was the internal pacification of the area defined by state territory. This involved the creation of a strong administration directed from the centre of government, claiming a total monopoly of violence in its territory. The suppression of both political insurrection and common crime became policy priorities.

Institutional reforms were undertaken by Napoleon to create ‘comparable and synchronized institutions’ in the sphere of criminal justice, including law codes, courts, and systems of registration (de Graaf 2020: 25). The internal pacification of the nation was successful as robber gangs were suppressed (Bauer & Souleuz 2012: 67–76). Thus, as regards large companies of brigands, there was a crime drop during the early decades of the nineteenth century. This was caused by the deliberate control policies of the state (Broers 2015: 313–14). The reforms of the law of criminal investigation (1808) and the penal law (1810) expressed similar purposes of pacification by standardization.

The pacification of state territory progressed to an international European level. After the final defeat of Napoleon in 1815, the victorious coalition of Britain, Prussia, Austria, and Russia dictated the terms of peace for France and formed an Allied central administration occupying parts of France until 1818. The Allied powers accepted and adapted Napoleon’s reforms in policing and criminal justice implementation (de Graaf 2020: 263), upgrading the model into the first European security structure. As analysed by Beatrice de Graaf, they promoted civilization by ‘disseminating security throughout Europe’; by new control-related vocabulary and measures such as security services, passports, and databases (pp. 449–51). The creation of intelligence agencies was connected to improvements in the operation of the municipal police (p. 216). State efforts and their capability to see society and criminal behaviour were improving considerably during the decade before the launch of the first modern crime statistic, a development that is also relevant for the isomorphism assumption.

The European security architecture drew from the concept of ‘balance of power’, where the concept of balance referred to the concrete instrument of weighing. The Vienna Conference (1815) planning the post-Napoleonic order had a statistical sub-committee researching the territorial areas and population sizes of European countries (de Graaf 2020: 67–8, 108). Originally, the statistical committee aimed at assessing both the numbers of populations and the ‘quality of the people’ (Peterson 1945), a notion not far removed from the attempt of criminologists, such as Nikolaus Heinrich Julius and Pellegrino Rossi, to compare the criminality of nations (see Chapters 7 and 8 in this book). The groundwork of the Vienna system was important for criminology through the base number problem; the crime rates in different areas could be compared only if the relevant population sizes were known. The population size thus enabled the comparison of differently sized areal units in terms of criminal propensity.

In France, the pacification of the Empire and the Allied command were continued and consolidated by the Restoration system between 1815 and 1830. The contributions of that regime to state formation have been recently underscored by scholars (Greenfield 2022). The frequent uprisings, *coups d'état*, and regime changes of the nineteenth century did not undo the long duration of the 'deep state', or centralizing governance, embedded in administrative routines and independent bureaucracy (Bauer & Soullez 2012: 79). The cultural discourse on the civilizing process, and the contemporary perception of increasing civilization up until and during the 1820s, were built on the perceived continuing successes of the control policies of the central state. The rise of modern national crime statistics is part of this innovative consolidation.

## Criminology as fear-inspired control?

Why was criminology born as a data corpus-based intellectual space during the 1820s? One key explanation has been to link criminology to fear of crime (on related discussions, see Barbin & Marec 1987: 43; also Reinke 1990: 173; and Galassi 2004, as discussed in Chapter 10). Sometimes the fear of street crime and fear of revolution are mixed in these discussions; the fear theory resonates with an equation of common street crime with revolutionary potential. Beirne saw the rise of national crime statistics as a reflection of the 'middle class fears of the dangerous classes', and Quetelet's criminology as reflecting the 'failure of the French penal strategies' (Beirne 1993: 2, 6). Studying Belgium, Tixhon argued that the rise of crime statistics there reflected the rise of crime, and fear of crime among the upper classes (Tixhon 1999: 972).

Some of the fear theory variants are less causal, describing how penal strategies developed from *ancien régime* penal spectacles to new carceral techniques of the nineteenth century, linked to Enlightenment concepts of rational actors to be deterred by sanctions (Beirne 1987: 1143). During the Restoration regime, the study of crime connected to new penal strategies, while the rising statistical movement gave it intellectual credibility (Beirne 1987: 1144; Porter 1986). This interpretation connects the rise of criminology to more subtle changes in power technologies aimed at preventing a new revolution.

Was there a crime wave, or fear of it among the elites? Was crime increasing during the 1820s? How strong is the case that data criminology

reflected fear of crime and revolution? Free-ranging robber gangs had been suppressed by the 1820s and the Allied central command had instituted more efficient passport controls and police operations between 1815 and 1818 (de Graaf 2020). However, what happened to ordinary crime is difficult to assess. It has been argued that in the early decades of the nineteenth century, the newly industrializing cities created 'not a crime wave but a typhoon' (Hacking 1983: 470). Yet there is no certainty regarding the existence or scale of this typhoon. Several scholars and contemporaries have, however, noted that the *type* or patterns of crime were changing. Property and petty crime became a pervasive part of normal life for French citizens due to the presence of large numbers of those in the marginal underclass, many of whom were involved in crime. At the same time, crime news became ubiquitous, and literature and drama took up the topic with unprecedented vigour (Chevalier 1973 [1958]; Beirne 1987: 1145). It was believed that prisons exacerbated the problem of crime, and some segments of society perceived crime as increasing (Beirne 1987: 1146–7). Perrot (2001: 167–8) suggests that the high crime levels of 1815–18 inspired government officials to develop national crime statistics. Crime data was thus seen as partially reflecting fear of crime and/or fear of revolution; the aim was to ensure the functioning of social control (van Kerckwoorde 1994: 254).

During the spring of 1827, the journalist Henri Beyle noted in his correspondence to the *New Monthly Magazine* that 'about two months ago so many daring robberies were committed here [in Paris], that it was hardly considered safe to pass through the streets after eleven at night'. This Beyle connected to dissatisfaction and contempt for the Villèle administration. He also claimed that the police had prosecuted a victim of an alleged robbery for having invented the incident. Beyle's observations regarding a short-term robbery peak were made in a highly politicized context, when the government was attacking the freedom of the press (*New Monthly Magazine* 1/1827: 374; *Courrier Anglais* 3, 1827: 318).<sup>1</sup> The satirical tone of the novelist-journalist gives the sense that we are witnessing rhetoric where crime outcomes were linked to political tensions between government and the liberal opposition.

Beyle did not see the street robbers as harbingers of a revolution. Indeed, when the post-Napoleonic security architecture was erected, its

<sup>1</sup> Stendhal's English journalism was published in French by Henri Martineau during the 1930s. Citation is given to both English and French versions, available from Google Books and BNF Gallica.

main opponent was political terror and radicalization, not common street crime. Terror was defined as political violence supporting revolutionary or Bonapartist goals (de Graaf 2020). Seeing criminology as linked to upper-class fears, control purposes, and power functions connects to the notion that ordinary crime is pre-revolutionary, so that criminals are vanguards or portents of a revolution. Eric Hobsbawm's influential social bandit concept, invented in the late 1950s, involves the notion of proto-revolutionary crime (Hobsbawm 1971 [1959]). Also, the sheer timing makes it natural to link the birth of criminology in the 1820s to the towering presence of the French revolutionary and imperial periods. But could the link be different from the one proposed by the fear theory? In what follows, I explore the hypothesis that the elites behind the crime statistics, and their use as instruments of criminology, were also great optimists perceiving a crime drop, indexing the megatrend of the civilizing process.

## Civilization and the crime drop

An increasing *douceur*, 'gentleness' of mores, was perceived by multiple observers during the eighteenth century. An important dimension in the *Zeitgeist*, this was a recurring theme in the writings of the Enlightenment philosophers. The domains of civilization ranged from mores and sensibilities to trade and commerce. In the field of legal policy, Beccaria himself had stated in 1764: 'But as souls become softened by society, our sensitivity grows,' an empirical trend that was destined to lead to lesser severity of punishments (Beccaria 2003 [1764]: 113). The philosophers not only observed this process but made it their own project, especially in the field of social norms and penal procedures.

In the years preceding the publication of the first national crime statistics in France, the notion of increasing civilization was in flux. During the Empire, initial efforts to collect crime statistics were inspired by this cultural context of discovery. The notion of civilization was connected to a decrease in crime. What ensued was the first crime drop debate, which predates the rise of data corpus-based criminology. This was an important part of the context of the discovery of modern crime statistics. In the State of the Empire address given on 25 February 1813, the interior minister, Count Montalivet, argued that crime was decreasing, at an increasing pace. The crime drop was most marked in areas that had been incorporated into the French Empire, a trend linked to 'our laws, our prosperity, and the

maintenance of public order' (de Montalivet 1813: 70). After the collapse of the Empire, the exiled Napoleon Bonaparte himself pointed out that during his reign crime decreased in France while it was increasing in Great Britain (de Las Cases 1823: 466–7). Even erstwhile enemies like the British could see the French occupation force as a crime-preventing influence (see Chapter 9). The French revolutionary and then Napoleonic military expansion was perceived to expand the rule of law. This created an unprecedented option for comparative crime analysis, because French legal transplants standardized the outcome measure of crime in different social and cultural conditions. One of the motives for creating large-scale crime data was to render the process of civilization measurable.

In the years preceding the publication of the first proper crime statistics compilation, the civilization frame was gaining momentum. In 1825, an anonymous author complained in the journal *Le Globe* that the higher echelons of society had abandoned all 'disorder and scandal' in their lives, turning away from public matters towards increasing privatization, to the *petits choses* within their families and immediate circles of friends. Revolutionary idealism and libertinage were being replaced by a new kind of *douceur* and probity that were probably also spreading to the lower social strata (*Le Globe* 107, 14 May 1825: 538–40). The journal returned to this topic later the same year. As before, the analyst was ambivalent about the merits of civilization. High society manifested *mœurs douces* while lacking *vertus fortes*; the rise of more gentle opinions and actions came with a price tag, the loss of what Machiavellian *virtù* stood for: manliness and strength. In contrast, the rise of industry had led to a genuine improvement of morals in the lower social strata, who increasingly conformed to the law and authority (*Le Globe* 195, 10 December 1825: 1014–15). There were thus commentators who saw the rise of conformity as a problem in the higher strata and a victory of the civilizing process among the lower classes.

In the same year (1825), the economist Charles Dunoyer published a book, *L'industrie et la morale considérées dans leurs rapports avec la liberté*, arguing that industrial–technical progress and free markets made people freer and more affluent, and therefore also less criminal. He critiqued the claim that civilization corrupts people. Rousseau had been wrong in claiming that progress means depravity, or that 'savages' are noble. Against the Romantics celebrating the noble savage, Dunoyer argued that homicide was frequent among hunter-gatherers (Dunoyer 1825: 150) and that people's habits had improved over time. In the long run, and especially after the Revolution, the trends had been towards increasing civilization: there

was more enlightenment and more well-being, while people had improved their manners and morals. There were fewer libertines, and family ties had become stronger. People were less ceremonial but more respectful of each other. People from all walks of life were valued. This was a fact every impartial observer recognized (Dunoyer 1825: 290–2). One such observer was Dunoyer's friend, the legal economist Charles Comte, whose treatise on legislation discussed the civilizing process. He saw two trends: the decrease of crime and its concentration in the lower classes. The onward march of civilization had pacified the upper classes, leaving the lower classes as carriers of crime. There was a general improvement of morals and legislation in Europe (Comte 1826: 48–51).

Dunoyer explained the crime drop by the rise of free commerce. At least two mechanisms were involved. Affluence as such improved morality. Trade increased people's interconnectedness, supporting politeness and abstinence from violence (Dunoyer 1825: 152–3, 252–6, 289–90). If you wish your customers to return to you in an open market without monopolies, you are polite and non-violent towards them. This theory on the commerce–civilization link was later elaborated on by Norbert Elias in the 1930s in his Freudian rendering of civilization theory. In our time, the *doux-commerce* hypothesis is still being studied by criminologists observing the violence-reducing, civilizing impact of free trade and open markets (LaFree & Jiang 2023).

## Crime rhetoric

Crime data was intended to replace politicized crime rhetoric which was perceived as a counter-civilizational, emotional force: data would civilize how crime could and should be talked about. The relation of first data-driven criminology to the revolutionary era should be seen in this light as well.

The French Revolution invented, or accelerated, the use of crime rhetoric in political discourse. Crime rhetoric was prominently used, gaining momentum during the radical phase of the revolution before the events of the Thermidor (July–August 1794). The Jacobin politician Georges Couthon attacked 'impure individuals' who were 'building a throne for crime' by corruption (Jones 2021: 46). Another politician, Bernard Barère, defended strong revolutionary government as a shield defending the republic, making

it impossible for aristocrats to return and for 'crime to dominate' (p. 198). When moderate forces forestalled extreme politics, the Jacobin Club swore an oath to fight crime that was seeking to overthrow virtue (p. 306). The Jacobin 'war on crime' was waged by a progressive movement that at the same time opposed the death penalty and enacted education and welfare laws to 'allow egalitarian brotherhood to flourish'—war on crime and welfare reforms aimed at creating a 'new man' (pp. 85, 88, 93, 140).

The revolutionary leader Maximilien Robespierre was obsessed with crime in his speeches at the Convention and the Jacobin Club. For him, crime was the opposite of revolutionary goals and virtues. He also claimed to be both the 'victim and the enemy of crime' (Gauchet 2022: 152). He referred to *scoundrels*, *thieves*, and *rogues*. He used an extensive concept of crime, beyond conventional crime, to include what we would today call 'white-collar crime'. The criminals were linked to corrupt forces such as shady financiers (p. 119). 'Corruption' was rampant and referred to all deviations from the revolutionary goals. The criminal tendencies were embodied by the evasive Baron de Batz, who combined royalism and financial fraud in his repertory and who may be the first great white-collar criminal used by government to justify harsh policy measures. The Jacobins were simultaneously using crime to refer to specific acts, and as a moral metaphor: since people knew what conventional crime was, Robespierre was trying to attach the same negative label to political opposition. In his final speech to the Convention on the 8th of Thermidor, the day before he was taken to the guillotine, Robespierre climaxed his political career by saying that he 'was made to combat crime' (p. 160). Thus, 'governing through crime' was innovated by the revolutionary government. Robespierre can be seen as a critical criminologist seeing white-collar crime and corruption as major problems. The eradication of criminals, including political opponents, was a means of fulfilling the goals of the Revolution. The terror of the years 1793–4 was an extreme version of white-collar crime prevention through preventive incapacitation.

Later, after the Thermidor (the end of 'Terror' in 1794), the conservatives pictured Robespierre, the leader of the Left, as the arch-criminal, thus inverting and continuing the political use of the crime rhetoric. Theories linking the rise of criminology to fear of crime, or to the fear of revolution, need to consider the complex echo chamber in which political crime rhetoric emerged with politics based on mass participation. Did some of the conservatives of the 1820s remember the complexity of the crime–politics



issue? Could factual crime counts liberate society from the political uses of crime rhetoric? Rather than fearing crime, the first scholarly field of criminology wanted to act against ideological biases by agreeing first on facts and numbers. Rather than proposing a new political stance, they aimed at transcending the rhetoric of crime.

The rise of crime as a topic of political rhetoric thus predated the birth of data-based criminology. The ‘man born to fight crime’ was born before the Lombrosian ‘born criminal’. Crime rhetoric was increasingly used by different political persuasions. In the immediate foreground of the *Compte* event, France was governed by the conservative Villèle administration but towards the end of its reign, the government was attacking liberal freedoms. Liberals saw an attack against secular, non-religious education, and claimed that the policies of the administration had led to increasing crime, as the streets were no longer safe (*Journal des Debats* 31 December 1826). While this polemic did not draw on any crime statistics, its causal theory was consistent: bad policy led to crime.

## Dupin and the map wars

Before national and international crime data became available, thinkers stressing civilization and the rise of gentle mores used other kinds of evidence. They referred to the history of antiquity, opinions of classical philosophers, reports from voyagers, and personal observations. Because they lacked systematic data, reading them feels somewhat repetitive. The paradigm of the civilizing theory appeared to be exhausted if nothing gave it new energy. In the mid-1820s, continental administrative intellectuals were searching for means to move beyond the type of ‘armchair theorizing’ exemplified by Enlightenment philosophers. One group was working in the Ministry of Justice (see Chapter 4) to launch national crime statistics. Another innovation was related to cartography.

At this stage, an important figure enters the scene: Baron Charles Dupin. He was a mathematician and engineer, and a member of the Académie des sciences from 1818. He is also known to posterity as a champion of free popular and adult education. Because of this, he wanted to be known as the ‘professor of the workers’ (Christen & Vatin 2009: 13). The progress of civilization, and the promises of enlightenment, could be accomplished by education. From 1819, he served as the professor of applied mechanics in

the Conservatoire national des arts et métiers,<sup>2</sup> transforming during the early 1820s his courses on applied mechanics into a national movement of worker education (Christen & Vatin 2009: 18; see also Bradley 2012). He wanted to educate the workers, and propagated the virtues of work, savings, abstinence from alcohol, and education (Christen & Vatin 2009: 15, 17). These virtues were all facets of self-control, a meta-virtue that could also prevent crime among the working classes. But was he being successful? It seemed like a natural thing to do to seek *evidence* that secular and technical knowledge supported morality, rather than corrupting it. But where could he find data on morality?

Consistent with the 'balance of powers' perspective created in the post-Napoleonic settlement by the Allied powers, Dupin was particularly interested in measuring the productive powers of nations. He travelled in Britain to learn about its power. Later, he wrote a report on the productive forces of France. In that study, he also commented on crime trends. Using penal statistics and the state budget, he observed a *crime drop* from 1817 to 1825. Convicts were fewer in number and prison conditions better. The convict rate had more than halved in relation to the 'virtuous population' (Dupin 1827: 39). This interpretation was soon critiqued by Charles Lucas using the newly available *Compte* data; for instance, he suggested that choosing the famine year of 1817 as a point of comparison gave a too optimistic view of crime trends (Lucas 1827: xlii).

In 1826, Dupin had published a ground-breaking shaded (choropleth) map, an innovation combining geographic–natural entities and social data on education (Palsky 1996: 59–67). The map itself was an instrument in the 'culture war' on the meaning and consequences of secular civilization. It showed how France was divided into two regions: the enlightened north and the 'obscure' or dark south. Dupin's *Carte figurative de l'instruction populaire de la France* also had a strong impact because it was a picture, a map, a device with unprecedented rhetorical power (Palsky 1996). The map showed a bivariate link between education and area, using the method of cartography. It was very similar to the education–crime maps published by Guerry and Balbi a couple of years later (see Figure 5.1). The scholars who saw Dupin's map saw the next issue: it could be correlated with the good and the bad consequences of secular civilization. Since Parisian circles already

<sup>2</sup> The 'arts' part of the title referred mostly to the mechanical and technical crafts needed for industry and manufacture. Founded by the National Convention in 1794, the Conservatoire embodied the optimistic and science-based notion of secular civilization.

knew that crime statistics were becoming available, an empirical solution to the great debate on the meaning of civilization appeared to be within reach.

Dupin released and discussed his new map in a lecture held in the Conservatoire national des arts et métiers, on 30 November 1826 (*Le Globe* 49, 4 December 1826: 257–9). It must have been a dramatic moment of unveiling. The next Monday, 4 December, the map was discussed in the Académie des Sciences. There, the renowned mathematician Augustin-Louis Cauchy (1789–1857) was present in the audience. Politically, Cauchy was a Bourbon legitimist and royalist, and a fervent Catholic. He opposed the Bonapartists and the liberals who, in different ways, supported the secular notion of civilization as a movement embracing the achievements of the 1789 Revolution. As testified by Henri Beyle, a journalist witnessing the séance, Cauchy was a right-wing royalist and clericalist who liked to warn about the moral consequences of secular education. He had a habit of suggesting that certain scientific truths should not be communicated to the ‘masses’ because facts could breed immorality (Belhoste 1991: 138–40).

With this background, it is hardly surprising that Cauchy was triggered by Dupin’s map. He suggested to Dupin that he should include in his map information on morality and compare the enlightened and dark areas in that regard (*Procès-verbaux des séances de l’académie* 1918 [1826]; *Le Globe* 50, 7 December 1826: 263). Were uneducated areas more or less criminal than the educated ones? Cauchy claimed that he was not an ‘enemy of the people’s education’, but only curious to know the correlations. As reported by *Le Globe*, he was ‘curious to see if there would not be more morality in departments which are ignorant as regards science, but in which the people receive religious instruction, than in those departments which are more educated’ (*Le Globe* 50, 7 December 1826: 263). Cauchy was perhaps hoping to see that the ‘dark’ France would have less crime than the ‘enlightened’ part. He proposed to Dupin that he use the number of illegitimate children and crime records of courts of assizes to measure morality. Thus, Cauchy explicitly suggested a quantitative analysis of links between education and crime, using national crime statistics.

To this, Dupin replied that he had already examined that but could not yet publish because of the delays in the publication of ‘certain indispensable documents’ (*Le Globe* 50, 7 December 1826; see also Lucas 1827: 179). Was he referring to the *Compte*, the first modern national crime statistics, which would be published soon, in February 1827? He also said that he expected that crime would correlate positively with ignorance, because most illegitimate children were born to the lowest social strata with little or no

education. But was he preparing to examine crime? Dupin's biographer, Margaret Bradley, suggests that his interest in statistics may have been influenced by his relative, Claude Dupin (Bradley 2012: 185), who had included crime figures in the departmental statistics of Deux-Sèvres back in 1803. Given the salience of the crime drop debate in the mid-1820s, it would have indeed been strange if Dupin had not thought of creating a crime map to supplement his prior time-series approach to civilization and the crime drop debate.

In January 1827, Dupin gave two further lectures on the links between education and morality, finding a correlation: lack of education was linked to immoral behaviour. Reporting to the English *New Monthly Magazine*, Beyle connected Dupin's educational programme with a metapolitical fight over the meaning of civilization. He informed the English readers that Dupin's thoughts were opposed by clerics and aristocrats (*New Monthly Magazine* 1/1827: 196–9; *Courrier Anglais* 3, 1827: 287–99). The benefits of popular education were elementary truths 'disputed by all who are connected, however remotely, with the clergy and the nobility'. The good effects of education were 'annoying to the Jesuitical party' and 'obnoxious to the aristocratic portion of society in all parts of the world'. Beyle connected the Dupin map, and the lower levels of crime in the north, to crime reports provided by the Ministry of Justice (*New Monthly Magazine* 1/1827: 197–9; *Courrier Anglais* 3, 1827: 291, 295–8).

Newspaper sources suggest that in February 1827 Dupin may have presented the concept of a map, or the map itself, showing how education, life expectancy, and moral tendencies 'follow a regular and, so to speak, mathematical law, within the capital as throughout the kingdom' (*Le Globe* [T. IV No. 47], 1 February 1827: 590–1). Similarly, an English journal reported in 1827 that Dupin 'has had a map of France engraved, showing the relative degrees of instruction in each department, and the relative number of crimes committed in each'. Furthermore, the source continued that the analysis linked popular education to low crime rates: 'It appears, that in those departments where education is encouraged, and the Lancastrian system introduced, the morality of the lower orders stands higher than in those whose ignorance is proverbial' (*New Monthly Magazine* 3/1827: 66).

The specificity of the given information and the reference to the 'Lancastrian system', a special type of primary education, suggest some accuracy in this report. The source could have been Beyle, who was the regular Paris correspondent of the *New Monthly Magazine*, and who was following Dupin's work. The relation of Dupin's lost map to the Balbi–Guerry map

(1829, see Figure 5.1) is unknown. It seems strange if these reports were fully false or based on misunderstanding. Certainly, Charles Lucas had in 1827 already published in table format similar correlations, inspired by the Cauchy–Dupin exchange the previous December (Lucas 1827; see Chapter 5). The difference was that Lucas did not use map graphics to present the findings. It thus appears evident that the concept of showing the education–crime nexus, disaggregated by map or table format, emerged two years before the publication of the Balbi–Guerry map. Furthermore, Dupin also saw lack of primary education as a cause of crime because of a correlated time series approach (Dupin 1827: 68). Dupin’s map represented the English notion of secular civilization with a strong emphasis on technology and education. He was trying to make the point that education, and occupational education, were productive forces in the economies of advanced states of Western Europe.

In 1828, the German criminologist Julius attacked Dupin’s theory linking progress to less crime. He defended the German *Kultur* but still attributed the civilization–crime correlation claim to Dupin (Chapter 7). In France as well, Dupin’s approach was critiqued by the clergy and the ruling clerical–aristocratic forces. The education map itself triggered a backlash with conservative cartographers such as Bigot de Morogues and Villeneuve-Bargemont. In a war of maps, they tried to show that industry and commerce were leading causes of immorality (Palsky 1996: 71–3). The map of Balbi and Guerry (1829) can be seen as part of the conservative backlash, as it showed a high concentration of property crime in the advanced parts of the country. It could be praised in the press as showing that the ‘most perfect society’ would be a Catholic polity where the clergy would take care of primary education (*Gazette de France* 9 August 1829).

## Beyle on civilization

The journalist Henri Beyle who witnessed the Dupin–Cauchy debate in late 1826 is today better known under his nom de plume, Stendhal. He was a contemporary witness to the rise of first criminology. It was hardly a coincidence that he keenly followed the rise of crime statistics. Already as a young officer in the Napoleonic army occupying northern Italy, he was more interested in human behaviour than touristic attractions. In February 1801, he wrote to his sister Pauline about high homicide rates in Brescia and compared them with the relatively low homicide rates in Paris (Stendhal

1997 [1801]). His analysis showed two interesting features: he saw the need for population base numbers, thus thinking in terms of risk rather than via absolute numbers. Second, he contrasted homicide rates with the number of religious institutions and with religious participation, noting that high homicide rates were not prevented by religious lifestyle. Stendhal did not necessarily see violence as a bad thing, but rather as an indication of energy and virtue. Long before the rise of criminology, he combined a romantic appreciation of transgression with a love of statistical facts (Marsan 1932: 49–50). This dual interest may have led him to the salons and seminars of the 1820s when morality of nations was genuinely being measured.

But how did Stendhal work through the question of civilization and violence? Stendhal's novels integrate the civilization–crime debate, giving it a rendering in high art and testifying to the centrality of the theme in 1820s France, and in Europe. Stendhal's first novel *Armance* was published in 1827, the same year data-driven criminology was born. That novel links the materialist philosophers of the eighteenth century, and the 'English', practical aspect of civilization, to the amoral behaviour of the 1820s generation. In his view, the 'melancholy' disposition of that generation was linked to certain 'writers of the last two centuries', such as Helvétius, Bentham, and Bayle, whose 'impious books' explained human thought materialistically and advocated a philosophy of utility (Stendhal 2017 [1827]: 3–4, 13, 19). Stendhal saw an interest in philosophy as the 'prevailing disease' of the generation. The hero of that book, Octave de Malivert, had studied practical arts in the École Polytechnique, thus he knew the non-religious, technical side of the civilization process. When feeling repulsed by the opinions of the aristocracy, Octave felt driven to practical occupations such as being a 'chemist in a factory'. He visited the popular education pioneer, the Duke of Liancourt, to examine machinery imported from Manchester. He would have loved to 'command a steam engine' or to be 'employed in some factory' (pp. 43–4).

Stendhal connected the practical dimensions of civilization to both immediate political and deeper cultural currents. The immediate context was a reaction to the policies of the Villèle administration, which aimed to support the aristocracy. In terms of ultimate cultural context, Stendhal connected scientific and secular civilization to moral voids, created by eighteenth-century philosophers and the Industrial Revolution. The civilizing endeavours had behavioural consequences. They led to the amoral and crime-prone behaviour of his protagonist, who felt like having no conscience, and 'no instinctive revulsion to crime' (p. 21). Stendhal linked

murder to utilitarian philosophy: Octave killed a man in a duel without any feelings of sympathy for, or hatred towards, his victim, and defenestrated a servant in a fit of rage, with no justification.

Stendhal connected to the debates on popular education, which in turn were linked to the grand problem of the moral consequences of civilization. He caricatured the conservative opposition to education. The 'lower orders' were 'not intended to read'. The conservatives feared the Jacobins who had 'changed all of our current customs and even our language'. The aristocrats did not fear ordinary street crime, but rather political insurrection and the rise of a new Robespierre. As perceived by Stendhal, the conservative elites hated the 'cursed Charter, public debates and the liberty of the press' while ridiculing the Lancastrian model of mutual teaching and vaccination (pp. 73, 75, 83, 90–1).

Thus, Stendhal worked on the crime–civilization theme without endorsing either side; the debate became an instrument of his art. That is why it highlights the cultural context of discovery in which data-driven criminology was born. Indeed, both of his great novels, *The Red and the Black* (1830) and *The Charterhouse of Parma* (1839), worked on the civilization debate. *The Red and the Black* drew inspiration from a real crime and thus represented true crime fiction. Stendhal again connected crime to the grand civilization controversy, asking how religion was related to morality. His answer was hardly flattering to the old-school, pro-religion lobby: consistent with his early observations on homicide rates per church tower, he described religion and crime as highly compatible. In both novels, the main characters are Catholic clerics spiralling to crime. Julien Sorel of *The Red and the Black* commits an attempted homicide against his former lover. He is sentenced to death. A quixotic and comic figure, Fabrice del Dongo of *The Charterhouse* rises in the church hierarchy while committing a series of crimes ranging from horse theft to homicide. For much of the plot, he is either in prison or a fugitive from justice. *The Red and the Black* even refers directly to Dupin's map when Stendhal writes that 'in the north [of France] there is more civilization, and fewer injustices' (Stendhal 2009a [1830]: 248).

Yet Stendhal remained ambivalent. His protagonists Sorel and del Dongo were not genuinely religious; Sorel was a hypocrite who had 'no religious principles', characterized by a 'total lack of faith' (pp. 286, 467). In the *Charterhouse*, a central character believed that all events after 1715 were a 'crime and a blunder' and that concern for liberty and happiness was criminal (Stendhal 2009b [1839]: 138). The novel ends with a travesty of religion,

as extramarital lovers vow to God never to see each other, only to solve the problem by making love in the dark (pp. 504–5). Stendhal's fictive characters were commentaries on the meta-political crux of the era: how institutional religion and religious dogma relate to morality. Stendhal thinks that external institutional religion is compatible with, even conducive to, crime.

Stendhal believed that fiction could be a means of revealing social and psychological realities. In one of the most celebrated passages in *The Red and the Black*, he defends the realism of the novel as a mirror of reality. 'Sometimes it reflects the azure of the sky, sometimes the mud of the quagmires on the road.' It was ridiculous to accuse such realistic mirroring of being immoral (Stendhal 2009a [1830]: 371). Was his view that religion was compatible with crime influenced by Dupin's map, and the subsequent rise of the *Compte*? Or were both shaped by social realities existing independently of the observers? It was in any case very difficult to hold in check the wishful thinking of the partisan observers. Here, the emerging *Compte* offered a way out of the impasse. Statistics could serve as a result-open source of data, enabling the settling of the crime–civilization debate once and for all.



## Breakthrough to data 1825–1827

### Introduction

Before the rise of data criminology, there was an abundance of free-floating theoretical nuclei making sense of crime by means of rational thought. Sometimes this body of thinking referred to non-systematic types of evidence such as classical authors, traveller descriptions of foreign cultures, or personal experience in criminal justice roles. By the mid-1820s, the crime–civilization debate was forcing the crisis of speculation to its momentum. The diverging views needed to be arbitrated. As with the experiment in natural sciences which was intended to end dissent and civil strife (Shapin & Schaffer 1985), administrative crime statistics became a possible route to consensus-building in criminology. It was designed to settle debates on vague theories, and to get rid of ‘systems’. The data the task of which this would be had to be designed as a research-enabling instrument.

Crime statistics development was a movement led by individuals who were motivated by moral and political goals, such as the reform of criminals and the prevention of crime. Often, their motivation was theoretical: they simply wanted to understand the causes of crime and saw data as a means to that effect. Thus, the rise of societal data analysis was, to a considerable degree, an internal scientific development. The logic of natural sciences was applied to moral and social phenomena. Yet those who were driven to apply natural scientific models to human affairs had recourse only to assets built earlier for other purposes. The instrument of national crime statistics relied on earlier sediments of state activity, unrelated to research. Roughly, three ideal typical stages can be observed: the emergence of the ‘returns’ vehicle in administrative monarchy (c. 1730–80), the emergence of the *Kriminaltabellen* tradition (c. 1780–1820s), and the game-changing event of 1827, France’s *Compte général*.

## From vehicle to content

The birth of first criminology in 1827 can be seen as an amalgamation of two basic factors: the *vehicle* and the *content*. The vehicle was the bureaucratic capability of the central state to order and instruct data collection. Orders flowed from the state by means of circulars, and data flowed back along the same route from the regions to the centre. This vehicle was born long before 1827. Criminology was born when the pioneering data creators of the 1820s *harnessed this vehicle by entering research-enabling content into it*. The content, as a set of social science variables, was derived from Enlightenment thought on crime and the civilization theoretical debates. In what follows, I first look at the vehicle, that is, tabular statements on crime during the pre-statistical era before 1827.

### The vehicle

In France, the central state had a long history of criminal justice data collection. The criminal code of 1670 included a stipulation for data collection. This data order became one of the least respected articles of the code, as commented on by the legal scholar Serpillon (Leromain 2017: 204–5). It took fifty years before a serious attempt to remedy the situation was undertaken. Launched in 1733 by the Chancellor Henri-François d'Aguesseau (1668–1751), a standing 'state of serious crime inquest' was launched. It operated continuously from 1733 to 1790, creating a remarkable archival dataset (Leromain 2015 and 2017). The target of this standing inquest was to produce statements on serious crimes, '*états des crimes dignes de mort ou de peines afflictives*'. D'Aguesseau motivated the new system by claiming that serious crimes were not always prosecuted properly. He also suggested that lack of efficient enforcement could increase crime. The idea linking detection risk and criminal behaviour thus emerged in bureaucratic planning of administrative monarchy prior to being discussed by the *philosophes* such as Beccaria. A standing inquest could be used to yield a full view of the criminal justice system and to enforce a unified response to crime (cf. Leromain 2017: 41–9, 64–5).

The serious crime inquest was based on orders sent from the centre via the regional state administrations to the grassroots level of *law in action*. The orders flowed from the centre to the grassroots level, and data flowed back along the same route, almost like tributaries of a giant river system.

The tables sent from the regions were thus ‘returns’ to the centre. The central administration was interested in controlling the duration of criminal processes, especially as delays involved costs to the Crown. This resulted in reprimands sent upstream in the data flow. While the central bureaucracy was worried about the cost of the upkeep of detainees, the feedback also resembled legal oversight on excessive pre-trial detention times or arbitrary detention (see, for example, pp. 241–69). The administrative monarchy of eighteenth-century France was not as arbitrary as depicted by some of its critics.

The d’Aguesseau serious crime inquest involved innovations in data collection. From the 1750s, under orders from Guillaume de Lamoignon, tabular forms were used to facilitate and standardize data collection (pp. 323–4; see also Leromain 2015). The data sheets had variable names for each column, but these were filled in with textual information, including the name of the offender (accused). Thus, somewhat uncannily, the returns look more like modern individual-level register data than aggregated numerical statistics. Yet the practice of ‘returns’ created the groundwork for the later crime statistics designed to enable research.

## The *Kriminaltabellen* stage

The returns system created a data flow from the field to the centre. What did the centre do with this data? In the eighteenth-century, serious-crime inquest, the data was not used to compile statistics of crime (Leromain 2017: 611). Yet the idea of producing tables ‘mirroring’ realities emerged early, and earlier than 1827.

The French Revolution ended the serious crime inquest. However, it did not take long before similar attempts of centre-directed data collection were resumed. The Directory and the Imperial administration ordered departmental statistical overviews, some of which contained crime statistics of the region (Tixhon 1999: 967–8). For instance, in the department of Deux-Sèvres, the prefect Claude-François-Étienne Dupin published crime statistics for the year 9, overlapping with years 1800–1 in conventional terms (Dupin, É 1803: 221–3). He died in 1828 and may have witnessed how his relative, Charles, made inroads in the crime statistics field in 1826–7.

The collection of central statistics also moved on. Orders to collect crime data were reissued in 1801. At least for the years 1803–7 and 1811–1825, data were received by the authorities (Perrot 1977: 125–6). The vehicle of

data collection operating between the centre and the regions gradually evolved into published crime tables. In the Grand Duchy of Baden, such tables were published from 1808 (Moses 2006). The *Kriminaltabellen* aimed at '*Geschäftskontrolle*', that is, 'business control' of the courts, meaning the description and control of the everyday operation of the criminal justice system. They were not created to capture the trends or patterns of criminal behaviour outside the courts. Nor did they claim to solve theoretical questions of crime causation or provide data for independent scholars who might start analysing crime.

Despite this, there seems to be an internal logic from pure 'business control' to an indicator mode based on the isomorphism assumption (the idea that administrative statistics correspond to behavioural realities in some respects). The mere fact that the centre asks about crime case data seems to invite a realistic-external reading. In the French serious crimes inquest of the eighteenth century, some local administrators pointed out that underreporting reflected fear: people did not report because they feared retaliation (Leromain 2017: 282–4). Underreporting by the local judges was also suspected, for instance to avoid the cost of prosecution. Therefore, some of the serious crimes remained hidden from the data collection system. Several solutions to the problem were suggested, such as fact-finding missions to local jurisdictions and added reliance on clerics as data providers. It was believed that no crime could occur in a parish without it becoming known to the local priest (pp. 305–9).

In Baden, the published trends and annual shifts caused ducal administrators to offer external explanations regarding the observed fluctuations in the number of crimes. The same applies to earlier French crime tables. Thus, the essence of the paradigm shift from the 'state of serious crime' and crime tables tradition to modern criminological analysis, symbolized by the year 1827, connects to the notion that the statistics actually capture behavioural phenomena beyond court activity. The idea of isomorphism between statistics of recorded crimes and the external behavioural aspects of crime was the central aspect in the emergence of data-based criminology. The shift from *Geschäftskontrolle* to criminology was to some extent immanent in the criminal tables concept because the interpreters were driven to refer to external realities when they saw changes in the volume of processed crimes. Of course, changes in law were in some ways 'external', but the main prize was to capture patterns of behaviour. The claim of isomorphism referred to multiple levels, not only the much-discussed difference between recorded and hidden crimes (see Chapter 10).

The key distinction between the crime tables phase and data criminology was the planned and research programme-based insertion of theoretical content to the ‘returns vehicle’ instrument inherited from the administrative monarchy of the pre-revolutionary era. The vehicle of data flow was there, and the new generation of scholars interested in crime and criminal justice inserted Enlightenment theories into it. They saw a possibility to test the vague theories by using the instrument created during the monarchy. They used administrative statistics but presumed that this captured something more than the workings of formal control.

## Montyon

The d’Aguesseau inquest collected data for the centre, but the centre did not use it to publish nationally aggregated descriptive statistics of recorded crime. Yet the idea of doing so was embedded in the instrument. In this regard, the work of Jean Baptiste de Montyon (1733–1820) needs to be addressed. Based on crimes processed by the Parliament of Paris in 1775–86, he wrote a report titled *Observations sur la moralité en France* (Lecuir 1974). When the report was written is not known exactly, but it was before the Revolution when Montyon had to leave France in haste. The new aspect was that he used the data to produce new knowledge on crime. In the report, he disaggregated crime data by sex, age, place of offence, crime type, prosecution outcome, and sentence (Lecuir 1974: 446; see also Zauberman & Robert 2011: 2–3).

Montyon worked in the watershed between the ‘judicial review’ and ‘isomorphic data asset’ vectors. As a frequent patron of Parisian salons, he must have been well versed in cutting-edge Enlightenment thought; his nephew was Beccaria’s Parisian letterbox (Lecuir 1974: 451). A core aspect of the critique was the prevalence of those who were falsely convicted by the courts (p. 450). As a lawyer, Montyon was active in helping those who were unjustly accused. The creation of judicial statistics following the flow of prosecution, sentence, and acquittal may have been a means of controlling the judges in this respect.

Lecuir (p. 447) suggests that Montyon may have been inspired by writing competitions held by local French academies. For instance, in 1780, the Academy of Chalons-sur-Marne issued a competition on the topic ‘What kind of less severe penal laws would be effective in containing and repressing crime through prompt and exemplary punishments, while at the

same time protecting the honour and liberty of the citizens?’ (Lecuir 1974). If this were the case, a specific moral–political platform of Enlightenment thinkers influenced the emergence of crime statistics. This does not mean that the statistics were ‘wrong’ or that they ‘invented crime’. Politico-moral agendas can motivate the creation of data collection instruments that are, once used, detached from the hold of the original moral motivations. Even if moral quests produce measurement instruments, the data outcomes are beyond the control of the original developers (Kivivuori 2011). Objectivity of study was also an independent goal for the creators of crime statistics such as Montyon. He was following in the footsteps of natural science; the rational spirit aimed at description, not moral judgements. Stressing rigour of analysis, quantitative data, and the goal of generalization, Montyon paved the way for the application of exact methods to social phenomena (Lecuir 1974: 451–3). There is a kernel of truth in the notion that sociology was born out of concern for crime and excessive punishments (Perrot 1977).

## Guerry de Champneuf

How exactly the first modern national crime statistical yearbook was created is not clear. The most likely attribution is that the work was initiated by and developed under the leadership of Jacques Guerry de Champneuf (1788–1852), a civil servant in the Ministry of Justice (Yvernès 1887: 35; Gandon 1971: 274). He served under the Minister of Justice Count Peyronnet in the Villèle administration. Who was he and what motivated him to lead the creation of the first modern crime statistic?<sup>1</sup>

Born in 1788 in Rouzede, department of Charente, Champneuf<sup>2</sup> studied law at the University of Poitiers (Gandon 1971: 260). Exempted from military service due to problems of sight, the drafting commission described him as taller (1.71 m) than average, brown hair, long nose, chin, and face, and a large scar on the left hand (p. 261). During the turmoil of regime change in 1814–15, he seems to have thought that equality before law was

<sup>1</sup> Renouard (1828) claims that the idea of national crime statistics originated from the previous government when De Serre served as Minister of Justice (1818–21). Because the drift from the returns stage via the crime tables stage was gradual, it is possible that the idea matured as a process in administrative circles.

<sup>2</sup> For brevity, I will use occasionally ‘Champneuf’ to designate Guerry de Champneuf. Champneuf’s biographical information is adapted from Auber (1852) and Gandon (1971). I am using the prefix ‘de’ in his name because the press sources did so in the 1820s. During the July Monarchy (from 1830), he appears to have abandoned the prefix.

the true base of government legitimacy (p. 262), consistent with his later defence of the rule of law (Guerry-Champneuf 1832). Before being called to Paris, he served as prosecutor in Poitiers (Guerry 1864: III). His obituarist-biographer Auber (1852) depicted his life in the traditional format used in the lives of the saints: hardships during youth, when he was schooled by immoral, married former priests whose secular doctrines the young Jacques resisted through willpower (Auber 1852).

In his early career, Champneuf became an enthusiast of free popular education. In 1815, he established a school without tuition fees for twelve children. His motive was to ‘secure the good principles and good *mœurs* whose absence, amongst the poor classes worthy of our attention, is only attributable to lack of education’ (Guerry-Champneuf 1817; Auber 1852: 13; Gandon 1971: 265). Long before his great crime data project (the *Compte*), he thus supported the lack-of-education theory of crime, or its religious version, which saw religious education as the necessary pillar of morality. In his early popular education experiments, he advocated ‘mutual teaching’, where more advanced youths taught younger pupils, a system known as the ‘Lancastrian system’ after the English pedagogue Joseph Lancaster. Champneuf would later advocate the competing ‘simultaneous’ mode of teaching. Yet he remained consistent in the belief that education needed moral–religious content to be effective. But could the effects be measured so well as to settle the matter for good?

Champneuf was nominated the chief of the criminal matters and pardons directorate at the Ministry of Justice in August 1824, at the age of 35. There he started the work towards national crime statistics. He probably made his first experiments of collecting statistics during his service as prosecutor in Poitiers in the early 1820s (Vingtrinier 1846: 6; Guerry 1864: III). Having been hired by the Ministry of Justice, he recruited Jean Arondeau (1803–63), a relative, to the team (Yvernès 1887; Perrot 1977; 2001). The planning stage of the new instrument included meticulous canvassing of existing criminal justice statistics in various parts of Europe. Guerry claims that Champneuf paid the costs of this vast correspondence from his own pocket, mentioning the sum of 5,000 francs (Guerry 1864: III).

Sources concur that Champneuf was the mastermind behind the planning of the *Compte*. Regarding his motives, the picture is less clear. Different observers emphasize different goals. André-Michel Guerry, a member of the original team, provided an interesting narrative almost forty years later (Guerry 1864: III). He depicts Champneuf as driven by an urge to create a new kind of state-funded social science asset. Thus, when Champneuf

proposed the grand plan to the minister Peyronnet, he justified the costs involved by discussing very pragmatic goals, such as reducing the costs of justice, the need to speed up legal processes, and legal overview. The statistics would help to justify the budget of the ministry to the Chamber of Deputies. However, these arguments camouflaged Champneuf's other goal—to create a new kind of data asset for the 'philosophical study of man' and for social science. Guerry notes that roughly half of the *Compte's* content was motivated by curiosity-driven scientific goals (p. III). Guerry's narrative is interesting as it shows that research funding is very central in directing research (Savelsberg et al 2004; Savelsberg & Flood 2004).

The Catholic historian Auber describes a somewhat different motivational context for the creation of modern crime statistics. In his view, Champneuf had four goals: (1) to balance claims suggesting that the present is better than the past; (2) to prove the need for religious education; (3) to provide data for the study of new penitentiary systems; and (4) to generally contribute to the data basis of government (Auber 1852: 21). The last two are consistent with Guerry (1864), while the first two are not. If Auber can be trusted, Champneuf may have 'wanted' crime statistics to show that secular education increases crime, or maybe his views changed during the July Monarchy. During that period, his defence of religious education appears to have become stronger. He linked high English crime rates, as revealed by crime statistics, to secular education (Guerry de Champneuf 1840). These tones do not necessarily negate the thesis that the new instrument of statistics was, among other motives, developed to test the effects of education, a lifelong interest for Guerry de Champneuf.

The presiding minister Peyronnet did not take personal credit for creating the new national monument. Instead, he arranged for Champneuf to meet King Charles X in recognition of his services (Auber 1852: 22). Champneuf was also recognized by scholars as a key contributor, rather than only an administrative chief leading the team. In 1830, he became one of the members of the first board of a new statistical society. The group included several scholars sharing a research interest in crime statistics, such as Charles Dupin, Adriano Balbi, Adolphe Quetelet, and Dr Julius from Germany (*Gazette de France* 24 March 1830).

As a person, Guerry de Champneuf has been described as a timid, shy child (Auber 1852). The loss of his mother at the age of six may have been traumatic but was hardly abnormal in 1795. His connection to the maternal family line (Arondeau) became stronger at that point. *Athenaeum*, the London-based literary magazine, described him as follows: 'M. Guerry



de Champneuf, though severe and unpopular, is undoubtedly a man of superior talent, and he did good service in his department by the extreme regularity and order which he introduced into it, and more especially by his statistical tables of the administration of criminal justice. These tables form a complete and admirable model for judicial statistics' (Anon 1833: 537.) Forty years after the events, André-Michel Guerry remembered Champneuf as a man who combined strict principles with a capability for moderation (Guerry 1864: III).

Champneuf was dismissed from the Ministry of Justice after the 1830 Revolution which ended the Bourbon regime. From then on, the 'de' prefix is missing from his name as cited in the daily press. After the failed 1832 rebellion, made iconic by Hugo's *Les Misérables*, the French government declared martial law in select departments. In his book *De l'état de siège*, Champneuf rose to defend the legal safeguards against dictatorial emergency powers (Guerry de Champneuf 1832). He underscored the fundamental rights of people to be tried in regular courts by permanent judges, with publicity and the right of defence. He condemned extraordinary tribunals and retroactive jurisdiction. In his view, particularly during times of trouble, legal safeguards should be especially upheld.

Furthermore, Champneuf observed that suspension of rights was often justified by reference to 'brigands' and 'criminals', as political power wanted to enforce harsh punishments beyond humanity and moderation. He asked his readers to remember the worst excesses of the Grand Revolution which justified terror with reference to alleged crimes committed by 'enemies of the people'. Thus, in his view, the 1832 conservative backlash shared with Robespierre an intent to govern through crime, to suspend legal safeguards in the name of political power. It is tempting to link Champneuf's 1832 views to his earlier work on judicial statistics. After all, the *Compte* was a means of making the regular rules-based order transparent and visible. While Quetelet would underscore the 'shocking' stability of crime, that could also be seen as reflecting the predictability of law in action.

Different obituarists concur that Champneuf compromised his health with excessive work (Auber 1852; de Curzon 1852). An obituary published in the journal *L'Ami de la religion et la Roi* (de Curzon 1852) described him as a religious man with genuine convictions. It also stressed his modesty; as a government employee, Champneuf tended to avoid the limelight. Given the anonymous character of the *Compte*, his *chef-d'oeuvre*, this description has an authentic feel. On reading him behind the tables and figures of the *Compte*, it appears plausible that he genuinely wanted to 'let the facts

decide' in criminal justice, envisioning and working for a future where policies would be evidence-based.

Champneuf did not create the *Compte* alone. It was created by a small group of administrative intellectuals at the Ministry of Justice. At least two important names are known: Jean Arondeau and André-Michel Guerry. Interestingly, Champneuf seems to have hired from his prior social networks. Arondeau was Champneuf's first cousin, the son of the maternal uncle to whom he became close after the death of his mother in 1795 (Auber 1852: 5; Yvernès 1887: 35; see also the German source Anon 1848: 193). The 1858 *Dictionnaire Universel des Contemporains* (1858: 67) names Arondeau as the creator or publisher of the *Compte*. Guerry was hired for the Ministry of Justice statistics team in 1827, with responsibility for overseeing the data compilation for Paris (Friendly 2022: 3). Born and schooled in Tours, he had studied law at the University of Poitiers. Champneuf, Arondeau, and Guerry thus all shared links to the region of Poitou-Charentes.

## Research programme

The *Compte* was based on a research programme and went beyond giving total national figures for accused and condemned people. From its tabular structure, the research programme can be reverse engineered, because the tables contained extrajudicial variables. In addition, the ministerial orders show the research aims.

The first annual volume of the *Compte général de l'administration de la justice criminelle en France* was addressed to the king and signed on 11 February 1827, by the keeper of the seals (Minister of Justice), Pierre-Denis de Peyronnet. A conservative royalist, Peyronnet was part of the inner core cabinet of the Villèle administration, the longest serving French cabinet in the modern period (1822–8). This stability was accompanied by intense strife between liberals and conservatives, culminating in the election of 1827. The government wanted to enforce conservative reforms of inheritance laws and limit the freedom of the press. For instance, it nominated a monsignor to head public instruction, an attempt to re-sacralize the educational system (Spitzer 1987: 47). This shows how the conflict between secular and religious education was high on the public agenda, a conflict that would shape the rise of the first data-driven criminology.

In the eyes of contemporary liberals, the justice minister Peyronnet was the least popular member of the cabinet. This was linked to his role as the

minister responsible for the press laws (de Waresquiel & Yvert 1996: 449). Later historians often sided with the liberal interpretation. One historian described the press laws as incarnations of the Restoration regime's 'suicidal cultural politique' (Spitzer 1987: 256). Another historian commented that the legislative achievements of the Villèle administration were 'almost null' (de Waresquiel & Yvert 1996: 401–2). A third historian wrote about the 'dark days' of France under the yoke of the conservative Villèle (Fox 2012: 34).

The 1830 Revolution sealed the poor reputation of the Villèle administration. Does this unfavourable reputation reflect the fact that historians instinctively side with the liberals? Perhaps. Yet recent historical scholarship has underscored the innovativeness of the regime's political culture (Greenfield 2022: 68), for instance in the consolidation of the fiscal-military state and adapting to the new European security order (de Graaf 2020). To these accomplishments we must add the creation of the *Compte*, which triggered the emergence of data-based criminology. The statistical device later celebrated by Guerry as a 'national monument' served as the model for other countries in making the state monopoly of violence visible. Data-driven social science can be seen as one of the Restoration-period innovations, consistent with the new security order (de Graaf 2020).

## Research aims

The stated aims of the *Compte* included the old aims of the 'returns' and 'crime tables' tradition. Prominent among these was the control and standardization of court activity. Especially the lowest level of reactions to misdemeanours by *tribunaux de simple police* had shown 'grave abuses' of power, violating the laws. The crime statistics would help to recognize this evil and remedy it (Ortolan & Ledeau 1831: 286–7). The national crime statistics were thus also a means of controlling the controllers, in the tradition of administrative monarchy (Moses 2006; Leromain 2015 and 2017). There was a power-knowledge nexus involved in the creation of national crime statistics. State consolidation and standardization were creating the foundations of data criminology. This does not mean that the data is 'wrong' or that crime as counted in the administrative statistics is 'constructed' by power practices or biases. By controlling itself, state-based

statistics standardized data about behaviours previously outside state purview.

From the beginning, the project of creating a paradigm for modern crime statistics was also a research programme. It was thus not only a 'bookkeeping' tool in the *Kriminaltabellen* tradition but also designed for research purposes. The immediate research goals of creating the new *assemblage instrument*, with central orders issued to local courts, can be observed in the ministerial instructions dated 5 January 1826. The instructions are addressed to local court data compilers. They show a highly developed understanding of the strategic research goals that could be fulfilled using the new instrument (Ortolan & Ledeau 1831: 275–90).

The ministry defined the intended observation units: the *Compte* would count both offences and offenders, with the purpose of comparing how these related (Ortolan & Ledeau 1831: 280). The statistics would also cover all three levels of penal jurisdiction from minor infractions to serious crimes, covering three primary court levels. Some offences had been redefined as infractions in 1824, and the *Compte* aimed at exploring how many offenders had benefited from the increasing leniency (*adoucisement*) of criminal law (p. 280). The 'correctionalization' of criminal law was not conceptualized primarily as a validity threat to the new instrument; rather, it was one of its intended research targets. Related to this, the ministry wanted to monitor how juries influenced the outcomes of prosecutions (p. 289). The expectation was that juries were prone to avoid severe sentencing by ignoring aggravating circumstances. This was a recurring theme of criminal justice debates in the 1820s, with deep roots in the eighteenth-century discussions on the subject. The local elites doing jury service were regarded as potentially 'soft on crime'. Overall, there are few signs of 'fear of crime' in the *Compte* working group or in the first-generation criminologists who started to use the data.

The ministry wanted to monitor the costs of criminal justice (pp. 281–2). They were interested in the swiftness (celerity) of justice, reminding local courts that sentencing should be prompt, and asking them to report the time elapsing from offence to sentencing. They also wanted information about how many offenders had remained unknown, and how many citizen complaints had led to no action by the authorities (pp. 284–6). The *Compte* team was aware of the limitations of administrative crime statistics. They knew about the existence of hidden crime.

One of the most urgent data needs pertained to recidivism. The ministerial instruction related this to the need to study the effects of punishments. They wanted to know how punishments influence those who are condemned (p. 288). The ministry urged local control agents to meticulously record prior convictions (at any level) of the accused to enable such research. The instructions on offender variables show a consistent stress on the validity of data. For most of them, the ministry recommended independent data from administrative sources rather than relying on self-reports of the offender.

In later instructions (1828), the ministry gave new orders focusing on offender data. Key discussed variables included profession, residence, age, civil status, and prior crimes. The selection of variables indicates a risk factor approach. Of particular importance was the educational level of the accused. ‘I place high emphasis on knowing the intellectual state of every accused, and I rely on your zeal to record it as exactly as possible’, the order stated. The text then went on to describe a four-category taxonomy of educational levels, suggesting that over the next years this information could be of the highest importance (Ortolan & Ledeau 1831: 293).

The stress on education is consistent with the intellectual background of the main *Compte* architect, Champneuf, who had been a popular education enthusiast from the mid-1810s, before entering the ministry. The education variable connects directly to the core meta-political question of the age, regarding how religion vs secular education impacts people’s morality. The old religious hypothesis suggested that morality requires religion, but this argument could be phrased non-religiously as well, as Rousseau had done in 1750, claiming that civilization corrupts morality and leads to increasing crime. Dupin’s choropleth map of 1826 had opened a new prospect of solving the question empirically, by linking educational and crime statistics (see Chapter 3). Now the ministry was aiming to secure the systematic collection of the required data.

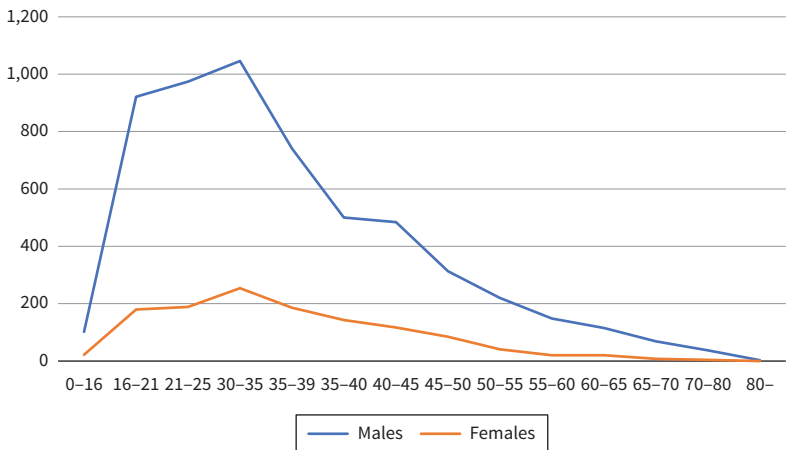
The *Compte* was thus a theory-laden research instrument for social science-based crime data. It was a tool creating a knowledge basis for the development of criminal policy. There was a strong Enlightenment component in this (Perrot 2001: 168). Yet the picture and motives may be more complex. The way Champneuf saw the role of religion in education and crime prevention may have played a role (see also Auber 1852). It is possible that different people had different expectations regarding what the *Compte* would say about the crucial links between explanatory variables like affluence, education, and religion.

## Emerging social science

The aims of the *Compte* can be studied from the ministerial instructions and from the interpretive part of the published reports. In both, we detect an explicit aim of building the data base for research. But what if we only had the tables, table legends, and figures as mute ruins without text-based meaning by those who created them? Even in that case, the aims of the data could be reverse engineered from the tabular structure of the *Compte*. The tabular structure shows a division by the three court types: criminal courts, correctional tribunals, and police courts; the seriousness of the suspected crime (the penal value) decided the court where it would be processed (see Aubusson de Cavarlay 1993). But in addition to this, there were two more general principles at work: aggregation and disaggregation.

*Aggregation* was used to combine specific legal crime categories with more general and behavioural analytic categories. The ministry research team saw statistics as an enumeration of the primary facts, while the broader and analytically useful categories were a task for the social science (*Compte général* 1836: vii). The most important aggregation was the distinction between property crimes and crimes against persons (violence), with some tricky classification decisions involved. Yet this dichotomy abstracts from the highly variable legal primary categories in the penal law as applied by the courts.

*Disaggregation* is an immanent feature of the table as an analytic device, as it is not possible to create a tabular presentation without some disaggregation. Therefore, also in the *Compte*, disaggregation was a fundamental aspect of the report. The report of 1826 was published soon after the first report, on 6 June 1827. In this report, we see an extended introduction of extra-legal variables to further disaggregate crime. For instance, Table VIII (*Compte général* 1827b: 14) divided the accused by gender and age. Figure 4.1 shows the distributions in graphical form. Note that this figure was not published in the *Compte*, but it is given here to illustrate the content of the original table. The publication directly harboured the ‘age–crime curve’ (Ulmer & Steffensmeier 2014). We see age distributions peaking in age group 30–5, and a predominance of males (82 per cent) over females (18 per cent). Gender and age distributions are both heavily skewed. Was this something that reflected the activity of the courts or could these biosocial risk differentials reflect how crime risk itself spread over a population? The first-generation criminologists believed that there could be pattern



**Figure 4.1** The age and gender distribution of persons accused in criminal courts, France 1826 (*Compte général* 1827b)

isomorphism between the data and the reality of crime (see the section ‘Most remarkable uniformity’ in Chapter 10 for extended discussion).

Additional risk factor variables were integrated. The civil status of the accused, and their birth origin, were soon recorded. Thus, we are able to know that in 1828, 55 per cent of criminal offenders were single and 3 per cent were born outside France. The number of those who were foreign-born was relatively higher in the Paris area, and in the border and harbour areas (*Compte général* 1829: 24–7). Education was created as a statistical variable in the *Compte* in an early stage, reflecting the discussions and optimism about the moral consequences of progress and education. The classification had four categories: those unable to read and write (60 per cent), those able to read or write imperfectly (27 per cent), those able to read and write (11 per cent), and those with superior education (2 per cent). The percentages show the distribution of these categories over all accused persons, as published in 1828 (*Compte général* 1829). Such percentages did not reveal differences in population risk, as they were not counted as rates per corresponding subsection of the population. In 1853, 55 per cent of the French were classified as literate (Gillis 1994: 396).

The timing of the crime during the year was yet another social scientific, extra-legal variable. In which month the offence was committed was not legally relevant for the court but could have been relevant for the explanation and prevention of crime. Likewise, the explanatory interest is seen in

the table where homicides were disaggregated according to the motives that propelled the offender to commit the crime. The systematic disaggregation of homicide by motive was an innovation. This approach was surpassed perhaps only in Marvin Wolfgang's *Patterns of Criminal Homicide* (1958) over a century later and is still pursued by criminologists in international comparisons (see, for instance, Liem et al 2013; Kivivuori et al 2022).

Recidivism tables were also included, a variable that could be legally relevant whilst also indicating behavioural continuities among offenders. The high recidivism rates were not linked to labelling mechanisms (see Chapter 2). Possibly the labelling interpretation was considered too sentimental for hardcore statistics publication, leaving the theme for literary genres.

The tenth anniversary report, published in 1836 and presenting data for the years 1825–34, underscored the importance of the multiple social scientific variables enabling the disaggregation of the offender (accused) population. By the end of the first decade of observation, these included key variables such as gender, age, birthplace, place of residence, profession, degree of education, and civil status. The disaggregation variables were extra-judicial. For example, gender, birthplace, living area, education, and so on, were not supposed to influence the penal reaction. Rather, the non-judicial variables of the national crime statistics revealed the influence of external circumstances (*circonstances extérieures*) on humans in their social existence (*Compte général* 1836: iv, viii). By incorporating such variables, the new data instrument constituted social science drawing on a state-funded big data project.

*Adjusting for population.* In the *Compte*, the reporting of the findings placed a relatively heavy emphasis on departmental crime rates.<sup>3</sup> Crime rates were typically calculated as the number of people per crime/accusation. This means that high figures stood for low crime risk (many people 'producing' one crime), and low figures for high crime risk (few people 'producing' one crime). This calculation is counterintuitive by later standards but is nevertheless a means of adjusting for population. The comparative research goal was built into the report. It resembles an attempt for international comparison in the modern world; it was revolutionary to have standard figures for sub-units of a large nation. Figures depicting the proportion of accused who were acquitted were given as percentages (*Compte*

<sup>3</sup> In the first report, the correctional offences of the Paris region were not included due to the large mass of crimes; they were integrated later (*Compte général* 1827a: 109).



*général* 1827a: 52). At the same time, lack of adequate base population information prevented similar comparative risk analyses on most dimensions of disaggregation (see, for instance, *Compte général* 1836: x–xi).

The possibility of disaggregation was important for the understanding of crime differentials even in the absence of base population figures. Thus, the crime rate in the Paris region was much lower if those born elsewhere or in foreign countries were excluded from the crime count. Similarly, the département with the lowest crime rates exported its offenders to other parts of the country (*Compte général* 1836: ix). Data-driven social science criminology was thus showing that differences in simple crime rates did not only reflect differences in individual-level criminal motivation. Rather, selection of individuals to places needed to be factored in.

## A space allowing civilized disagreement

The research plan behind the *Compte* contained detailed instructions for data collection. Thus, the new data instrument was based on a research programme, in contrast to the prior *Kriminaltabellen* tradition. Some of the research questions were specific, such as ascertaining the effects of legal changes. In addition to this, the published volumes of the *Compte* contained programmatic statements about themselves: the purpose of which was to replace armchair philosophy with facts.

## Against vague theories and systems

In 1825, the civilization theorist Charles Dunoyer (1786–1862) called for a method based on observation of facts without the interference of political wishes. He formulated the notion of replication, writing about the need for being so transparent that it would be possible for others to redo his analysis (Dunoyer 1825: 19). Distancing from moral concepts, he underscored the difference between observed social realities and moral wishes (p. 21). He saw the facts-based approach as a means of avoiding social discord and conflicts, because facts were beyond the wishes of men. To highlight the role of facts as arbiters of truth, Dunoyer recounted an anecdote showing the power of natural science. He had witnessed a heated quarrel about whether gas storages needed for modern street lightning—a crime prevention measure—were secure. The opponents claimed that the prospect of a

gas explosion was itself a threat. The quarrel ended when a chemist calmly explained that gas storages were safe, alleviating the fears of the critics (pp. 25–6).

The need to solve problems without ideological commitments was heavily in the air. Another civilization theorist, Charles Comte (1782–1837), represented in his treatise on legislation (Comte 1826) a similar ‘logical empiricism’. He wrote that he was only interested in revealing the ‘nature of things’, not issuing moral or political guidance (pp. xii, 43). He aimed at applying the methods of natural sciences to the study of law and human behaviour (pp. 2, 29). Data-based researchers often encounter findings which are surprising and contrary to their expectations, ideas, and hopes—‘*contraires à nos idées, nos intérêts ou à nos espérances*’. Comte was thus pondering the dangers of what modern social psychology calls confirmation bias: people are prone to look for evidence supporting their prior beliefs. Therefore, the scientific method forced researchers to change their views if required by the evidence. He even stated that when encountering unexpected findings, researchers should first replicate their empirical observation, and if the facts remain, they should change their views (p. 13). He was critical towards philosophers and *jurisconsultes* who first invented a ‘system’ and then sought supporting evidence; they rejected empirical facts if they were not consistent with their hypotheses (pp. 7–12).

The proto-criminologist inventor of the shaded map, Charles Dupin, was yet another civilization theorist who saw in quantitative analysis a solution to social problems. He regarded the coldness of numbers as a means of ending unnecessary political strife. Contrasting himself with ‘system makers’, he underscored the impartiality of numbers-based statistics (Karila-Cohen 2009: 136). Like him, many key influencers in the 1820s generation were critical of ideological biases and unconscious efforts to find evidence for one’s own preconceptions. This was new in comparison to the Enlightenment essay tradition of criminal policy. The project of research-driven criminal justice policy was open as regards findings; it was *ergebnisoffen*, as the Germans would say. For instance, the existence and direction of the link between civilization and education would be solved by data-based analysis, not by a priori reasoning. The thrill was that the results were not known in advance. Thus, the new instrument would civilize research itself by serving as the arbiter of truth. The new instrument served in the same role as the experiment served for the natural sciences in an earlier historical era likewise suffering from civic strife (Sapin & Schaffer 1985). It

was the mast to which researchers bound themselves to be able to see more. This act of discipline constituted criminology.

## Focusing on empirical solvability

The programmatic statements of the first *Compte* reflected this climate of opinion against theory and system. The purpose of national crime statistics was to support evidence-based criminal justice policy. ‘The exact observation of facts is one of the primary needs of our form of government’, stated the first report published in February 1827. The facts would enlighten decision makers and simplify the processes of deliberation. An anonymous author, possibly Champneuf, wrote that the progress of well-being and education could impact crime causation. But he then added that it was possible that the facts would *not* corroborate these ‘consoling theories’. Here we see the key aim of the new data: freedom from confirmation bias (*Compte général* 1827a: vi). The *Compte* would replace vague theories with observational data (p. x).

What were the vague or consoling theories? Probably the wide array of free-floating ideas about crime circulating in the eighteenth-century European discourse on crime (see Chapter 2). These theories were not based on systematic data. They relied on classical sources, traveller tales, and personal experiences. Yet they were familiar and widely circulated, referring to poverty, labelling, lack of education, and laxity of deterrence as causes of crime. The reference to vague and consoling theories could be welcome for a conservative audience, as most available theories were linked to Enlightenment thinkers. Among the first generation of criminologists, there probably was a preponderance of those who were liberally oriented. However, it is not clear that Champneuf himself could be counted among them in any simple sense. He combined advocacy of religiously oriented popular education with rule-of-law advocacy. But the point is that they foresaw an era where such ‘standpoints’ did not matter. The new data project was intended to transfer the responsibility of solving social issues from people to reality, without any guarantees that the solutions would favour some political philosophy or the other. Hardcore ‘sticking to facts’ policy could appeal to both conservatives and moderates.

When the authors of the *Compte* revisited their goals in the mid-1830s, they again underscored the application of natural scientific method to human affairs. The ten-year anniversary report noted that the application of

observation and induction had ‘contributed forcefully’ to the progress and authority of natural sciences. Now the rise of crime statistics had created the possibility for social research to follow this example; similar progress was now possible in the social sphere and in the study of legislation. The *Compte* even suggested the possibility of establishing observation-based laws, which would allow future predictions based on past developments (*Compte général* 1836: iii–iv).

The optimism of the ten-year anniversary edition was likely based on the research activities triggered by the *Compte* in the decade after its first appearance (see Chapter 5). The team behind the annual report was impressed by the patterned nature of reality. Certain patterns regarding the number of crimes, and their correlates, repeated themselves year after year, with only slow change over time. This, they argued, reflected the operation of general causes in the realm of human criminality. Chief among these were the social condition of people, as well as ideas and mores. Analogously, society could influence crime by influencing the general well-being, and moulding the ideas and habits of people (*Compte général* 1836: iv).

At this point, they were reading the figures based on isomorphism assumption. They also defended themselves against people who feared that crime stability led to more crime by supporting ‘fatalism’. The action of social causes was not *nécessaire* or *fatale*, since the freedom of humans could use the causal knowledge to block criminogenic influences and to improve the general welfare, and to facilitate the intellectual and moral development of the nation (*Compte général* 1836: iv). Causal knowledge was a means of fulfilling the aims of the criminal statistics creators: crime prevention and general welfare.

When the then general secretary of the Ministry of Justice, Charles Renouard (1794–1878), gave a talk to the Academy of Moral and Political Sciences in 1837, he underscored that when using statistics, one does not know in advance which results will emerge. The data collectors do not know in advance what states of affairs will be proven correct. ‘In statistics, one rarely knows the emerging findings to begin with . . . remaining neutral in between all systems is a guarantee of its veracity.’ Thus, the purpose was to secure reliability and neutrality with respect to theoretical expectations (Renouard 1837: clxxx). The new data corpus-based science was a programme that knowingly aimed to detach research from external influences. Much later, another administrative intellectual, Yvèrnes (1887), linked the goals of the *Compte* to the principles of Laplace, with the aim of extending natural scientific methods to inform criminal justice policy.

## Reception

The immediate reaction to the publication of the first truly modern crime statistical yearbook can be divided into two waves. First, there were press reactions in the spring of 1827, but not an intensive celebration or debate. This reflected the immediate political situation. The Villèle administration had recently launched a new law project, limiting the freedom of the press. Newspapers were focused on this development in the spring of 1827. Most of them hated the Villèle government and in particular its Minister of Justice, Peyronnet. The notorious press law, marketed as the ‘law of love’, was linked to his name.

## Governing through crime?

The liberal reception was influenced by the immediate political context, and suspicions of further power grabs by the conservatives. The critic of the *Journal des Debats* wrote that the *Compte* was the first useful work the government had accomplished during its five years (*Journal des Debats* 9 April 1827: 2). He went on to receive the data in a distinctly civilization theoretical frame. He observed how many of the crimes were motivated by monetary needs on one hand, and how many by revenge, jealousy, or other brutal agitation of the passions on the other. From this point, he went further than statistics by reflecting on the causes and related remedies of crime. ‘The passions and misery have a common remedy: that is, instruction which enlightens morals, makes mores gentler [*adoucit les mœurs*], and distracts bad propensities by work, and saves from hunger by its products’ (*Journal des Debats* 9 April 1827: 2). Education was for the people like a rebirth. Indeed, it would be a crime for a statesman not to promote the goal of education.

The critic noted that the *Compte* itself suggested that crime could be reduced by increasing education and affluence (*Compte général* 1827a: v–vi). He was, however, irritated by the suggestion that these ‘*consoling theories*’ might be refuted by the accumulation of further crime data. The critic did not see this as openness to possible empirical findings, but rather as an explicit *wish* to refute theories linking crime to low affluence and low education. He seemed to believe that if there was no empirical connection between poverty/education and crime, the government would start preventing crime by reducing affluence and instruction. Logically, this

did not follow from the *Compte's* aim of result-neutral and data-driven research. Rather, the critic's interpretation was influenced by the current political situation where the government was attacking freedom of the press by means of its controversial 'law of love', meaning censorship. There is also something very modern in this reception as the critic seemed to believe that welfare and education policies somehow require crime reduction effects in order to be justified; that in the absence of such crime effects, the welfare and education state would collapse.

In the eyes of the liberal critic, the spirit of the *Compte* was, like everything else the government had done, oppressive and cruel, an instrument of brutal force (*Journal des Debats* 9 April 1827: 3). The power-knowledge interpretation of crime statistics was thus born immediately in the first wave of reception, partially because of the political situation during the spring of 1827. On New Year's Eve 1826, the *Journal des Debats* had looked back at the policies of the conservative government, claiming that its attack against education had increased crime and made the streets unsafe (*Journal des Debats* 31 December 1826). The interpretive framework was taken from the civilization debate. The crime trend was inferred from policy.

The critic of the *La Quotidienne* (24 March 1827) claimed that English crime statistics were better than the new French edition. Many of his factual statements were sloppy, as indicated by the counter-critic of *Le Moniteur* (14 April 1827). The latter critic observed that it was a common parlance that crimes were horribly increasing, and people were romanticizing the 'good old days'. Crime statistics could correct such beliefs and pacify emotions. They were also a game changer because the present time would one day become the 'good old days'. Illusions were also created by the media reporting about horrendous crimes. But in the future, populists and romantics would no longer be able to make false claims about the past, because of the new crime statistics. Thus, the new statistical instrument was a point of discontinuity with the pre-statistical era, increasing the factuality of political discourse. In so thinking, the *Moniteur* critic pioneered the received view of many future generations of criminologists, seeing crime statistics as antidotes to emotional responses to crime.

Alphonse Taillandier (1827a),<sup>4</sup> in his review for the *Revue Encyclopédie*, started by stressing the importance of publishing administrative statistics, lamenting the restricted distribution of the report, which was not made

<sup>4</sup> Probably Alphonse-Honoré Taillandier (1797–1867), a lawyer and (later) member of parliament, who published in 1824 a comparison of French and English penal laws.

fully accessible for the reading public (pp. 360–1). He used the findings to critique the criminal justice system, interpreting the figures from a liberal perspective. He compared French crime figures to those in England (pp. 370–1), finding them close to one another when adjusted for population. This finding was unexpected because he believed the English severity would be linked to more crimes. Yet, while acknowledging that the number of criminals was still too high and caused harm to citizens, he saw a crime drop in France since the days of the *ancien régime*. Thus, Taillandier did not read the data in the ‘fear of crime’ context. He concluded that ‘harshness of criminal law is not the best way to make people better, nor to ensure the just repression of crimes’ (pp. 373–4). Upon receiving the figures for 1826, he boldly commented on the trend by noting an increase of crime (Taillandier 1827b: 735). Later Arondeau (1847) would consider a twenty-year time series as too short to measure the mores of a nation.

A conservative reviewer described the asset as one of the ‘glorious monuments’ of the reign of Charles X (*Gazette de France* 10 June 1827). This author noted an increase in crimes from the previous year and wondered about the unrecorded cases. He also noted the age–crime curve and suggested that the high crime risk of youth reflected uncontrolled natural passions provoked by the current political (liberal) climate, which taught youths ‘hatred of authority’ and ‘rage against the moral and social barriers’. He condemned lenient penal laws. Basically, the author saw in crime statistics proof that crime is caused by liberality and penal moderation. After these notes, he moved to defend the penal policies of the Minister of Justice Peyronnet, who aimed at ‘prompt repression,’ supporting preventive effects by celerity of the justice process.

## Constituting a research field

For contemporaries, the *Compte* represented an innovation in the analysis of crime. Soon after its publication, the philanthropist reformer Charles Lucas described it as the primary and most important work so far published in that topical domain, not only in France, but in the civilized world (Lucas 1827: xviii). Lucas saw the *Compte* as a massive confession of a nation, which dared to lay bare its crimes to all humanity. He explicitly compared the *Compte* to Rousseau’s *Confessions*; crime statistics did for a country what Rousseau had done for an individual. As such, it was the most precious document ever given to the legislator, giving a boost to

human civilization and philosophy (pp. xviii–xix). Later Arondeau himself considered the statistics as the *confession publique annuelle de la nation française* (Arondeau 1847: 898). The Genevan law professor and pioneer criminologist Pellegrino Rossi described the new instrument as a masterly work (*Meisterstück* in German translation, see Rossi 1829d: 343, and Chapter 8).

In 1833, André-Michel Guerry—a member of the *Compte* team—wrote that it was acknowledged by foreigners as a ‘national monument’ of France, imitated by all civilized nations of Europe and even by North Americans (Guerry 2002 [1833]: 6). Indeed, several European scholars wrote to Champneuf after the publication of the first issue in 1827, congratulating him and thanking him for the volumes he had sent. Thus, the German law professor Mittermaier wrote in August 1827 that ‘tables published in other countries do not merit the name of a *compte-rendu*’ (Gandon 1971: 276). Similar letters arrived from Geneva and Belgium. The Grand Duchy of Baden immediately made efforts to acquire copies of the *Compte*, to serve as models for its own reform of crime statistics. The Embassy of Baden in Paris was embarrassed at being ordered to ask for French crime statistics year after year, urging the home country to produce something similar for reciprocity (Moses 2006: 101). As a result, Baden’s modernized *Übersicht der Strafrechtspflege*, published in 1830, closely followed the French model (Moses 2006: 100–12). In the general tumult of enthusiasm, some commentators perceived oversights in the French paradigm of statistics. Thus, the German scholar Karl Salomo Zachariä noted a limitation: there was only offender-based data (the accused). The *Compte* did not count reported crimes whose offenders remained unknown to the authorities (Zachariä 1828: 609).

The French crime statistics were widely understood to be a game changer, a paradigm shift in the study of crime. The French knew that it was their national memorial, the first of its kind as an immaterial, data-based monument—an assemblage instrument merging administrative structures with Enlightenment knowledge goals. By 1829, Adriano Balbi, the Venetian cartographer, could write that the enlightened rulers of Europe had sensed the importance and utility of modelling their own crime statistics after the *Compte* (Balbi 1829: 260). The same year, Taillandier wrote that the *Compte* was a ‘service rendered to the cause of humanity’ (Gandon 1971: 277). This proud claim was renewed in the twenty-fifth anniversary report of 1850 (*Compte général* 1852: ii). Contemporaries saw the new instrument as a break with the past, enabling the birth of data-based criminology.



What was the ultimate purpose of the *Compte*? One aim was to justify the sums allocated to the criminal justice system in France (*Compte général* 1827a: x). Yet the *Compte* had another, possibly even more important, motive: to outsource and ‘crowdsource’ the study of crime and criminal justice. It was not intended only for the internal use of the ministry. It was addressed to those who liked to ‘meditate matters related to crime’ (p. x), thus constituting a field of research. The author of the first introduction stated that such people would seek in vain as good a data base elsewhere. The notions based on the new data instrument would be ‘clear and precise’, in contrast to the echo chamber of vague theories emerging from the long eighteenth century. He went on to describe the context of the report: ‘The exact knowledge of facts is one of the priorities of our form of government: it clarifies decisions; it makes decisions easier to make; and gives the decisions solid foundations by substituting the positive and reliable knowledge of experience for the vacuity of theories’ (p. x). It may be hard to express a policy-relevant empiricist social science research programme more succinctly. As testified by Guerry, one of the aims of the ministry team was to create the data foundations of social science (Guerry 1864).

France—its academies—had a long tradition of relying on external experts in the development of what today would be called public policy. Reliance on independent scholars was a necessity, as there was no modern state-operated and state-funded research administration. Often the outsourcing took the form of a *concours*, a competition for scholars (Caradonna 2012; Leromain 2017: 526–7). Rousseau’s *First Discourse* (1750) is the best-known example of a competition essay; it is telling that its topic was moral regulation. Later, the statistician Montyon may have been inspired to make inroads in crime statistics in the 1780s by the *concours* tradition (Lecuir 1974: 447). And Charles Lucas used the first *Compte* when publishing his essay response to the dual competition for the abolition of the death penalty issued simultaneously in Geneva and Paris (Renouard 1827). Given this tradition, Champneuf could reasonably expect that there would be scholars who would like to ‘meditate crime issues’, as expressed in the first report. Such persons quickly emerged, as several scholars eagerly seized the opportunity to study the patterns of crime.

# 5

## First criminology

### Introduction

The *Compte* was addressed to the king, and to scholars who liked to study crime and criminal justice-related matters, hopefully using the new quantitative data asset. These men, should they emerge, would be the first-generation data criminologists. And they did emerge. In this chapter, I explore how first criminologists such as Charles Lucas, Adolphe Quetelet, André-Michel Guerry, and others, used the data, and what kind of theoretical developments emerged from their analyses.

In their work, the civilization framework was combined with unprecedented means of testing it. The new data allowed the first data-based criminologists to empirically link crime to other phenomena, and to disagree amongst themselves, creating a field where the data would serve as the final arbiter of conflicts. This dynamic field led to a new kind of consolidation of theoretical assets, detached from moral blaming. The civilization framework diverged into a line focusing on how civilization increased crime through increasing *opportunities*, and another focusing on how civilization decreased crime by supporting *restraints* to criminal impulses. The former was found by disaggregating the outcome variable into property and violent crime. The latter reflected a differentiation in the predictor: *what* was learned seemed to matter after all.

This chapter will first introduce three key scholars whose work created data-driven criminology as an intellectual space. After that, the emerging theoretical approaches are examined. They are compared with the approaches criminologists use today: we see the shapes of opportunity and control theories emerging from patterns arising from the data. This descriptive comparison is not anachronistic, because it does not presuppose influence or causation.

## Charles Lucas

Charles Lucas (1803–89), the French lawyer and prison reformer, is best remembered as a campaigner against the death penalty (Normandeau 1970). His role was central in the creation of data-based criminology. In the spring of 1827, he was among the very first to discuss the *Compte*, or rather scoop parts of his forthcoming book, in *Gazette des Tribunaux* (9 June 1827). At that time, he was participating in two essay competitions aiming at the abolition of the death penalty. One of the *concours* was declared by Count Sellon in Geneva, the other by the Société de la morale chrétienne in Paris (Renouard 1827). He won both competitions. Based on his winning essay, he published in 1827 a work on the philosophy of punishment and preventive justice, titled *Du système pénal et du système répressif en général, de la peine de mort en particulier* (Lucas 1827).

This book was mostly philosophical and ethical, but it incorporates an extensive empirical part based on the *Compte*'s first two years of observation. It seems like an addition to an otherwise complete and different book. In the long introduction, Lucas writes that he is applying the methods of natural sciences to social matters. He mentions two writers who had inspired him to move in that direction: Charles Comte and Charles Dunoyer (Lucas 1827: VIII).<sup>1</sup> Both authors were inspired by Bentham's utilitarianism. But they were also civilization theorists, as discussed in Chapter 4. They had equated secular and technical progress with civilization and stated that the adoption of the methods of natural science was necessary to achieve progress in the field of public policy.

The immediate inspiration for Lucas seems to have been the mathematician Cauchy and his intervention in the session of the Royal Academy of Sciences on Monday 4 December 1826, where Dupin discussed his educational map of France. Dupin had suggested that France could be divided into two parts: the 'dark', uneducated south-western part and the 'enlightened', educated north-eastern part, divided by an imaginary line from Geneva to St Malo. Was Lucas present when Dupin unveiled his map? In the book, he mentions twice how the mathematician Cauchy had questioned Dupin on the links between education and crime, calling for national crime data (Lucas 1827: xxiii, 179). After the *Compte* had become available a couple of months later, Lucas was able to answer Cauchy's question. Was

<sup>1</sup> Lucas also thanks Théodore Simon Jouffroy (1796–1842) for insights into moral psychology (Lucas 1827: VIII).

the dark, uneducated part more criminal than the enlightened, educated part of the country? The first aggregated figures of the *Compte* did not seem to conform to this hypothesis, as large urban areas had high crime rates. Lucas then disaggregated crimes against property and crimes against persons, while aggregating individual crime types within these broad categories. This basic duality was of considerable interest, because he thought that these two crime types were driven by different causal pathways.

Violent crime against persons was caused by the moral state of the individual or individual traits more broadly. To study this aspect, Lucas decided to focus on homicide alone. He chose five crime categories: *parricide*, *assassinat*, *meurtre*, *empoisonnement*, and *infanticide*, and calculated homicide rates per million population. Today, we would use rates per 100,000 population. Using these, Lucas showed that northern France had a homicide rate between 1.4 to 1.8 per 100,000 population, while the corresponding rate in southern France was twice as high, approximately 3 per 100,000 population (Lucas 1827: xxx–xxxi). His geographic areas corresponded to Dupin's 1826 shaded map. Thus, at the aggregate level, his findings corroborated the pattern of low-violence north and high-violence south. Lucas argued that this supported the theory that crime was caused by lack of education and poverty. With hindsight, his decision to focus on homicide in an area comparison seems ground-breaking. In his view, the figures corroborated the doctrine of preventive justice that he had earlier developed as a philosophical argument (p. xix).

Regarding property crime, Lucas argued that this reflected opportunity structures rather than individual-level traits or motivation. Property crime was high in affluent and rich areas because such areas had multiple opportunities for property crime (see pp. xxiii, xvii). Lucas even surmised that in relation to opportunities, property crime might in fact be less prevalent in cities. He later came back to this problem from the point of view of crime measurement (Lucas 1828). He suggested that violent crimes are more independent of the opportunity structures. People can commit violence in all contexts and types of society. In contrast, property crime was more context-dependent and therefore less usable for international and time comparisons. 'Opportunity to steal' is a variable in time and place; and explains differences across time and place. Only if the opportunities are held constant can one judge individual motivation as a cause for differentials (pp. xlvii–xlviii). Therefore, violent crime formed a better crime index (p. xlvii).

Lucas critiqued certain claims made by Dupin in his crime trend analyses. Dupin had chosen a famine-related crime peak (1817) as the first

year of his series, inevitably yielding a decreasing crime trend. He had also overlooked a law reform in 1824 which moderated the penal system (Lucas 1827: xl–xliv; Criminocorpus 2013). Lucas's critique shows how the internal discussion of the emerging criminological research field is consolidated by the recalcitrant nature of crime statistics. Within that field, scholars could disagree on interpretation while agreeing on evidentiary bases (see Shapin & Schaffer 1985 for an analogy). It also shows the gradual emergence of what can be described as the craft of criminological crime trend interpretation. The selection of comparison years, and the notification of possible penal changes affecting the statistics, were necessary to tease out a valid description of crime from administrative statistics.

In the short run, the crime drop was dubious. Yet, in the longer run, many observers saw a decreasing trend. Using the violence vs property crime distinction, Lucas claimed that in developed countries, violent and serious property crime was decreasing, while common theft was high or increasing because advancing civilization multiplied opportunities for theft (Lucas 1828: xlix–l). In this, he also referred to crime figures from Pennsylvania, England and Wales, and the canton of Vaud in Switzerland (pp. xlix–lvi). In Spain, perceived as one of the most uncivilized countries in Europe, the situation was reversed: there were many homicides and assaults, but few thefts in the crime statistics (p. lix).

## Adolphe Quetelet

The Belgian astronomer Adolphe Quetelet examined crime in 1827 in a general statistical description of the Netherlands, a country at that time also incorporating Belgium. Already he was alert to patterns of crime, such as its gender distribution (Quetelet 1827: 51). This early work drew on prison statistics, enabling Quetelet to estimate the prisoner rate as 185 per 100,000 population (1821). The publication of the *Compte* tables by the French government encouraged further work by Quetelet on this front. In a memorandum read to the Brussels Academy of Sciences in December 1829, he took an interest in the link between crime and age (Quetelet 1829). Two years later, he published a major work on 'Propensity for Crime at Different Ages' (Quetelet 1984 [1831]).

At that time, Quetelet was already an established and renowned scientist in the field of astronomy (Beirne 1987; Donnelly 2016). It can be regarded as one of the successes of the *Compte* that it attracted a scholar of Quetelet's

calibre to the social sciences. He brought to the field a familiarity with numbers and methodological qualifications developed in the study of celestial mechanics. He too appreciated the possibility of settling differences of opinion with data, replacing words with facts and 'vague hypotheses' with observations (Quetelet 1829: ii). Statistics were delivering the kind of 'cold-blooded impartiality' to crime requested by Balzac and Raison in 1825 (Balzac 2015 [1825]: 9 [xiii]).

Quetelet saw statistical facts as means of fighting the bad faith, *mauvaise foi*, of selecting findings based on moral or political hopes. He was speaking of what today is known as confirmation bias, which can propel researchers to select results that are favourable to their own wishes and hopes whilst remaining silent about contradictory results (Quetelet 1829: ii). Confirmation bias was a theme he visited recurrently over the years. In 1846, he included the following as major validity threats: having preconceived ideas about the results of the analysis and neglecting figures that would be contrary to the results one wishes (Quetelet 1846: 313). The role of statistical data was to bind the observer to facts by not allowing him to select results favourable to his wishes, or to remain silent about findings contrary to his expectations. It was necessary to curb passions that were interfering with the pursuit of impartial truth. Quetelet referred to such biases when writing, 'Nothing is more injurious to the interests of science, than to undertake such researches with *notions previously formed*' (Quetelet 2013 [1842]: 78). Equally harmful was people being prone to claim that facts, if known, could have negative moral consequences. The claim that the stability of crime could support 'fatalism' or 'materialism' was a case in point (Quetelet 1829: v).

Another challenge of research in the human and societal domain was to have data that enabled one to tease out causal mechanisms by comparing groups in similar circumstances in other respects, 'rendering all changes equal' (Quetelet 2013 [1842]: 78). Quetelet made the argument that society is better seen from a distance. If we stand too close to a pointillistic painting, we see no pattern; but if we stand back, the distinct pattern emerges: 'placing himself at a greater distance, the eye embraces of necessity a greater number of points, and already a degree of regularity is observable' (p. 5). Quetelet did not refer to pointillism; his example was a very large circle formed by dots. The study of society was trailing behind the study of nature because such good data, allowing inference from dots to patterns, was lacking. He called for 'sufficient and trustworthy data' (p. 78). In his classic formulation of sociology, *A Treatise on Man* (1835), he used whatever data was available,

often in correspondence with European scholars. The *Compte* crime data played a very prominent role in that synthesis of ‘social physics’.

## André-Michel Guerry

Scholars have argued whether Quetelet or his younger contemporary André-Michel Guerry should be seen as *the* founder of criminology (Whitt 2002). This ‘priority debate’ is futile as the group that created the first data-driven criminology included more scholars than these two. Yet alongside Lucas and Quetelet, Guerry was undoubtedly a key pioneer in using the new data asset in research.<sup>2</sup>

Born in Tours in 1802, Guerry studied law at the University of Poitiers (Friendly 2022). He may have taken literature and physiological courses as well. In 1825, he went to Paris to practise law. From 1827, he worked for the French Ministry of Justice, compiling data on crimes committed in Paris, thus participating in the creation of the *Compte*. In 1829, he published with Adriano Balbi a cartographic poster comparing the crimes and levels of education in the administrative areas of France (Figure 5.1). Thus, Guerry’s first published look at crime statistics was about the aggregate-level correlation of crime and education (Balbi & Guerry 1829), directly connecting with the civilization debates. Some conservatives welcomed the map as an antidote to liberals advocating for secular and technical civilization over religious and moral content (*Gazette de France* 9 August 1829).

Guerry’s breakthrough was the book-length *Essai sur la statistique morale de la France* (Guerry 2002 [1833]), which won him the prestigious Prix Montyon. He saw that book as part of a great shift towards the evidence-based science of crime and criminal policy. In the past, criminal policy opinions had been based on logical reasoning, examination of general concepts, and personal experience. This approach was susceptible to ‘vivid and durable impressions’ created by biases. Concepts derived from uncontrolled experiences enabled people to modify generalizations ‘at will’ and thus to ‘lay the foundation for any theoretical system one could imagine’. The new data source, standardized national statistics, would be recalcitrant towards people’s wishes to prove a priori selected hypotheses or

<sup>2</sup> Quetelet and Guerry could be compared to Darwin and Wallace as co-discoverers of evolutionary theory. However, as a member of the original *Compte* team, Guerry cannot be regarded as an outsider to the scientific and data establishment.

policy stances (pp. 9–10, 14). Data-based analysis could forestall confirmation bias as scholars could now rely on evidence to assess specific theories. Guerry supported conducting and publishing research irrespective of the content of the results. Even if a hypothesis was wrong, ‘it would not be fruitless, since, in research of this type, in which *a priori* explanations are almost always erroneous, it is usually only by the path of exclusion that one can hope to arrive at the truth’. When empirical findings contradicted widely held beliefs, he wrote: ‘We are not creating doctrine here; we are exposing the facts . . . in order to be useful to science and man, it is necessary to place the authority of facts before the authority of names, and never to sacrifice any truth to these secondary considerations’ (pp. 78, 96–7).

The new data source of criminology, statistics as a state-funded instrument, could refute erroneous beliefs. Other examples of empirical refutations, as discussed by Guerry, include the crime trend claims of people seeking to use criminology to support previously chosen value positions. For instance, Guerry saw no basis for the claims that violence was increasing or decreasing. The facts supported neither conservatives nor progressives. While crime media created illusions about moral decay, there was ‘nothing to lead us to believe that assaults against the person are more common today than at the end of the last century’ (pp. 23–4). Guerry also critiqued more specific moral crusades, such as politicians blaming lotteries for crimes (p. 75). Similarly, Beaumont and Tocqueville suggested that philanthropists dedicating huge efforts to rehabilitate convicts could be ‘under the influence of passion’ yielding cognitive bias, as they deduced facts from their wishes (Beaumont & Tocqueville 1833: 103).

## Emerging theory

The new instrument of national crime statistics influenced the way crime was conceptualized. As seen and felt by participants, this was an internal development of science: the instrument reacted to stubborn realities. These realities had existed before, now the instrument made them visible. The most fundamental of these patterns was the existence of variation. In large countries like France or England, there were wider differences in the quantity of recorded crimes. Since the law was the same in all areas of the country, the variation in recorded crime (law in action) could not be explained by law in books. This focused attention on social and economic explanations of crime, often framed in civilization theoretical meta-language.



## Routine activities

The routine activities perspective sees the number of crimes as reflecting the co-occurrence of motivated offenders, suitable targets, and lack of guardianship. The latter two aspects form the opportunity structure for potential offenders. The role of opportunities in crime had been previously understood, especially in relation to practical crime prevention in places such as London, and especially its port, the greatest hub of stealable items in the world. Thus, Colquhoun's 'new science of Maritime Oeconomy' (Radzinowicz 1956: 380) to protect commerce from thieves had uncanny connotations with later concepts such as capable guardianship, place managers, and similar.

Yet the newly available crime statistics gave a huge boost to this approach, often perceived through civilization theoretical lenses. In his 1827 book, Lucas observed that property crime and violent crime were differentially patterned across France, as revealed by the new instrument. In highly developed and educated areas, property crime was more frequent than in less developed areas. Based on these analyses, Lucas argued that crimes generally reflects locally and situationally emerging opportunities to commit them (Lucas 1827: lxxi). Civilization increased affluence and technical progress, which in turn provided opportunities for property crime (pp. xxvii, xxxiv). Aggregate differentials in crime rates across areas could be interpreted from this opportunity perspective. Civilization thus had a complex relation to crime: it increased some crimes while reducing others, especially violent crime.

While the increase of property crime reflected the rise of stealable, mass-produced consumer products, the decrease in violence reflected an increase in welfare and enlightenment.

From this analysis, it was a logical step to move towards situational prevention. In Lucas's view, the first principle of preventive justice was that criminal acts can be *prevented by removing the opportunity for criminal action* (Lucas 1827: xxvii). This shows how patterns detected in administrative crime statistics were interpreted as causal theories enabling prevention conclusions as well. The opportunity structure framework rhymed with the secular-technical civilization concept, becoming in later years a core tool of crime trend interpretation, often as an antidote to moral causation theories of crime. If crime increased, it did not necessarily mean that bad people were more numerous but, rather, a constant of moral badness could yield different crime outcomes depending on opportunities.

Like Lucas (and later de Candolle), Quetelet was drawn to a three-factor model of aggregate crime rate interpretation. He wrote: 'To commit crimes, it is necessary that one will bring together these three essential conditions: the will, the opportunity, and the ability to act' (Quetelet 1984 [1831]: 48). In his *Treatise on Man*, he summed up these 'essential' and 'principal causes' as *will*, *opportunity*, and *facility* (Quetelet 2013 [1842]: 91). It was thus not enough that a person had the intention to commit crimes. An opportunity to do so was also needed (p. 82). In modern routine activities theory, we often speak of motivated offenders, suitable targets or victims, and lack of guardianship. For Quetelet, the first two were very close to their modern uses, while the third, facility, referred more to the technical skill or ability to commit crimes, rather than to external guardianship.

As regards gender differences in crime, both Quetelet and Guerry drew from the routine activity interpretation. The low female propensity to commit crimes was partially linked to motivation (shame and modesty). In addition, female crime opportunities were limited by 'more retiring habits' and means of offending by lesser strength (Quetelet 1984 [1831]: 48). Patterns of crime also reflected opportunities. Since women's lives were more limited to the domestic sphere and 'remote from business', their offending was similarly expressed mostly within the domestic sphere. Quetelet estimated that the morality of men and women was likely to be similar; the differences in crime between men and women were thus more likely to reflect opportunities and the constrained routines of women. He also observed an interaction between education and gender, seeing this as evidence of how 'habits and social position' influence crime (pp. 49–54). André-Michel Guerry similarly offered explanations resembling the routine activities approach, explaining the lesser crime involvement of women by different opportunity structures created by differential routine activities. Thus, more generally, aggregated crime differentials were not necessarily related to the moral character of individuals or groups, but rather to their opportunities to commit crimes (Guerry 2002 [1833]: 34). This explanation detached crime from the domain of sin, evil, and morality, and placed it in the everyday flow of societal routines.

In explaining the high crime levels observed in the valley of Seine, Quetelet explained that 'these departments . . . contain the greatest proportion of persons and property, and consequently present more occasions for committing crimes; it is there that there are the greatest changes in people, and the greatest influx of people . . .' (Quetelet 2013 [1842]: 89.) Regarding the high theft rates in urban areas, Quetelet referred to massed 'movement

and contact with strangers' and 'large numbers of people and things' giving rise 'to more opportunities to commit crimes' (Quetelet 1984 [1831]: 35–8), a factor today often discussed as crime generator contexts. The first users of national crime statistics also understood that migration involved the self-selection of offenders from one geographical area to another. Urban centres were crime hot spots because they combined *crime generator* and *crime attractor* mechanisms, with people low on control self-selecting themselves to urban environments in order to hide from the authorities (p. 40; Jomard 1827). Guerry's call for better data enabling the study of how transport networks impact crime reflects the same logic (Guerry 2002 [1833]: 78). Crime was linked to places of mass movements and attraction.

The peak of criminal propensity at the age of 25 reflected the point when passions were maximal and reason minimal. Also, the physical strength of men climaxed at this age, explaining the crime peak (the facility of offending). Quetelet returned to this topic with a much larger dataset in 1848, adding international comparisons, showing that the age–crime curve was very similar in France, Belgium, and England (Quetelet 1848). The reason he was particularly interested in the age–crime curve was partially methodological. Its stability suggested that the shape of the curve reflected human behaviour rather than the zeal of courts to prosecute young people. Peaking in young adulthood, the curve symbolized the majestic slowness of change in the fundamental patterns of crime. The curve had existed without crime statistics, as an unobserved fact, but it became numerically and graphically visible to scholars because of the new assemblage instrument, the *Compte*. The curve was a fact because it was not in the eye of the beholder.

## Education: enthusiasm and reservations

The architect of the *Compte*, Guerry de Champneuf, was a popular education activist. Dupin was exploring the links between education and morality in the months preceding the first *Compte*. The debate on the moral effects of civilization formed an important context of discovery for data-based criminology. Once the data was available, many analysts seized the opportunity to test the effects of schooling on crime.

Edme-François Jomard (1777–1862) was probably the first to publish analysis on the *Compte* data, signing the analysis ten days after the

publication of the national statistical report.<sup>3</sup> And he did this from the point of view of the crime–education link. Who was he? Best known to posterity as a veteran of Napoleon’s science campaign in Egypt and key editor of the *Description l’Égypte*, he was also a popular education enthusiast, not unlike Guerry de Champneuf. Like many other pedagogical activists of the day, he was impressed by the English Lancastrian system of mutual education. He felt that the lower classes should not be expected to obey the laws if they did not know about the social contract; that is why education was needed for all (d’Enfert 2014).

The immediate trigger for Jomard’s rapid assessment was a treatise on penal colonization by Benoiston de Chateauneuf (1827), who claimed that crime was increasing and that many ‘ignorant’ areas low on schooling had low crime rates. He thus denied the crime–education link. Using the first issue of the *Compte*, Jomard calculated crimes per 100,000 people in three areas: the south, the middle, and the north. The civilized north manifested the lowest rate of crimes against persons but the highest rate of property crime (Jomard 1827: 28). Jomard additionally compared England, Ireland, and Scotland. In this comparison, Scotland manifested the good constellation of high education and low crime, thus indirectly supporting the causal role of education on crime. To improve analytic potential, he proposed that in the future the *Compte* should include additional variables, especially gender, age, birthplace, and literacy. It should be accompanied by parallel educational statistics using a similar variable structure (see p. 33, for a suggestion of returns tables).

Jomard raised several methodological caveats concerning the use of new crime data. He was aware that only an unspecified fraction of crimes were processed by the courts, and that crime was only partial operationalization of asocial behaviour. Critiquing Benoiston de Chateauneuf, he pointed out that some ‘ignorant’ areas such as Savoy had low crime rates because the Savoyards were driven by poverty and ignorance to commit their crimes elsewhere (p. 10). He also noted that in a true analysis of the education–crime link, the predictor variable should be measured well before the outcome (pp. 16–17). Cross-sectional area comparison of current crime and current education could underestimate the power of education to curb crime, especially at the current historical period when education was expanding from prior near-zero level. In this methodological discussion,

<sup>3</sup> I draw on the Google Books version which does not give an author name. The BNF catalogue and d’Enfert (2014) list Jomard as author.

crime statistics were seen as an independent arbiter of truth, transcending value-based ideologies and potentially enabling empirical solutions to long-standing debates.

The geographer Adriano Balbi was interested in numbers pertaining to education and crime at least from the early 1820s, considering that enlightenment improved morality and observing that among the Austrian provinces, the low crime figures of Bohemia were linked to the high education rate (Balbi 1822: 111–12, 134). In his *L'Empire Russe comparé aux principaux États du monde* (Balbi 1828),<sup>4</sup> he showed side by side the density of schooling and crime in Russian provinces but did not comment on their correlation. In 1829, he joined Guerry in publishing a poster showing three maps: crimes against property, crimes against persons, and education, each shown as rates per population (Balbi & Guerry 1829, see Figure 5.1). The third map of the poster showing educational differentials was similar to the first choropleth map of Dupin, showing the Geneva–St Malo line dividing France into ‘dark’ and ‘enlightened’ parts.

Balbi examined the crime–education link in a separate article (Balbi 1829). He took his crime figures from the *Compte* and education figures from Dupin’s original choropleth map dividing France into the civilized north and uncivilized south. His innovation was to use three-year averages rather than single years, thus offering sensitivity analyses of the *Compte* data to get more stable and robust crime rates. Like the exchange between Benoiston de Chateauneuf and Jomard, Balbi’s article shows the formation of a discursive field. He used Dupin’s data and critiqued Lucas, thus constituting a field where shared data could arbitrate conflicts because they were the same for all, and recalcitrant.

Guerry revisited the topic in his 1832/3 magnum opus on crime in France. He started by noting that ignorance was then believed to be the principal cause of crime, and that criminal justice policies should emphasize popular education. This view was, at the time of his writing, ‘generally accepted in France’ and it had become a ‘widely accepted truth’ (Guerry 2002 [1833]: 87). The factual basis of this educational theory of crime rested on the area-level inverse relation between crime and education: departments low on education were high on crime. What he did was to replicate the prior work by Jomard and Balbi with better data on education. He used the reading and writing test of the French draft system to count department-based educational rates. Using this data, he confirmed the

<sup>4</sup> Undated poster with 1827 as the latest observation year.



pattern already suggested by Malte-Brun and shown by Dupin: the south, centre, and west of France were low on literacy, while the north and east were highly literate. Comparing these rates with crime, Guerry observed that violent crime was low in places with low literacy. Thus, he confirmed Balbi's 1829 analysis with better measures of education, stating that the 'relationship [between education and crime] people talk about does not exist' (Guerry 2002 [1833]). Balbi (1829) had reported similar conclusions some years before by aggregating the first three years of the *Compte* and linking them to Dupin's data.

In his *Treatise on Man*, Quetelet compared the crime patterns of people possessing different cognitive skills. He observed that the distribution of offence types in the most skilled group, and among the liberal professions, had most violence in relative terms. He noted that this was not a risk differential due to the lack of base numbers: there was no information on how the full population divided into the same educational categories as used by the *Compte* (Quetelet 2013 [1842]: 84–5). The base number problem was a persistent problem for the early criminologists, often forcing them to examine crime patterns rather than crime rates. Quetelet nevertheless speculated that affluence could suppress property crime among the educated classes, leaving hate and jealousy to dominate their crime patterns (p. 86).

## Enter morality

The question of the education–crime link was not resolved, but it helped to form the first field of criminology. One way forward was to divide education into components, just like crime was divided into violence and property crime. Guerry noted that education was morally neutral, it was 'an instrument which can be used well or poorly'. He therefore divided educational content into cognitive and moral components, roughly corresponding to the concepts of *instruction* and *education*. Instruction referred to basic cognitive skills like reading, writing, and counting. It was not crime-preventive, nor crime-inducing; it was neutral. In contrast, moral education could be crime-preventive as it pertained to what was acceptable and what was not. Guerry did not elaborate on its content. He seems to have thought that morality can be induced without religious dogma, calling for new state-funded textbooks for moral education aiming to support 'honour and probity' (Guerry 2002 [1833]: 99). He noted that the importance of cognitive skills and popular education did not rest on their alleged



crime prevention uses. They were valuable as such and for other ends than crime prevention. Yet the distinction between skills instruction and moral education addressed the content of what was being learned. The content of learning could be counterproductive in subcultural contexts, where people learned to perceive crime as an acceptable course of action.<sup>5</sup>

Two years after the publication of Guerry's essay, in 1835, Quetelet wrote in his *Treatise on Man* that 'education is far from having so much influence on the propensity to crime as is generally supposed'. Noting, like Guerry, that teaching people to read and to write was neutral in moral content, he raised the possibility that cognitive skills and learning processes could be instruments of, rather than obstacles to, crime (Quetelet 2013 [1842]: 95). His observations regarding crime by proxy are a case in point. Noting that the age distribution of convicts in England included more young people, he referred to specific types of learning as explanations of this statistical finding. Particularly in the metropolitan London area, the high rate of youth crime was owing 'to children being trained in a manner of theft, while the really guilty act through their intermediation'. Adult criminals trained children as instruments of crime to elude the rigour of the law (p. 95; see also Mittermaier 1830b: 194).

Quetelet thus referred to proxy crime<sup>6</sup> as a key crime-learning mechanism in his 1835 treatise. A couple of years later, this social mechanism would receive a classical artistic rendering in the novel *Oliver Twist* by Charles Dickens 2003 [1837–8]). Dickens was a journalist and prison visitor, a witness to London crime. He claimed that his novel described London thieves, and their associations, 'as they really are' (Dickens 2003 [1841]: 457). He considered his novel an ethnography of the criminal underworld. It is likely that continental criminologists like Quetelet and Mittermaier shared with Dickens key sources, such as the *Report of the Select Committee on the Police of the Metropolis* (1828), which was based on qualitative thematic interviews of various control professionals in London. Later, the English criminologist Rawson W. Rawson interpreted the shape of the English theft age–crime curve with reference to adults employing children in burglary (Rawson 1839: 332). The similarity of the age–crime curves in England and France, and the locally interpretable deviation from it, was consistent with the assumption of *isomorphic correspondence* between statistics and social reality.

<sup>5</sup> In our time, situational action theory factors into morality as a major component of crime causation, see Wikström et al 2024.

<sup>6</sup> For the concept and study of proxy crime in modern criminology, see Kivivuori 2007.



The proxy crime explanation was local and contextual, almost ethnographic, as opposed to general claims about links between education and crime prevention. Locally high crime rates invited similar learning-based interpretations. Adriano Balbi noted that instruction could transmit the means of committing crimes. The moral acceptability of revenge was an example of this. Socially learned belief in the natural right of revenge could lead to violence, as in the case of the high number of violent crimes in Corsica (Balbi 1829: 263). Quetelet similarly explained the high level of violence in Corsica by reference to learning processes: people there learned to see revenge as an acceptable course of action. Values and attitudes supporting violent revenge were ‘transmitted from generation to generation’ (Quetelet 2013 [1842]: 87; see also Quetelet 1984 [1831]: 34–5).

In explaining the high property crime rates in commercial and industrial hubs, Guerry added to the routine activities account a learning theoretical perspective. He noted that in the capital city and other industrial centres, the majority of property crimes were committed by professional thieves. He saw reformatories and prisons as places where young delinquents prepared for this profession. Guerry saw prisons as places of rationalization: people who had committed impulsive crimes learned the craft of crime, and learned to know the penal law, enabling them to rationalize their criminal behaviour after release: ‘since they know the penal laws perfectly well, they carefully avoid committing actions that carry them to the gallows’ (Guerry 2002 [1833]: 85). Thus, the content of instruction—the penal law—could be tactically used by a sub-group of offenders.

It is one thing to explain crime differentials by locally learned morality, and another thing to judge it morally. Generally, the new instrument of national crime statistics supported an objective, non-moral approach to crime. But there were exceptions. Consider how Guerry tackled the crime–civilization link from the perspective of white-collar crime. This part of his work is worth quoting in full, because it combines key themes of first criminology:

The swindler, the forger, the fraudulent bankrupt of our *northern* departments who, with his *polished etiquette and wide-ranging education*, coldly accomplishes the ruin of twenty families whose trust he had abused, is in our eyes, more vile, more immoral than the *illiterate* inhabitant of our *southern* departments, who strikes down his adversary in a brawl and kills him.

(Guerry 2002 [1833]: 86, emphasis added.)

Thus, educated (or instructed) people can and do commit very harmful crimes. By saying that the white-collar criminal came from the northern departments, Guerry connected to Dupin's dichotomy of enlightened and dark France.<sup>7</sup> The white-collar crimes of the enlightened north could be more immoral than the simple violence of the south. Interestingly, Guerry shows here a Rousseau-style aversion to 'polished etiquette', seeing upper- and middle-class social surfaces as hiding moral depravity. He is clearly referring to his own moral emotions rather than to processes of learning which propel some entrepreneurs to perceive crime as an action alternative.

Disclosing upper-class immorality was also a recurring theme in the popular crime fiction of the long nineteenth century, to be explored by authors such as Sue, Dumas, and Zola. Their novels were filled with ordinary street criminals, but often the worst offender was the white-collar criminal. Since there was no systematic criminological study of white-collar crime, fiction filled the vacuum. Later in the century, populist-progressive activists and Christian movements joined grand realistic fiction in attacking the 'robber barons' and white-collar criminals. This prepared the ground for Edwin H. Sutherland to launch the criminological study of white-collar and corporate crime and, ultimately, to break the official control barrier of crime measurement in the third data revolution of criminology (Kivivuori 2011).

## Strain theory

The poverty theory of crime existed long before the 1820s as a doctrine, based on the standard methods of pre-data thinking on crime, including personal observation, classical scholars, and travelling. In the first generation of scholars using the *Compte*, Charles Lucas and Édouard Ducpétiaux both advocated a welfare theory of crime. If people were affluent, they would not commit crimes, especially if state-paid popular education was also available. Lucas even predicted that economic cycles would cause crime in industrial populations by forcing people accustomed to wealth to endure strain. This could increase crime in the civilized and industrialized areas, a link that for Lucas corroborated the role of affluence and enlightenment in crime causation (Lucas 1827: xxxv–xxxvi). He considered ignorance and 'misery' to be the 'two primary and general causes of criminality'

<sup>7</sup> Guerry attributed the dark/enlightened distinction to the geographer Malte-Brun and to his earlier co-author, geographer Adriano Balbi (Guerry 2002 [1833]: 85).

in all times and places, thus claiming to create a general theory of crime. He set out to explore data to learn if welfare and education were, for preventive justice, the Archimedes' lever which could be used to fundamentally change social order (p. xxi).

Lucas saw society as divided into two classes: those who are self-sustaining by skill or property; and those who are not. The latter derived their subsistence from the first category by two means. They committed crime to make ends meet. The alternative was to use forms of taxation, either public or private charity, to ease the lives of the poor (Lucas 1828: 40). Lucas thus compared crime to a form of taxation, or income transfer, imposed by the lowest classes on the upper strata. Such views probably circulated widely in cultured circles, as testified by Balzac's satirical crime prevention manual (Balzac 2015 [1825]) which started from a structural-perennial class conflict perspective. Lucas was more optimistic because he thought that conflict could be alleviated if the state stepped in to levy the taxation. He too approached the crime phenomenon from the budgetary and economic perspective, supporting the welfare-educationalist frame at least implicitly with recourse to the newly available crime statistics.

While Lucas and Ducpétiaux were enthusiastic supporters of the poverty theory of crime, later scholars introduced greater complexity to this. The problem at hand was set by the data, which indicated that some of the poorest areas of France had the least crime. At least two solutions to this data anomaly were presented. One was Jomard's (1827) self-selection or crime attractor hypothesis, meaning that individuals in poor areas move to richer areas, thus bringing their criminal propensity to a wealthy context. Another, more straightforward theory referred to relative deprivation. In 1829, Adriano Balbi counted 'poverty amidst of plenty' as one of the key causes of crime (Balbi 1829: 262–3). Two years later, Quetelet wrote that criminogenic pressures arose when a 'continual view of luxury and of an inequality of fortune' disheartens less affluent people (Quetelet 1984 [1831]: 38). Unlike Quetelet, Balbi had given a cyclical dimension to strain, pointing out that economic crises forced people accustomed to affluence to face poverty, a particularly criminogenic situation. The contrast between wealth and misery could take place between people sharing the same location, and over time in the same people whose economic situation worsened.

Adriano Balbi additionally referred to the commercial spirit, and to the rise of the industrial economy as a general background for criminogenic relative deprivation. Especially if the industrial revolution was sudden,

extreme, and 'adventurous', it corrupted public morality (Balbi 1829: 264). These thoughts resemble modern anomie and institutional anomie theories of crime, stating that excessive reliance on markets and economical values explains aggregate-level variations in crime. Balbi's notion of commercialism and adventure capitalism creating artificial needs, whose satisfaction was broken by economic crises, may be seen as a development of the eighteenth-century notion of the 'luxury of the poor' as discussed by Henry Fielding (1988 [1751]). 'Luxury of the poor' was replaced by Balbi's artificial needs as cultural constructs created by the rise of industrial capitalism. Fielding borrowed the luxury explanation from classical sources, which saw a causal chain from conquest, looting the provinces, material luxury consumption in the centre, decay of moral fibre, to the ultimate result, the collapse of Rome. Similarly, industrial-commercial wealth could lead to false expectations of affluence, and to crime, if culturally constructed needs could not be satisfied by the economy. The collision of a trope borrowed from classical antiquity with modern crime statistics influenced theoretical formulations.

There were other anomalies that could be solved by relative deprivation-based strain theory. In their expedition to the US, Beaumont and Tocqueville (1833) observed that universal popular education did not always lead to a reduction in crimes. In making sense of this, they suggested that education created wants and desires which, if unsatisfied, drove people to crime (pp. 114–15). This position resembles the Mertonian view that crime results when culturally created aspirations are frustrated by structural impediments (cf. Merton 1938). According to Beaumont and Tocqueville, popular education was beneficial to nations. Yet it had side effects, such as culturally induced motives to commit crimes to achieve goals.

## Social causation

The new instrument of crime statistics made new things thinkable or gave new observable meaning to notions circulating in the cultural context of discovery. One of the most important of such theoretical nuclei which existed without a data anchor was the social embeddedness of crime. The aggregated and slowly changing aspects of crime became visible because of the data, interpreted by first criminologists as correspondence to reality. One result of this was that criminology detached crime from individual-level 'evil' as an explanation. Society was seen as creating the crime it had.

By the mid-1820s, this thought was so well known by the reading public that it became an object of satire (Balzac 2015 [1825]).

Charles Lucas wrote about society as the agent of criminality (Lucas 1827: xlv). Quetelet's celebrated passages on the budget and regularity of crime can be seen as part of this emphasis. In his view, 'we are able to enumerate in advance how many individuals will stain their hands with the blood of their fellow creatures, how many will be forgers, how many poisoners, pretty nearly as one can enumerate in advance the births and deaths which must take place' (Quetelet 1984 [1831]: 69). Thus, the stability of crime figures indicated by the first years of the *Compte* suggested that crime was a necessary consequence of societal arrangements and was related to the routine activity and opportunity perspective. Emphasis on social causation detached crime from the moral sphere of evil (Beirne 1987: 1158). In his 1835 treatise on man, Quetelet stressed that 'it is the social state . . . which prepares these crimes, and the criminal is merely the instrument to execute them'. Accordingly, every society 'supposes a certain number and a certain order of crimes, these being only the necessary consequences of its organization' (Quetelet 2013 [1842]: 6). In the final lines of the treatise, he made a very strong statement on this:

Since the crimes which are annually committed seem to be a necessary result of our social organization . . . it is the province of legislators to ascertain these causes [of crime], and to remove them as far as possible: they have the power of determining the budget of crime, as well as the receipts and expenses of the treasury. . . . *Society prepares crime, and the guilty are only the instruments by which it is executed.* Hence it happens that the unfortunate person who loses his head on the scaffold . . . is in some manner an expiatory victim of society. His crime is the result of the circumstances in which he is found placed.

(Quetelet 2013 [1842]: 108, emphasis in original.)

This passage shows a subtle move from causal analysis to blame analysis. Like Guerry commenting on white-collar crime, Quetelet feels the pull of moral emotions and declares offenders exculpated by societal forces. The lines cited above are an early example of a scholarly statement redescribing offenders as victims of societal circumstances. This is an example of what Quentin Skinner meant by innovating ideologists who were able to re-evaluate values by skilled rhetorical manoeuvres (Skinner 2002;

Kivivuori 2011). Judging from the work of novelists like Balzac and later Dickens, the contemporary audiences recognized the move to demoralize crime by means of statistical analyses, and even the move to condemn the condemners.

## Consilience

In the early stages of data criminology, there was no conflict between statistical analyses and individual-level psychological traits. In the 1820s, the social sciences did not exist as a separate disciplinary entity. Quetelet came from astronomy and the natural sciences. His interest in social and human affairs was not anomalous in the eyes of contemporary scholars, even though his work was critiqued from moral and religious positions. Guerry was a lawyer, but he was widely interested in other forms of knowledge. Both were also interested in what today would be called the humanities. The young Quetelet wrote at least forty poems, sixteen opera librettos, published translations of classical poetry, and reflected on the history of the Romantic genre (Donnelly 2016: 44). Guerry published a collection of ancient songs of Poitou, thus partaking in the Romantic revival of national and regional roots. Jomard edited the celebrated interdisciplinary work *Description de l'Égypte*. Benoiston de Chateauneuf studied medieval poetry before turning to statistics.

Even with strong links to the humanities, the first generation of criminologists were not hostile towards the natural sciences. In the preface to *Treatise on Man*, Quetelet speculated that the number of crimes could reflect 'causes which produce a given number of defective brains annually' (Quetelet 2013 [1842]: vi). Similarly, Guerry also cooperated with natural scientists in the analysis of mental disease and criminal propensity. He saw data-based criminology as compatible with natural scientific approaches studying 'the natural history of man' and the varying physiological characteristics of people in various parts of France, citing the racial reflections of William Frédéric Edwards (1777–1842). He predicted that such data could lead 'to more empirically based and satisfactory results' (Guerry 2002 [1833]: 77). If natural factors did not explain crime, this would be important to know, rather than deciding not to investigate the matter.

Both Quetelet and Guerry were interested in the possible linkages of ethnic background and crime. While Guerry talked about the nations of France, Quetelet used the concept of 'race' in this analysis (Quetelet 2013

[1842]: 89). At the time they were writing, racial discourse could be linked to the kind of thought we immediately recognize as racist (see, for example, Dunoyer 1825). Some 'races' had lower crime levels because they were 'in a more advanced state of civilization', thus suggesting that civility was the cause of 'racial' variation in crime. For Guerry and Quetelet, the primary interest focused on the groups within European populations. Thus, Quetelet saw in France the 'Celtic', 'German', and 'Pelagian' races. Furthermore, the discussion of these sub-populations mixed biological connotations with cultural and activity-related factors. Border areas were high on crime because there 'the races are most crossed . . . and where there is most disturbance, and where the customhouses are established' (Quetelet 2013 [1842]: 88–90). Thus, from a modern standpoint, Quetelet's mix-of-races interpretation appears to incorporate racial connotations with routine activities and customs as a criminogenic institution, a common idea in the early nineteenth century.

Some historians have seen the links between early criminologists and natural scientists as problematic in moral or factual terms (Beirne 1987: 1159–60; Mooney 2020). Guerry has been described as 'slipping' into cooperation with the medical team of Esquirol to measure cranial capacities and pulse rates of criminals and those who were mentally ill (Whitt 2002: xv). Yet there is nothing immanently absurd in biosocial criminology. Quetelet and Guerry were writing in a historical context where the notion of unitary science was legitimate and transcended the limits of human and natural sciences.

In a review of Quetelet's work, the Genevan demographer Edouard Mallet appreciated the effort to use statistics in human sciences. Like Quetelet, he saw this task as linked to an avoidance of confirmation bias, that is, not seeking to obtain confirmation of certain ways of seeing, of ideas fixed in advance (Mallet 1835: 300). Yet he also offered doubts whether the numeric perspective could be applied in the moral domain, which is governed by free will. As Mallet saw it, Quetelet moved from the solid ground of nature to the difficult domain of human free will, *le domaine de la volonté humaine, libre, fière et indépendante*. He doubted whether the human heart and its spiritual mysteries could ever be penetrated by means of quantitative analysis (pp. 314–16). In contrasting natural and human realms, Mallet referred to crime as a case in point: while births and deaths could be counted and compared, moral constructs, such as crime, were resistant to standardization. What was a crime in one country could be a mistake, an error, or a lawful act in another (p. 314). In this, Mallet discussed a key validity threat

to international crime comparisons. Interestingly, the problem of cultural variation in the definitional lower limit of crime had been raised by another Geneva-based scholar, Pellegrino Rossi, as part of assessing the feasibility of crime statistics in comparative research (Chapter 8).

The scholars who used the new instrument of national crime statistics based their work on the assumption that administrative statistics on recorded crimes had an isomorphic correspondence with behaviour. This conviction did not ignore the validity threats. Rather, it was based on a sophisticated analysis of such threats, by a connected field or space or researchers. The correspondence notion was not limited to the auxiliary assumption used by Quetelet, the constant ratio doctrine about the relation of recorded and unrecorded crime; it is more complex and multifaceted (see Chapter 10). The 'mirror of reality' metaphor is thus too simplistic to describe the way the first criminologists saw the link between statistics and reality. Perhaps the Platonic cave metaphor of knowledge is better. Scholars see shadows in the back of the cave that are blurred and contain many errors and degrees of certainty, yet they are caused by things existing outside the cave. The conflicts and critiques among the scholars took place in a new space limited by data, a space where disagreement was empirically solvable within normal science.

The instrument of national crime statistics was created by administrative intellectuals and used by independent scholars, the first generation of data-driven criminologists. What was at stake was nothing less than the solution to the problem formulated by the eighteenth-century *philosophes*: can social order survive without religious morality? Will people commit crimes if they no longer fear eternal damnation? The *Compte* and international comparisons indicated that the answer could be complex. Civilization could increase some types of crime, such as property crimes, by joining massed opportunities with potential offenders. On the other hand, it could decrease violence by teaching restraint, a notion that also seemed to require a concept of morality in the new data-driven study of crime. After all, some high violence contexts were embedded in culturally learned patterns of seeing crime as acceptable, as in the case of the Corsican revenge culture. In this discussion field, the data seemed to lead theoretical formulation towards routine activities, opportunity structures, and notions linking internalized moral control to variation in crime. Both *civilization-as-opportunity* and *civilization-as-restraint* perspectives were optimistic rather than fear-based. A further element of optimism was introduced by the prospect that data could help in the creation of better criminal justice policy.



# Anchoring criminal justice to facts

## Introduction

During the late 1820s, criminal justice was a hot topic in continental cultural and artistic circles. There was a veritable ‘prison craze,’ *monomanie du système pénitentiaire*, as satirically expressed by two young lawyers, Gustave de Beaumont and Alexis de Tocqueville (1833: 88). Benjamin Appert, the prison reformer, was given a cameo role by the hot, young author Stendhal in his novel *The Red and the Black*. Another up-and-coming poet, Victor Hugo, published in 1829 a short story, *Le Dernier jour d'un condamné*, which described the last day of a man condemned to death. Inspired by this, the young composer Hector Berlioz named the fourth movement of his *Symphonie fantastique* ‘March to the Scaffold,’ with the distinctive climax depicting the fall of the guillotine blade (Cairns 1989: 339).

Stendhal, Hugo, and Berlioz represented the new generation of Romantic artists defying the classicist doctrines of form and convention. For them, it was natural to discover the authentic and human feeling in the criminal and convict. Cultural sensibilities were changing and influencing penal thinking and penal practices. From the mid-eighteenth century, western elites increasingly found corporal and capital punishments distasteful. Corporal punishments were defined as a social problem (Garland 1990). When statistics emerged as a new instrument of crime and criminal justice research, they were deployed in the context of a movement away from harsh punishment.

As a climate of opinion, the increasing mildness of society was both an unfolding social process and a project driven by motivated criminal justice reformers. The goal of making society milder and gentler, as applied to criminal justice, was an important context of discovery for data-based criminology. In 1826, two essay competitions were announced, calling for the best essay supporting the abolition of the death penalty. One was declared in Paris by the Société de la moralité chrétienne, and the other by the Swiss philanthropist Jean-Jacques Sellon (1782–1839) in Geneva (Luginbühl 2000). Both competitions were won by Charles Lucas, the

young Parisian lawyer whose pioneering analyses of the *Compte* data were discussed in the previous chapter. By using the data, he was able to give his moral–legal argument the additional aura of cutting-edge research. This associated the reform with scientific developments seeking to replace vague theories, philosophical ‘systems’, or moral principles with research. The data and their research were received in a morally loaded context.

In today’s world, and especially in the US, criminology is often divided into two major subcategories, ‘criminology’ focusing on criminal behaviour and ‘criminal justice studies’ focusing on official reactions to crime. While the previous chapter focused on the emergence of the previous type, I discuss in this chapter how the data was associated with explorations of criminal justice. In the initial reaction stage, the criminal justice-related reading of the data tended to be general, even sweeping generalizations, often following the rhetorical form of the foil and halo arguments. These brought forth a ‘grand theory’-based emphasis of welfare and education as key tools of preventive justice, especially in the thinking of Charles Lucas and Édouard Ducpétiaux. Alongside this, a more focused type of evaluation of specific reforms emerged from the prison reform movement. When the *Compte* data and concept became available, they further helped scholars to focus on two basic questions: Did a specific reform impact crime? What social factors, if any, influence official control certainty?

## The foil and the halo

David Nelken has analysed how the contemporary criminal policy discourse often resorts to *foil comparisons* (Nelken 2015 and 2019). The criminal justice system of another country is described as particularly bad to highlight the goodness of some other system. This type of argument can be reversed: some country is depicted as very good in its criminal policy, to bring about changes in one’s own country. In both types, one country serves as a ‘foil’ or a backdrop against which others are judged. Nelken argued that often foil comparisons are based on inadequate or simplistic descriptions of the ‘foil’, which serves as an instrument for policy campaigning in the home country.

Another key piece of criminal policy rhetoric involves praise by association. The policies one supports are linked to other good things, like education, affluence, welfare, and equality. In the early stages of data-driven criminal justice research, this kind of *halo argument* was often used. The

argument had been used frequently by the *philosophes* of the eighteenth century, who used travellers' reports on foreign lands to critique criminal justice practices (see Chapter 2). Now, the rise of data promised to supercharge such comparisons. By linking preferred policies to reduced crime, they gained a positive halo. Lucas even formulated a sweeping, general historical law that good things were connected: 'depending on whether in a country civilization will be more or less advanced, poverty more or less great, administration more or less bad, one can, without consulting the registers of the criminal courts, say: more or less crimes are committed in this country than in another' (Lucas 1827: 176).

In our own time, the Nordic countries are often used as positive foils for criminal justice policy reforms. They are depicted as a paradise of humane and rational criminal policy. In contrast, the mass incarceration of the US serves as a negative foil for comparisons supporting penal moderation. In the 1820s, when systematic data assets were first applied to criminal policy arguments, the US served as the *positive foil* against which it was easy to critique one's own system. Duke de La Rochefoucauld-Liancourt summed up the role of the US as follows: the young world (the US) had received from Europe the lessons of enlightenment and penal reform, but then also served as the vanguard of implementing necessary reforms in Europe (de La Rochefoucauld-Liancourt 1819: 39). Thanks to travellers and exiles like Liancourt, the US became the great example of low criminality, penal moderation, and humane criminal justice policy for the 1820s generation. Charles Lucas wrote that since it was 'rare to encounter a poor person in the U.S.', crimes were also few (Lucas 1827: 177), with Édouard Ducpétiaux (Ducpétiaux 1827: 14) stating exactly the same idea. Another small protestant paradise was found much closer, in Geneva. Lucas described it as a 'modern Athens' that had won brilliant glory by means of its grand reforms, such as the penitentiary-type of prison aiming at personal reformation (Lucas 1827: lxiv). Like the Nordic countries in the twentieth century, the US and Geneva were small, protestant, and ethnically homogenous nations, fit for service as role models for enlightenment and penal moderation.

But if the US was the Nordic paradise of the early nineteenth century, what area was used as the 'bad foil', like the US of our own time? This was, at least until the 1820s, England with its 'bloody code'. English harshness was used as a foil by both English reformers and observers abroad. In the discourse of the emerging criminology and criminal justice research, that code was a living fossil, the 'medieval' foil against which progressive policies were illuminated as virtuous advances of civilization. A review of the

penal law reform of Louisiana praised its progressive spirit, contrasting it with the ‘scandal’ and the ‘absurd medieval rigour’ of the English penal code (*Le Globe* 16 June 1825). Charles Lucas described England as the ‘country separated from civilization by its old and monstrous penal legislation, as it is from the continent by the ocean which surrounds it’ (Lucas 1827: 361). The analysis was shared among reformers in England, comparing English and French capital punishment records and penal laws. Making empirical claims about crime impacts, MacIntosh said in 1822 that ‘France had escaped the fatal increase of crime which had been witnessed in England’ and explained this by ‘her improved criminal code’ (HC Deb 4 June 1822).<sup>1</sup> The challenge of draconian laws was more in the impossibility to implement them rather than in their barbarism, since the mores of the people did not support reporting crimes or convicting suspects.

The foil argument is flexible. One does not have to find a foil in the current world: one can also find one in the past. Thus, in continental criminology and criminal justice circles, the foil could be found in one’s own country, from its past of ‘medieval barbarism’ (Lucas 1827: xxxvi). The discourse on barbarism of penalties was linked to a recurring theme of increasing civilization, the very topic whose testing inspired the rise of modern national criminal justice statistics.

## Mildening of manners and mores

At the time when data-driven criminology emerged, western culture was seen as increasingly ‘gentle’ (*doux*). This sentiment extended to punishments. There was a general sense among liberal elites that people’s opinions and actions were becoming gentler (*adoucir*) and less condemning. The people who were ready to use the newly emerging crime statistics understood themselves as riding a tide of civilization and increasing mildness of manners and mores. The fight against the death penalty was the clearest example of this movement. This sentiment was so strong that it permeated popular culture and high art. The young novelist Victor Hugo published in 1829 a novel on ‘the last day of a condemned man’. In 1831, his popular novel *Notre-Dame of Paris*, set in medieval times, educated readers about the brutality of repressive justice: ‘we have not yet . . . given up this tradition

<sup>1</sup> House of Commons debates accessed at <https://api.parliament.uk/historic-hansard/index.html>, accessed 25 March 2024.

of the gaol and the chain-gang, which we, a *gentle, civilized and humane* people, still keep alive' (Hugo 2004 [1831]: 221, emphasis added).

The first data criminologists largely shared Hugo's point. The Genevan law professor Pellegrino Rossi wrote in his 1829 book *Traité du droit pénal* that branding and pillory were 'stains' which would disappear from the penal law of France, a nation '*dont les mœurs sont si douces et la civilisation si fortement progressive*' (Rossi 1829a: 44–5, 56). While Rossi was talking about branding and pillory, the argument was general: penal moderation was increasing because people's sensitivities were changing. People were increasingly sensitive, manifesting an aversion to violence and brutality (Lucas 1827: 350–79). The English draconian penal code was the strange laggard, or the needed contrast, in this process. It produced higher crime rates than the comparative penal moderation in France.

The increasingly sensitive culture was directly connected to criminal justice-related thinking via the dilemma of the reluctant juror. It was argued that when penal law was too severe, jurors preferred to acquit defendants rather than see them too seriously punished. Inspired by moral or religious sensibility, jurors were reluctant to send their fellow human beings to the scaffold (Lucas 1827: lxxv). Increasing, at least since the mid-eighteenth century (Ignatieff 1989: 19), this effect has been observed in modern quantitative research using historical sentencing data from England: excessive harshness reduced the sentencing willingness of jurors (Bindler & Hjalmarsson 2018). In the progressive criminal justice discourse surrounding the birth of criminology, the popular tendency towards leniency was seen to penetrate all levels of societal reaction (see also Ignatieff 1989: 19–20). Witnesses were reluctant to report crimes if they believed that the punishment was too severe, the authorities were reluctant to register cases, and the courts were hesitant to convict. The citizen reluctant to punish was thus seen as the product of the civilizing process. Criminal justice policy could build on this trend by allowing more discretion for jurors and judges (as in the 1832 reform of French penal law), while the data could then be used to describe and assess the results. Jean Arondeau (1842) showed that repression had become more efficient (fewer acquittals after the reform) while penal sanctions had become less severe.

For Lucas, the new sensitivity and gentleness of civilized nations were linked to what he saw as a violence drop. Reducing penalties was compensated by increasing certainty of punishment, as reporting and sentencing propensity increased, making criminal justice and general deterrence more effective. This in turn was reducing violent and serious property crimes,

spiralling into a perceived crime drop (Lucas 1828: lxii). It was a good cycle of criminal justice reform and decreasing crime. Indeed, the birth of data criminology was partially connected to the first crime drop debate in a civilizing theory frame. Lucas thought he saw evidence of decreasing violence, partially hidden by the rise of petty theft reflecting the new wealth of mass-produced consumer goods.

The perceived sensibility and reluctance to punish were social and behavioural phenomena that could be measured with the new data. The percentage of those accused who were condemned became a typical operationalization of sensibility, as exemplified by Quetelet's analysis of factors influencing sentencing (see pages 133–135). Indeed, when we speak of the isomorphism assumption of the first criminologists, we tend to think of whether control statistics captured any real behavioural criminal patterns. But the *Compte* and its followers were not only a measure of crime, as they also measured factors impacting criminal justice, as well as the kind of factors we sometimes call 'extra-legal'. The sensibilities of victims, witnesses, prosecutors, and jurors were seen as social facts, 'out there' in the world, reflecting and causing meaningful non-random variation in administrative judicial data. This also meant that users of the instruments needed to factor in control sensitivities when trying to reach conclusions about crime. Furthermore, the sensitivity perception and the foil argument in time against medieval barbarism suggest that the driving force of the first criminology was not fear of crime but, rather, fear of excessive punishments. Data meant that the foil (comparison) and the halo (correlation) perspectives started to evolve from rhetorical devices into research hypotheses.

## Preventive justice

During the Revolution, the French state became a project to 'change the man', or to 'create a new man' (Rosanvallon 1990: 118–27). Political attention was drawn to all kinds of institutions that could be used to this effect. Three levels appear relevant: general welfare, education, and criminal justice itself, in that order, from more general conditions of life to education and finally the law itself. These made the Beccarian dictum—that it is better to prevent crimes than to punish them—concrete. After the *Compte* was published, two young lawyers Charles Lucas and Édouard Ducpétiaux published major works combining these dimensions under the banner of preventive justice. Preventive justice was based on improving welfare and

increasing education. Only by such means could the state remove the motivation for crime. Criminal justice was a residual means of dealing with crime; it was need insofar as welfare policies and education were not totally effective (Lucas 1827: 161). Basically, Lucas and Ducpétiaux formulated the doctrine that crime prevention should address the 'root causes' of crime by social and educational policy. They did this with an enthusiastic reception of national crime data. By modern standards, they did not analyse hypotheses of crime causation. Yet the fact that crime varied empirically even though penal law was the same supported the notion that prevention should target the non-judicial drivers of crime.

Preventive justice built on the claim that the morality of a people was based on their welfare and enlightenment (Ducpétiaux 1827: 13). Social welfare and educational policies were therefore seen as the best means of preventing crime. To support this position, Ducpétiaux referred to crime statistics, showing that the famine of 1816–17 increased crime. The increase was largely due to property crime, as people were stealing to have something to eat (p. 14). Some years later, Moreau-Christophe argued that society should prevent crime by acting on its causes. To the degree that welfare rose, crime tendencies would fall (Moreau-Christophe 1838: 197–8). For these writers, crime data lifted the poverty–crime link and the education–crime link from the sphere of speculation and systems to empirically researchable hypothesis. They were prone to see in early data a corroboration of the causal chain.

With welfare and affluence, education was the other major means of changing people. In the early nineteenth century, the so-called Lancastrian model of education, also known as mutual education or simply the 'English model', was popular in philanthropist circles. Joseph Lancaster was an English educational reformer who created the notion of 'mutual education'. This system was based on older pupils teaching the younger, with a strict moral monitoring dimension. The system had obvious economic advantages, underscored by many of its advocates. Many youths could be educated relatively cheaply by making pupils teach one another. The Lancaster system was well received in France during the Restoration period. In 1815, the prison reformer the Duke of Liancourt participated in the creation of a special association for the promotion of primary education, the *Société pour l'instruction élémentaire*, which supported the use of the Lancastrian model (de La Rochefoucauld-Liancourt et al 1980: 333–4). To assist in

that work, Liancourt translated Lancaster's treatise into French (de La Rochefoucauld-Liancourt 1815).

At the same time, the future key planner of national crime statistics, Jacques Guerry de Champneuf, became active as a popular education activist, inspired by the Lancastrian system of mutual education. In 1817, while serving as a prosecutor in Poitiers, he was involved in creating a local branch of the society for the promotion of elementary education. Related to this activity, he participated in setting up a larger school based on the mutual education model under the auspices of the society. A twelve-year-old child called Orange was sent from Paris to serve as the first monitoring student for the new school (Anon 1817). National crime statistics became the other big project for Champneuf. From 1827, the data were immediately used by scholars interested in the education-crime link, with interests spreading beyond France. The 'lost map' of Charles Dupin allegedly compared the prevalence of recorded crime, as measured by the *Compte*, with the advance of Lancastrian schooling. From this point of view, the project to create national crime statistics was a means of making the effects of civilization (popular instruction) on crime visible.

Once welfare and education were defined as key methods of criminal justice policy, repressive justice became secondary. It was often dysfunctional; it could increase rather than decrease social disorder. Both Lucas and Ducpétiaux discussed an argument that became extremely central in the third data revolution of criminology: since many crimes evaded detection, repressive justice was impotent. It should therefore be the last recourse when everything else had failed. Ducpétiaux compared penal reactions to a surgeon for whom amputation was the last resort (Ducpétiaux 1827: 4). He then added to philosophical arguments an entirely new weapon: the national crime statistics provided by the *Compte général*. There he detected offences that could be eradicated by decriminalization, such as usury and bigamy. He diagnosed elevated crime rates in border areas and explained them as the product of excessive prohibitions and customs regulations, which demoralized the people who resorted to smuggling. These examples show that the state itself can create crimes which can be prevented by decriminalization (pp. 11–12; also Lucas 1827, xx–xxi).

The critique of penal harshness often referred to the counterproductive effects of severity. Punishments were defined as the last recourse. And even for penal sanctions, their capability to reform offenders became a



central concern. As with school reform, prison reform was a means of 'creating a new man' in the spirit of Enlightenment environmentalism. The themes of education and prison were also intertwined as moves to develop the education of prisoners. The mutual education model was applied in disciplinary institutions, including prison, advocated by the prison reformer Benjamin Appert (de La Rochefoucauld et al 1980: 335). Appert has the rare distinction of appearing in a cameo role in Stendhal's *The Red and the Black* (Stendhal 2009 [1830]: 9–10), a fact showing the cultural salience of malleability institutions like the prison and the school during the era when first criminology was born. Again, satire reveals that a cultural current has become hegemonic: the young criminologists Beaumont and Tocqueville (1833: 89) used the concept of mutual education to refer to criminals teaching crime to other criminals in prisons.

## Prison reform

Before the Restoration era, carceral institutions often housed all kinds of people, ranging from the poor and the infirm to criminals. All kinds of offenders, young and old, males and females, first timers and reoffenders, could associate with one another. Punishments were often intended to be public, or to communicate the essence of the crime to invoke fear in the audience of the spectacle. Executions, branding, pillory, or the use of 'chain gangs' for prisoner transportation, reflected such publicity. In contrast to these practices, a new ideal of a sequestered and specialized prison model was slowly emerging from the end of the eighteenth century. The new model separated different categories of prisoners from one another. The young should be kept separate from the old. Males and females should have their own quarters. The first timers and recidivists were to be kept separate (Ignatieff 1989).

The move from the general to the specialized prison was justified by empirical observations on crime causation. The old model was bad because it gave free rein to learning processes causing crime. The old taught the young, and the recidivists taught the first timers the values and techniques supporting continued crime careers. The various versions of the new prison concept tried to break these cycles of learning by means of individual cells and silence. It was believed that, under such conditions, prisoners would reform themselves and desist from crime when freed. Thus, the old general prison regime served as a laboratory and observatory of crime causation,

rather than the new regime. The new prison was designed to *switch off* crime causation processes. These processes were eminently social and learned.

## Liancourt descending to Hell . . .

François Alexandre Frédéric de La Rochefoucauld, Duke of Liancourt, is best known to posterity for his curt exchange with King Louis XVI in July 1789. The king asked, is this a mutiny? To this, Liancourt responded: '*Non, Sire, ce n'est pas une grande révolte, c'est une révolution*' (Bourquin 2007). During the Revolution, the Constitutional Assembly commissioned Liancourt to lead the committee on vagrancy and poor-houses (Comité de mendicité). In this role, he visited and witnessed the early modern concept of the 'General Hospital', an institutional archipelago housing all kinds of society's marginalized: the poor, the old, the sick, and the criminal.

The mixing of young first-time offenders with experienced criminals corrupted the young who should have been protected rather than destined for crime. In his report, Liancourt used the concept of *misérables* for experienced criminals. They were the schoolmasters of the school of vice and crimes, corrupting the young placed in their midst, predestining the young inmates to a life of crime. Prisons did not teach the inmates to do honest work, they only 'infected' them with vice, imprinting them with the label of criminal (de La Rochefoucauld-Liancourt 1790: 48–52, 92). Having listed all the pathologies of the confining institutions, Liancourt summarized his view with the lofty dictum: punishment which does not heal is absurd, and punishment which corrupts is criminal itself (p. 81).

The method of the committee inquiry rested primarily on prison visitation, a frequent activity among Enlightenment philosophers wishing to ground their reform efforts in empirical observations. Just a few years before Liancourt, the young English lawyer Samuel Romilly had visited the Bicêtre prison and published a scathing critique of the general prison model, supported by the politician Mirabeau. Romilly's direct contact with continental Enlightenment, coupled with a preference for piecemeal reform and the long-standing tradition of criminal 'returns', would later make him an advocate of data-based criminal justice policy (Chapter 9). Similarly, examining the old general prison regime, Liancourt was seeing learning-related crime causation processes, triggered by the mixing of different types of prisoners.

## ... and witnessing a Northern paradise

The role of criminal justice reformer was thrust upon Liancourt by revolutionary events. The study of prisons would become his lifetime interest (de La Rochefoucauld et al 1980: 329–32). As a moderate constitutional royalist, he tried to protect the king, and then had to emigrate as the revolution became increasingly radical. Via England, he arrived in Philadelphia in November 1794. At that time, Philadelphia was the US capital, and hosted a large French refugee community. The French cultural influence was very strong due to the American Revolutionary War, in which France had sided with the Americans against the British colonial power. French culture enjoyed a particular prestige in Philadelphia circles as a source of social distinction (Furstenberg 2014).

Philadelphia provided a unique opportunity for Liancourt to study the new type of prison that was being launched in Pennsylvania. He may have engaged in such studies out of the boredom of exile, but on the other hand he was already a prison expert due to his work in the poverty committee. For him, the Philadelphia prison reforms heralded a new age of human criminal justice. Whereas Nordic scholars are today often invited to the US to exemplify penal moderation, and even to build a Nordic prison in the US,<sup>2</sup> Europeans 200 years ago travelled to the US to learn and admire the penal moderation of the new republic, hoping to build US prisons in Europe. They admired the radical new *douceur*, gentleness, of US criminal justice (Furstenberg 2014: 118–19). Liancourt's treatise *Des prisons de Philadelphie* was published in 1796 in French and in English, reaching its fourth edition in 1819 (de La Rochefoucauld-Liancourt 1819).<sup>3</sup> The English edition of 1796 was named *A Comparative View of Mild and Sanguinary Laws; and the Good Effects of the Former, Exhibited in the Present Economy of the Prisons of Philadelphia*. The title itself summarizes the constellation, capturing a move towards mildness from excessive penal reactions, and the use of punitive laws as comparative foils.

The prison experiment report starts with a radical new theme. John Howard is praised as a philanthropic 'visionary' (de La Rochefoucauld-Liancourt 1819: 1). But would his thoughts stand the test of empirical reality? This question frames Liancourt's essay. The general Beccarian–Howardian

<sup>2</sup> See Andersen (2022) on the Scandinavian Prison Project. Appropriately, the 'Little Scandinavia' prison unit is located near Philadelphia.

<sup>3</sup> The citations below refer to the 1819 edition.

intention is clear from the outset, but is there data to support the efficacy of prison reform? Can the penitentiary really capitalize on human malleability to change the prisoner? Liancourt was putting the vague theories of Enlightenment critics to the test. From now on, policy reform should be based on empirical analysis of prior experiences (p. xviii). It showcased how data analysis could be linked to reform goals.

Liancourt repeated his earlier observation that prisons are ‘schools of crime’, hotbeds of learning processes (p. xiii). Yet, this learning dimension harboured a unique possibility: prisons could be transformed to make ‘new men’ out of depraved criminals (p. xiv). Before 1790, before the reform,<sup>4</sup> Philadelphia prisons were disorderly places, allowing many kinds of merriment and pleasure for the inmates. Prisoners worked in chain gangs in public places, causing further disorder. Liancourt contrasted the *old* type of prisons, which he knew from France, with the rational post-reform prison of Philadelphia which was based on solitary confinement as a goal (p. 32). Throughout, he underscored that making prisons desistance-oriented did not make them more appealing to criminals. Rather, the modern solitary and silent prison was more austere and harder than the carnival of old prison types (pp. xviii, xix). The US penitentiary system was an ideal type to be contrasted with the old system, still prevalent in Europe.

Liancourt pointed out that making criminal law less severe could make law enforcement more certain, because jurors often acquitted suspects to avoid sentencing felt to be too hard (pp. xxiii, 30–1). Writing a new afterword in Amsterdam in 1798, Liancourt generalized this lesson by saying that excessive severity of punishment reduced the efficacy of social control in all stages from crime reporting to sentencing (pp. 66–7). Draconian laws made law ineffective. The move to abolish the glaring penal excesses was thus also a move to make criminal justice more effective; it was a call for a ‘crackdown’. Liancourt called the Pennsylvanian reforms ‘severe, even terrible, but just and humane’ (p. 39).

To those who would accuse him of being too lenient, he exclaimed: is it a problem to be lenient, if this yields greater good to society, the only goal worthy of civilized countries (p. 30). In expressing these opinions and contrasting draconian English repression with the republican virtue of the US, Liancourt was repeating the criminal policy views of continental enlightened circles, prevalent since the 1750s at least. But then he added something

<sup>4</sup> For a description of the reform legislation, see Shapiro (2019).

that was new by attempting an empirical assessment of the Philadelphia reforms. Using a *pre- and post-measurement design*, he showed how recidivism declined with the advent of new criminal policy (p. 51). It is uncertain how accurate his figures were and where they came from. Also, their temporal fit to legal reform (Shapiro 2019) is not ideal. Later Beaumont and Tocqueville (1833: 120) critiqued Liancourt's policy effect as too swift because the condemned were still in prison when the alleged crime-reducing effect was seen. So, it was unlikely to reflect rehabilitation (special deterrence) but could reflect general deterrence or incapacitation. Even though Liancourt's comparison has flaws, the comparative table he published was a *paradigmatic exemplar* on how criminal justice policy should be evaluated.

Since Liancourt published the comparison based on data, the critical discussion became anchored in recalcitrant data. In the 1798 Amsterdam appendix, Liancourt explicated the revolutionary implications of his work from the point of view of what counts as evidence. We love, he wrote, to proclaim the authority of Beccaria. But the Pennsylvania reforms made his authority superfluous by offering an empirical test and evidence for the new criminal justice policy, open to all to examine (de La Rochefoucauld-Liancourt 1819: 67). Like so many first developers of empirical crime analysis, he contrasted 'principles' and 'evidence'. The crackdown through mildness worked to reduce crime.

Liancourt's analysis of what works was based on comparing recorded crimes before and after the reform. To this data-based evaluation he added reflections on crime causation that combined learning and strain theories. His learning perspective combined negative and positive learning. The negative learning processes were observed in the old prison models with mixed populations triggering the learning of vice and crime in prisons and outside them. To this, he added a more formal layer of education. He observed that most crimes were committed by uneducated people. He also suggested that countries high on education were low on crime, citing the US and Scotland as good examples, and comparisons across the US states. Again, England was the bad example of criminal policy. Increasing education was the only means of reducing crime (pp. 46–7). Another root cause of crime was the possibility for upward social mobility. In the US, he wrote, it was easy for hard-working men to become affluent, there was no frustration of ambitions by a rigid social order. People with individual-level propensity to crime could find lawful outlets for their energies (pp. 41, 47). Conversely, crime was caused by blocked chances of improving one's lot.

Liancourt saw crime causation as relevant for the assessment of criminal policy. Context mattered. Because of societal differences, lessons from the US could not be easily transferred to Europe. Yet he also suggested that criminal justice policy impacted human behaviour, as shown by his empirical analysis of the new penal system of Pennsylvania. The Pennsylvania policy changes combined penal law changes and prison reform; it was a policy package. The new world was thus showing the way for Europe in more rational and humane criminal policy. Regarding France, Liancourt lamented that political instability and lack of funding were forestalling the implementation of reforms the necessity for which was well known (pp. ix–x, 39).

## Beaumont–Tocqueville expedition

In the autumn of 1830, two young French lawyers, Gustave de Beaumont and Alexis de Tocqueville, applied for funding from the French interior ministry to make a fact-finding mission to the US. The aim of the mission: to study the new US penitentiary system. For the applicants, the interest in prisons may have been a pretext to get the funding (Perrot 2001: 109–10). While this anecdote may be too good to be true, it is telling that they chose prisons as a pretext. Prison reform was high on the cultural and political agenda, and a central topic of intellectual debates. Exertion of coercive and transformative power through education and new prison types was the cutting-age technology appealing to a centralizing state.

Having been successful in securing the grant, the two friends made a tour of US prisons. Based on this fact-finding mission, in 1833 they published a report titled *Du Système pénitentiaire aux États-Unis et de son application en France*.<sup>5</sup> At the core of the report on the penitentiary system was a reform of prisons in Pennsylvania and New York from the 1790s. The analysis largely built on the pre-data personal travel and visitation paradigm, but it also drew from statistical facts. These were factored in through prior work by Liancourt and Lucas, and by additional data analyses.

Beaumont and Tocqueville created two ideal types of prison organization to work on this linkage: the old prison system and the new penitentiary system. The old system was based on collective incarceration mixing

<sup>5</sup> The creation of this report, and the respective roles of the two authors, as well as its public reception, have been described in detail by Michelle Perrot (2001: 125–33).

all kinds of offenders: the young and the old, those who had committed serious and non-serious crimes, and even multiple genders could be housed in a joint institution. In contrast to this, the new penitentiary system was based on separate cells, solitude at night and silence during the day, and the separation of different types of prisoners. The old system was also characterized by a lack of working duties and lax discipline. Prisons could be subcontracted to jailers who ran them as firms, selling goods to inmates, and a workforce to other firms. As a result, the old system was a confusion of 'ages and moralities' (Beaumont & Tocqueville 1833: 26–8). This in turn triggered learning processes. The more criminally experienced taught the less experienced, never the other way round (p. 41). 'Mutual contagion' and 'mutual teaching' was based on communication between offenders, which was a determining cause (*cause inévitable*) of their criminal behaviour (pp. 40, 43, 89). The influence of offenders on one another emerged stubbornly from contact; even one 'consummate criminal', if seen and heard, triggered others to model themselves after him (p. 89).

The penitentiary system was thus fundamentally an application of the learning theory of crime. When its effects could be evaluated, learning theory would also be tested. The federal structure of the US created a good basis to assess this because the states were not similar in terms of prisons: some had reformed to a variant of the penitentiary system, while others still used the old 'European' system (p. 26). This variation enabled the French criminologists to study how the US aimed to achieve the amelioration of the prison (p. 36). In this overall scheme, the different sub-schools of the new penitentiary discipline (Auburn vs Philadelphia) were interesting but secondary to the big picture of comparing the new system with the old 'European model'.

## Using numbers in evaluation

The bulk of Beaumont and Tocqueville's analysis was based on qualitative data. They referred to their own observations, and to interviews with prison and shelter directors. Having done this, they asked if their qualitative observations could be corroborated with numbers. Had the number of crimes increased or decreased after the penitentiary system was created? They noted that quantitative data is very difficult to find for the US, due to different jurisdictions having different assets in this regard (pp. 109–10). They offered an in-depth discussion of the validity problems of official statistics.

They also taught the reader to pay attention to population sizes and population compositions in assessing crime rates. Stable absolute levels could yield increasing or decreasing crime rates depending on population trends. The composition of the population was also a challenge to the interpreter of statistics. Going through the causes of crime such as industrial cycles, lack of social ties in migratory populations, and the disbanding of armies (pp. 112–17),<sup>6</sup> they concluded that the prison system had little if any influence on the prevalence of crime in the general population. They thus offered empirical support for the futility argument, which would be influential in criminal justice policy doctrines until our own times.

Yet the prison system, if changed, might not be entirely futile after all. Due to the lack of a prison–crime connection, Tocqueville and Beaumont directed attention to recidivism as the gold standard of prison-effects research. In this, they departed from utopian ideas of genuinely shaping the souls of the convicts. True inner reform was elusive, and they advised the politicians and prisons to settle for external conforming behaviour as the goal (pp. 104–6). In analysis, Beaumont and Tocqueville found that rates of recidivism were lower in the new penitentiary system when compared to the old prison model (pp. 121–2). Similarly, the New York youth shelters seemed to be effective in the social integration of ex-inmates (p. 216). These empirical results were consistent with theory. The new system appears to have succeeded in breaking learning processes, giving efficacy proof for the system and validation for the theory.

## The Auburn survey

Beaumont and Tocqueville were aware that crime statistics excluded a large segment of offences. Conviction statistics were based on recorded crimes (*crimes constatés*) rather than on committed crimes (*crimes commis*). The craft of trend interpretation should always consider the rate of recorded crimes out of all crimes (p. 116). Hidden crime was a challenge to trend specification, but also to effects evaluation. Regarding recidivism, they discussed a novel source of validity and effects estimation, the survey conducted by Gershom Powers in 1826 (Powers 1828). He had tried to measure

<sup>6</sup> They offered a long footnote discussing the potential criminogenic effects of education. The core mechanism was that education increased economic activity and, through that, increased opportunities for crime (Beaumont & Tocqueville 1833: 114–15).



the hidden crimes of convicts released from Auburn penitentiary. His survey could be called a proxy survey, as he sent queries to postmasters, sheriffs, and district attorneys to inquire about the behaviour of ex-convicts in their localities (Powers 1828; Beaumont & Tocqueville 1833: 289). The purpose of the Auburn survey was to assess the effects of detention, that is, what is today often called special deterrence.

As reported by Beaumont and Tocqueville (1833: 122), 30 per cent of the releases had committed some immoral or criminal acts. Powers himself reported a more nuanced distribution. Out of the 30 per cent who had relapsed, twelve were 'somewhat reformed', two were 'not much improved', two 'suspicious characters', and two 'deranged', while twenty-six (16 per cent) were 'decidedly bad' (Powers 1828: 71).

The Auburn proxy survey is the earliest known attempt to bypass recorded crimes in crime measurement. It took place more than a century before the third data revolution of criminology, when Sutherland and Porterfield harnessed population surveys into the service of criminology from the 1930s (Kivivuori 2011). Of course, since the respondents were officials, the survey was not independent from state government. Yet the information given by respondents was not only about 'recorded crime'. Thus, the Auburn survey can be seen as a hybrid in the continuum of official information and hidden crime surveys. As with official statistics, Beaumont and Tocqueville discussed the validity threats in such an informant-based or proxy survey. They observed that the reports by postmasters and other local officials could be influenced by other motives than a willingness to reveal the truth. Willingness to help the ex-cons, or fear of them, could propel the informants to hide their knowledge about criminal activity (Beaumont & Tocqueville 1833: 289). Noting the validity threats involved in this new method, they nevertheless saw the results of the Powers survey as consistent with other data, supporting the relative efficacy of the penitentiary system—and thus, indirectly, the learning theory of crime.

## The cost perspective

The cost perspective to crime and its control was in the air. It was so common as to become an object of satire, as in Balzac's crime prevention manual (Balzac 2015 [1825]). There Balzac counted the cost of the criminal justice system and suggested that it would be more economical to give the sum directly to the criminals, to buy them off from crime. This satire

reflected real concerns among the administrative elites and first data-based criminologists regarding the monetary cost of crime and its control. It was widely conceived as cheaper for the state to prevent than to punish crimes; by investing in prevention, the costs of penal repression would go down (Lucas 1828: iii).

Charles Lucas took the matter seriously and presented an economic argument in favour of this approach, suggesting that it would be less expensive to prevent crimes than to punish them (Lucas 1828). He classified the costs of crime into three major categories: direct crime damages, the costs of control, and the costs of recidivism. He also called for cost–benefit analysis (*calcul comparatif*) contrasting crime prevention and repressive law (p. iv). He argued that harsh criminal justice was not only ineffective and counterproductive, but expensive as well. Lucas was particularly optimistic about the positive outcomes of education and recommended educational measures for young delinquents. This would, he argued, reduce the costs of the repressive criminal justice system (pp. 117–19).

The director of the *Compte* project, Guerry de Champneuf, is reported to have used the concept ‘*moral budget*’ to denote the dataset of national crime statistics (Yvernès 1887; Rosanvallon 1990: 40). Quetelet used the budget metaphor to highlight the stability of crime numbers year after year. He referred to the constant influx of people to the scaffold and to the prisons—which was even more stable than the actual state budget (Quetelet 1984 [1831]: 19). Crime followed similar regularities as the laws that governed natural phenomena. Celestial mechanics had correspondence in human affairs (Beirne 1987: 1150, 1153). André-Michel Guerry used a different variant of this theme: he compared the comparative constancy of crime across parts of France to annual harvest and tax yields (Guerry 2002 [1833]: 11–15). In his last book, Guerry wrote that crime statistics were for the moral order what the budget was for the material order (Guerry 1864: IV).

The budget and cost perspective of early criminologists reflects the close connection of crime data with state activities and state data collection, an innovation taking place in the context of consolidating the fiscal–military state (Greenfield 2022) and attempts towards a European security order (De Graaf 2020). When the first criminologists looked at their statistical tables of crime, ‘taxes’ and ‘budgets’ came to their mind as more familiar metaphors which could be used for two purposes. First, these metaphors underscored the recalcitrance of crime data; it was not something that an individual scholar could construe. Second, it was a means of arguing for prevention policies other than the criminal justice system.

The grand conclusion drawn by Beaumont and Tocqueville from their analyses was clear: the trends and variations of crime were very difficult (but not impossible) to change by means of criminal justice policy. The social processes unfolding beyond human projects were more powerful. This vision was also driving the work of Quetelet. He raised the criminal justice system itself as the target of empirical investigation. It too could be driven by other factors than law in books.

## Empirical study of criminal justice

The sixth edition of the *Dictionnaire de l'Académie française*, published in 1835, included a new concept: repression. The explication of the word was short: repression meant '*action de réprimer*', and as one salient example, '*la répression des crimes, des délits, des abus*'. Thus, the meaning of the word focused heavily on the criminal justice system. Was it a coincidence that the word was included in the dictionary after the rise of first criminology and a huge upsurge of empirical crime and criminal justice research? The first group of data-driven criminologists had, after all, operationalized repression by referring to the newly available national crime statistics. Like crime itself, penal concepts such as certainty of sanction moved from the world of vague theories and moral philosophies to the realm of empirical social science.

## Evaluating official control

The Champneuf team at the Ministry of Justice designed the *Compte* as a means of studying and improving criminal justice, not only as a resource for theoretical criminology. The team tackled this research frontier through two main topics: recidivism and evaluation of criminal justice reforms.

Recidivism data was created by linking judicial statistics with penal statistics from the interior and naval ministries (*Compte général* 1836: v). The idea was to compare the recidivism of ex-convicts released from different types of institutions and specific prisons. Recidivism rates were high and increasing, yet the team was careful in interpreting the findings. They factored in legal changes artificially boosting recidivism (p. xxv). In studying repression, the ministry team was not naïve about the legally construed nature of their data while still seeing the data as also reflecting behavioural

phenomena. This compromise created what can be called the standard ministerial interpretive frame of crime statistics, with a heavy emphasis on the role of legal changes and reporting propensity, combined with the notion that behavioural factors also played a role (Arondeau 1842). The knowledge derived from the statistics was seen as reflecting 'rigorous exactitude' (*Compte général* 1836: xix).

As years were added to the cumulative database, the ministerial team was able to evaluate criminal justice reforms. In 1831, they used a pre- and post-design in examining the effect of the law of 1827 which expanded the social base of juries. The *Compte* aggregated three pre-reform years and three post-reform years and witnessed a decrease in the application of severe punishments (*Compte général* 1831: xii–xiii). Thus, the widening popular base of criminal justice led to leniency. In 1836, the team was ready to evaluate a law expanding the use of attenuating circumstances in 1832. This further increased the share of lenient punishments (*Compte général* 1836: xiv–xv). In both evaluations, the percentage of the acquitted out of the accused was being used as an operational measure of 'repression'. Duke de la Rochefoucauld-Liancourt had used a pre- and post-reform design for the empirical evaluation of Pennsylvanian criminal justice reforms much earlier in the 1790s, but his data was much less uniform and robust, and possibly of questionable provenance.

Taken together, the findings of the ministry team were consistent with a general change of penal culture towards increasing mildness, impacting both legal reforms and juror behaviour. Yet the increasing 'gentleness' was not the whole picture. At the same time, those accused *in absentia* were becoming fewer, a fact interpreted as measuring increasing police efficiency (*Compte général* 1836: xviii). This combination of lessened severity and increased certainty was exactly what the Beccaria-inspired criminal law reformers wanted. Criminology as a data-driven social science emerged in the decade 1825–35 to witness and boost a unique change in the penal constellation: the shift from severity to certainty.

## Exploring unintended variation

Quetelet's *Sur l'homme* was published in the same year, 1835, when the concept of 'repression' emerged in the Dictionary. In that book, he used the cutting-edge data asset of criminology, especially the *Compte*, for the empirical study of official social control. His take on the domain of control

differed from the approach of Lucas and Ducpétiaux, who had strong criminal policy goals chosen before the analysis. Lucas appears to have been at times confused regarding the relation of principles and facts. He could write about the principles of his preventive justice doctrine and then add that what remained was to use the 'official and irresistible language of numbers' to confirm the 'truth of these principles' (Lucas 1827: xlv). He recognized that numbers are the language of power, but threads close to confirmation bias, that is, using data to prove a moral point.

Quetelet, in contrast, set out to examine social variation in the intensity of control with the data from the *Compte*. He wanted to 'examine if any general causes exist which modify the repression of crime' without preconceived doctrines to prove. He used the concept of repression to denote 'the severity with which the guilty are punished' (Quetelet 2013 [1842]: 103). His core research aims thus diverged from the ones taken by the ministry team. The ministry evaluated the official and intended goals of formal control, and the effects of penal reform. Quetelet, instead, was interested in extrajudicial factors influencing penal practice. Thus, criminal justice studies emerged from the new data instrument as an evaluation of specific legal changes, and as a variable-oriented study of factors influencing human control behaviour in the courts.

Like the *Compte* team, Quetelet defined repression operationally as the percentage of the condemned out of all accused. This way, the Beccarian concept of certainty was empirically operationalized using national administrative data. This transformed how the problem of 'reluctant jurors' and increasing sensitivity could be studied and discussed. The new data instrument made the eighteenth-century 'classicist' doctrines researchable with systematically collected data. However, the results additionally suggested that other factors than crime itself could influence control reactions. Quetelet found that the severity of penal reaction was linked to several social characteristics. Women, the highly educated, those who were literate, and those who were over thirty years of age were treated more leniently than others. Quetelet inferred that high education stood for affluence regarding its effect on repression (Quetelet 2013 [1842]: 104). Other more situational factors increasing the likelihood of mild sanction were committing a crime against persons and attending the trial (not being tried *in absentia*). Why was violence treated more mildly than property offending? Quetelet interpreted this from the perspective of increasing mildness of manners and mores. The main cause of the differential was that 'we are averse to apply punishment when it . . . appears severe in proportion to

the crime,' something that was apparently perceived in the case of violent offences (p. 104). The English translator of *On Man* added a footnote that Quetelet supported the criminal law reformers, according to whom severe punishment led to the escape of criminals, as people were reluctant to apply severe punishments. Making law more civilized was a way of making it more effective.

Quetelet also observed a temporal easing of repression, attributing this to a broader popular base of jury duty selection processes. The more widely selected juries were more prone to penal moderation (p. 105). Revolutionary processes were also relevant. He pointed out that a similar easing of penal severity had also taken place in Belgium, with its own revolution in 1830. The France–Belgium comparison revealed that when the same penal law was applied with juries (as in France), the results were less harsh than when applied by judges (p. 106).

Beaumont and Tocqueville also engaged in comparative criminal justice research by contrasting Pennsylvanian prisoner rates with those found in France. Their interpretation was historical–institutional: the cultural legacy of the aristocratic–puritan settlers from Britain still made Pennsylvanian criminal justice more severe and particularly harsh towards the lower social strata (Beaumont & Tocqueville 1833: 424). Democratic polity did not necessarily or easily overcome the cultural inertia of class justice. Empirical research drawing on the critical interpretation of crime and conviction statistics was beginning to change the role of the US as a utopian foil of humane criminal justice.

# French civilization and German *Kultur*

## Introduction

Some time in the late summer of 1827, Jacques Guerry de Champneuf received a letter praising him for the great accomplishment of the *Compte*. It was sent by a colleague from Germany, Carl Joseph Anton Mittermaier, then serving as professor of law in Heidelberg. He sent his French counterpart the criminal statistics report of the Grand Duchy of Baden and asked Champneuf in turn to send the most recent issue of the *Compte*. At that time, the French crime statistics were not available in bookstores. Rather, the French government circulated the document as a gift. Mittermaier definitely appreciated the gift. In his letter to Champneuf, he praised the high quality of the *Compte*: it was the new standard against which other crime reports had to be judged (Gandon 1971: 276; see also Moses 2006). He summarized the aims of the new instrument: to deepen the understanding of penal law in action, and to help to know where improvements were most needed. Mittermaier's swift response to events in France testify to the game-changing quality of the new criminological data-producing instrument.

Yet the French and German contexts were very different. Germany was divided into multiple small states, with an increasing thrust towards central power radiating outwards from the Prussian heartland. The religious context was more pluralistic and had a strong component of Protestantism. At the deepest level, the differences pertained to what civilization itself meant. To understand this cultural conflict, it is useful to return to a classic: *Über den Prozeß der Zivilisation* (1939) by Norbert Elias. In that book, Elias explored the deep sociogenesis of the concepts of civilization and *Kultur*. The latter, quintessentially German concept of *Kultur* is better left untranslated, because it is normative and differs from the later, more anthropological and value-free notions of culture. In the *Kultur* framework, it would have been ridiculous to say that non-western peoples of the Pacific, or western

criminal gangs, had '*Kultur*' or even 'subculture', because the concept of culture was normative.

Civilization referred to external achievements of the west, like science, technology, and polished court manners. In contrast, *Kultur* stressed the internal moral and artistic qualities of the cultured person. 'Moral' referred to *Sittlichkeit*, a concept yet again difficult to translate, as the German words *sittlich* and *Sittlichkeit* range from morals to virtue and self-control in the face of temptations. The concept of *Kultur* thus had a conformist dimension, while civilization was compatible with transgressions in polite society. *Kultur* was epitomized by those from what Elias called the 'middle class intelligence stratum', such as priests and professors. There was an element of nationalism in the concept of *Kultur*. Long denigrated as barbarians, the Germans wished to show that they were 'a superior cultural force' (Leonhardt 2016: 208–9). To do this, they would disparage England as a country valuing science only insofar as it helped to build spinning jennies and other machinery (Wulf 2022: 289). The advocacy of *Kultur* over *civilization* had deep roots in the eighteenth-century German critique of the Enlightenment, especially its anti-religious aspects (Cottret & Cottret 2023: 621–4).

This culture war influenced the way crime statistics were received and used in the German states. The first French data criminologists like Dupin, Lucas, and Guerry represented the Western Civilization school, while the German criminologists Julius, Mittermaier, and (to a lesser degree) Zachariä, advocated '*Kultur*' as relevant in the understanding of crime differentials. The French hypothesis was that secular education reduced crime, while the German *Kultur* hypothesis was that only education based on religion and inner moral change could forestall crime. Basically, the Germans predicted that they would have less crime than the French; they were using France as a foil (Nelken 2015) to highlight German identity. The crucial role of the modern crime statistics was that, for the first time, crude foil rhetoric could be replaced by empirical cross-national comparisons. Paradoxically, the Germans were able to conduct comparative research because parts of Germany applied French penal law, as a vestige of Napoleonic conquest.

Composed of small states, Germany lacked political unity, which could enforce a standard grid of crime classification on behaviour. Country-level judicial statistics were created only after Otto von Bismarck established the unified German Reich in 1871. In her masterful history of German criminology, Silvana Galassi (2004) traces its origins to the 1880s, triggered



by unification and special societal conditions (see Chapter 10 for a longer discussion). However, even before that, separate states had progressed in creating crime statistics in the *Kriminaltabellen* tradition. For example, the Duchy of Baden in south-west Germany was at the vanguard, largely thanks to Mittermaier, who was impressed by the *Compte* (Reinke 1998: 116–17; Moses 2006). Related to these developments, German scholars engaged with the *Compte* and discussed its meaning in a burst of articles. While often titled as reviews of the French innovation, these texts presented deeper-going analyses and theories of crime. The notion of national crime statistics enticed Germans to engage in reflections on crime and crime control.

## Julius

Nikolaus Heinrich Julius (1783–1862) was a German scholar who contributed to the rise of prison science (*‘Gefängniß-Kunde’*) from the 1820s. Born Jewish, Julius converted to Catholicism and studied medicine in Heidelberg. In the spring of 1827, in Berlin, he lectured on prison science to a select audience including ‘leading personalities’ such as the Crown Prince of Prussia (Krebs 1974). This shows the importance of the new behaviour modification technologies through incarceration in the 1820s intellectual climate (see Chapter 6). Thinking about criminal justice was an urgent topic.

## International criminology

The year after the 1827 lectures, Julius published a book based on them under the title *Vorlesungen über die Gefängniß-Kunde*. The publication was, however, not identical to the lecture series. He added a long section about crime measurement and cross-national comparison of crime rates, signing this part in June 1828. Why did he add this? The constellation resembles what Charles Lucas did in this 1827 book on the death penalty, and the work of Ducpétiaux: they too started with a longish introductory section drawing on cutting-edge crime statistics, while the rest of the works appeared to be largely non-empirical, classical Enlightenment essays.

It is possible that Julius and Ducpétiaux both imitated the example of Lucas by joining the movement towards quantitative data-based criminology. Be that as it may, Julius’s book shows both the existence of a prior

German *Kriminaltabellen* tradition (Reinke 1998; Moses 2006) and the reception of the *Compte* as a break with the past. It was here and now that a true intellectual field or space was emerging, constituted by Julius among others. Julius knew and cited the work of Quetelet, Lucas, Dupin, and Benoiston de Chateauneuf. He combined in his work the old pre-data tradition of voyaging to witness facts with the new asset of statistics, requesting data from newly won colleagues. He was particularly influenced by a voyage to Britain, thanking Robert Peel and Patrick Colquhoun for assistance, among many others (see also Chapter 9).

There was a sense of urgency to live up to the challenge of the *Compte*, combined with a wish to criticize the French secular civilization notion. Julius referred to the newly available *Compte* as of very high quality, and a model for other countries. He only complained about the lack of data from before 1825 (Julius 1828: xxvii, xxx). He was particularly irritated that he could not examine the effects of the Revolution on crime, implicitly suggesting that such effects should be big and criminogenic. He reprinted the available French data for the years 1825–6 in detail, with a special section for gender and age patterns of crime (p. xxxv). Regarding France, he claimed that Dupin's linkage of high crime with the 'dark' south-west rural areas was based on 'political partiality', that is, the wish to link industrial progress with less crime as in a halo argument (pp. xlii–xliii).

The *Compte* was an eye-opener, a lens that changed even the past: it helped scholars such as Julius to see prior 'crime tables' as potential data for social science. While the old national tables were not created as a social science project like the French model, they were now retrospectively seen to harbour analytic potentialities. Just like within France crime rate variation could be meaningfully correlated to explanatory variables, international crime rate comparisons could capture country-level differentials in contexts and causes. Variation was interpreted under the auspices of the isomorphism assumption, pertaining even more to relations than to absolute crime rates (see Chapter 10). As a pioneering developer of this paradigm, Julius included in his international comparisons an unprecedented number of countries, including Prussia, France, parts of the United Kingdom, the Netherlands, Switzerland, Denmark, Norway, Russia, and Spain. From the US, he had fragmentary prisoner figures. He then summarized the descriptive findings in four tables of crime rates adjusted for population, reflecting the stages of the criminal justice process (accused, convicted, death penalties, executions, prisoners; see pp. xcvi–xcix). These tables uncannily combine old German Fraktur typeface with the form of modern systematic

review. As was usual at that time, crime rates were mostly counted as the number of people per one crime. The higher the figure, the lower the crime rate. The quality of the sources varied considerably, and some, such as the Russian and Spanish figures, were implausible as indices of crime. Julius did not show the same level of methodological and critical sophistication as some other first criminologists such as Pellegrino Rossi and Alphonse de Candolle. But did he nevertheless see some meaningful pattern arising from these international crime comparisons of recorded crimes, in relation to the civilization debate? The data invited him to develop theory.

## Believing, knowing, having

Julius started his reflections with a citation from the naturalist Alexander von Humboldt, stating that numbers mean little without links to ideas. Judging from the context, Julius meant by this that bare numbers of crime statistics should be placed in some explanatory or theoretical context. For him, this source of theoretical meaning was the debate on the moral consequences of human progress (pp. c–ci). Does it increase or decrease crime? To make sense of the complexity of the crime data, Julius disaggregated both the predictor and the outcome. Regarding the predictor, he used two ideal types: the French concept of secular civilization and the German concept of religious *Kultur*. The French definition, taken from the first lecture of Guizot's *Cours d'histoire moderne*, equated civilization with social progress involving both civil society and the individual (Guizot 1828: 17). With this he contrasted an ethical personhood constituted by socialization in a moral tradition (Julius 1828: cxiii–cxiv).

Due to the crime statistics revolution, these concepts existed in a potentially hostile empirical environment that could refute them. While Julius denied any clear-cut positive effect of secular civilization, he did acknowledge, like Lucas, that crime type mattered. There really had been a drop in violence and homicide, while property crimes were increasing. A homicide drop was thus observed in the 1820s. This was a slowly unfolding process, but also manifested in periods of famine and price increases, when violence decreased, and theft boomed (pp. cxxi–cxxvi).

The way Julius wrote about this left little doubt about his own stance; he was in favour of religious education instead of education focusing on commerce and engineering (p. cii). He was critical of the Lancaster method of mutual education, the model advocated for by many French

first-generation criminologists. Julius saw it as an 'Asian' mass-education programme aiming at conformity, superficiality, commerce, and despotism.<sup>1</sup> This he contrasted with the German notion of cultural *Bildung*, an individual-oriented educational ideal moulding the inner spiritual qualities of personhood (p. cix). Throughout, the emergence of the interconnected criminology field was structured by reference to empirical facts of crime, and substantial difference regarding the correlations between phenomena. Julius even hinted that Dupin had been influenced by 'preconceived' preferences, a judgement enabled by the new data anchor (p. cxiii). Interestingly, he suggested that the Dupin-style progressive north vs stagnating south division could be found in all developed nations, including the UK, the US, Germany, Netherlands–Belgium, and Switzerland.

To make theoretical sense of the numbers, Julius classified crime risk factors into three categories: believing (*glauben*), knowing (*wissen*), and having (*haben*). The degree of religiosity, knowledge, and affluence determined the criminality of populations. Julius saw these tendencies as embodied in specific institutions of school, welfare, and (religious) social work (poor relief, *Armenwesen*). The crucial problem, for Julius, was that school and welfare had disconnected from religion as a result of enlightenment spreading from France (pp. ci–cii). Education was being directed to practical and occupational goals; a development inspired by new technologies such as the steam engine. This secular–technical type of progress links to names such as Liancourt and Dupin, both early crime analysts who promoted technical and vocational education, and also as a crime preventive measure. Julius thus thought that secular knowledge was not always for the good (p. cii). Education needed religious content to help inner restraint, in line with the notion of *Kultur*.

In some places in his discourse, Julius approaches some kind of institutional balance theory of his three dimensions of crime causation. Thus, the root cause of crime would be the imbalance of institutional–cohesive tendencies. He used concepts such as 'harmonious interaction' and 'balance' to argue for this (p. ciii) and wrote about the 'erroneous relationship' between the three core social control sources (p. ciii, cxxxii). In current times, the institutional anomie theory resembles this balance theory in a fully secular form. According to the institutional anomie theory, excessive market orientation can be criminogenic without balancing cohesive

<sup>1</sup> Andrew Bell, the co-founder of mutual education alongside Joseph Lancaster, was said to have adopted the method as applied in Madras, India.

sources of normative regulation. Julius saw excessive secularization and excessive marketization as criminogenic. Consistent with this, overgenerous poor relief disconnected from religious teaching and family ties could also be criminogenic (pp. cxxii–cxxiii).

These imbalance hypotheses were linked to the observation that the excessive development of the *haben* dimension could cause an increase in property crime. An increase of commerce and wealth was linked to crime via at least three mechanisms: increasing opportunities for crime, increasing ease of avoiding detection, and the loosening of pre-capitalist social ties (pp. xvi, 31–4). Consistent with this, continental governments were engaging in crime prevention (*Vorbeugung-Thätigkeit*) so that they would not need to use harsh punishments. In public–private partnerships, they were blocking and channelling crime-prone routine activities and crime attractors like festivities and fairs, especially on weekdays. Street lighting led to a decrease in robberies (pp. xxii–xxiii, cxxxiv–cxxv). Clearly, the German cultural criminology did not preclude situational crime prevention as a form of crime prevention that required good knowledge of the local traditions and customs. This type of embeddedness was for them consistent with the emphasis on the role of (religious) morality and the balance of institutions.

## Mittermaier

Carl Joseph Anton Mittermaier (1787–1867) was another German scholar who was inspired by the *Compte* to reflect on the meaning of data in research on crime and control. He is regarded as one of the pioneers of prison science (Riemer: 2005). Like Julius, Mittermaier shows that the content of that science was much broader than the prisons. Prison science was one of the many names attached to the emerging entity of criminology during the nineteenth century. It shows that equating the thing with the name is problematic, as it can potentially harm the analysis of disciplinary development.

## Medical metaphor

In 1828, Mittermaier published a lengthy article on crime statistics, motivated by the shock of reading the *Compte*. He started with a medical metaphor. A physician always ordering the same medicine for all illnesses would

be considered incompetent. The same applied to the legislator. A good legislator would know the real character of the people for whom he was legislating. Since human wisdom fails and is bound to self-deception, an empirical approach allows the legislator to assess how, in given circumstances, law impacts people, and whether it decreases crime. Crime statistics were part of a new kind of evidence- and knowledge-based criminal policy, *Criminalpolitik* (Mittermaier 1829a: 155), one that would be resistant to errors of human judgement and passions if it relied on hard facts.

Having argued that a good legislator grounds his efforts in social facts, Mittermaier turned to an extensive analysis of crime statistics. He divided his treatise on the *Compte* into two parts. In the first part, he addressed the contemporary culture conflict regarding the meaning of civilization and education. The concept of national crime statistics was inspired by the need to assess the effects of secular progress, promising to settle the matter with data. In the second part, Mittermaier offered a multifactorial account of crime. His take on the causes of crime was influenced by the recent publication of the *Compte*. He repeatedly referred to it as evidence, while also showing methodological awareness regarding the limits of inference from control statistics to behaviour. Despite validity threats, the new form of crime statistics gave the criminalists, *Criminalisten*, a means of comparing nations (p. 158). At the same time, the standardization of measurement led to the appreciation of the contextual nature of crime and reactions to crime.

Mittermaier explained the content of the *Compte* in detail to his German readers. He was particularly impressed by recidivism tables, and the high frequency of reoffending. He offered an interpretation regarding mechanisms. Ex-convicts reoffended because they had been cut off from their prior occupations, and they were blocked by the label of being ex-convicts. Rejected by legal institutions, the ex-convict resorts to 'bad teachings' learned in prison, maybe reaching out to his ex-prison mates with whom to commit crimes (p. 166). This interpretation was not unlike the one given by Schiller some fifty years earlier in the qualitative case study of a criminal career (Chapter 2).

Mittermaier saw crime as increasing in Europe and wanted to know the causes of that increase (p. 167). He divided existing explanations into four types: explanations referring to a lack of penal severity, to external societal circumstances, to the link of crime to civilization, and to lack of moral education (p. 168). In our vocabulary, these theories would correspond to deterrence, social causation, opportunity structure, and learning theories. Mittermaier was a multifactor theorist in that he saw all four as relevant.

After an extensive review of the *Compte*, Mittermaier offered a critique of isolated penal law perspective (p. 168). By this he meant the pre-statistics era of criminal policy discourse, which made unempirical claims about empirical phenomena like deterrence or rehabilitation. Now that the reality of crime was becoming visible, a good legislator should take into consideration all extra-legal factors that could forestall crime. Penal law and philosophy were diminished in stature when faced with the sheer facticity of human behaviour, as laid bare by the *Compte*. The national crime statistics detached criminal policy from armchair theories. A good legislator would understand the embeddedness of penal law on external social facts. Some of these were concrete social institutions or subsystems of society: modern civil law, effective family bonds, the existence of pluralistic non-state institutional ties (*Corporationsgeist*), and alert policing (p. 168). Since crime varied while law in books was constant, the modern crime statistics led criminologists to study what the Genevan law professor Rossi would call social facts (see Chapter 8).

## Civilization–*Kultur* controversy

In his take on the civilization–*Kultur* controversy, Mittermaier concluded that the two main opinions about the crime–education link were both erroneous. It was wrong to claim that civilization increases crime, or that it decreases crime (Mittermaier 1830b: 203). These differences of interpretation reflected conceptual confusion on the meaning of civilization. As opposed to *Kultur*, the Anglo-French secular civilization combined various excesses. Mittermaier contrasted German religious *Sittlichkeit* with the French stress on ‘social virtues’, ‘polished’ superficiality, and discussions in polite societies (Mittermaier 1829a: 173–9). In extreme cases, this translated into vice and crime as ‘the higher estates have their poisoners, patricides, testament forgers, and slanderers’. In contrast, the poor were often virtuous even if they could not read or write; with their simple morality, they did not long for sophisticated pleasures (Mittermaier 1829a: 173).

Linked to the French type of civilization was its over-politicized culture, which was criminogenic (Mittermaier 1830b: 203). In England, another aberration was seen: an excessive emphasis on monetary gains and speculation in the stock exchange was an indication of societal malaise fostering crime (Mittermaier 1830a: 221). Material affluence, technology, and secular enlightenment were thus, in excess, risk factors of crime, a notion that

brought Mittermaier close to the concept of white-collar crime. 'Property speculation' and wealth led not only to economic crime but also to mental illness, due to the excitation of financial affairs (Mittermaier 1829a: 179–180; 1830a: 221).

Secular knowledge, polite society, and facts-based school education were not bad as such, but bad when existing in excess, without balance. They needed a counterweight in moral and religious socialization (Mittermaier 1830b: 204). Like Julius, Mittermaier saw crime growing from anomic conditions brought about by an imbalance of institutions. The institutional anomie theory of present times, still strong in criminology, is a more recent version of this tradition. The first German criminologists underscored religion because religion was then a prominent vehicle of social integration. Later forms of institutional anomie theory trace their origins to Merton or even to Durkheim (Rosenfeld & Messner 2011), yet they had forerunners<sup>2</sup> in the intellectual space of the first criminologists.

## Multiple factor theory

The new data asset led Mittermaier to point out that crime could vary without changes in the moral basis of a nation. There was a normal crime rate level (*Normalzahl*) in a nation, but crime trends varied above and below it because of various aspects of social causation (Mittermaier 1830a: 208). For examples of non-moral causes, he listed factors that today would be described as structural or general strain theory: lessening of occupational opportunities, rising food prices, and low salaries. The nature of poverty relief impacted the number of people detached from social ties. Such individuals were prone to petty crime such as poaching and forestry offences that opened up criminal careers (*verbrecherische Laufbahn*) by allowing them to associate in the schools of vice (*Schule des Lasters*) with experienced criminals (Mittermaier 1829b: 359). Mittermaier also referred to the increasing 'luxury' of the lower classes, a concept discussed in Chapter 2 of this volume. It usually referred to aspirations towards higher living standards, not affluence as such, thus connecting to what today would be called relative deprivation approaches. The role of economic strain was particularly strong during famine periods, as in 1816–17 (pp. 371–2).

<sup>2</sup> Noting similarity does not mean that there was 'influence' or 'anticipation'. Similarity can also reflect theory–reality isomorphism influencing theory in two different eras.



The second main category of crime causation was official crime control itself. Here he built on the long tradition of labelling discourses (Chapter 2) but saw them as part of the more general domain of unintended consequences of public policy. Several legal institutions created opportunities of motives for crime. Among these were insurances, indirect taxation, the customs system, lotteries, and laws criminalizing the use of natural resources such as game and wood (p. 361). Mittermaier was critical of the tendency of criminal law to expand the penal domain to minor infractions. When such laws were applied, more people went to prison, where again more serious criminal careers were launched via labelling and learning processes, pushing petty offenders into the circle of criminals (pp. 361–6). In addition to the standard critique of mixing different kinds of prisoners, he paid attention to short prison terms for petty crimes. These were insufficient for rehabilitation but sufficient for negative influences in the ‘school of vice’. While eighteenth-century thinkers, notably Schiller, had observed similar mechanisms, Mittermaier discussed them under the additional evidential sphere of crime statistics, illustrating the extent of natural resource crimes with figures taken from the *Compte* (pp. 363–5).

Another mechanism by which official control could increase crime was the treatment of juveniles. If children suffered the pains of pre-trial investigation and public trial, that experience could stigmatize them as criminals. For Mittermaier, forcing children into a formal legal process meant that the state itself consecrated them into a criminal career (p. 368). The recidivism tables of the *Compte* triggered him to reflect on how the state itself was to be blamed for reoffending (Mittermaier 1830a: 218). He even warned that social welfare services could increase the behaviours they were intended to prevent (Mittermaier 1830b: 200–1).

Mittermaier presented these interpretations interlaced with numeric data drawn from crime statistics, mostly from the *Compte* but also from the *Kriminaltabellen* of other countries. His work thus shows how the French model gave new life to previously existing ‘crime tables’, as first criminologists saw them in a new light. By our later standards of causal designs, the proof was rudimentary. Still, the descriptive data was restricting what they could say and enabling him to say things that others could refute with the same data. For instance, Mittermaier explained the age–crime curve shown by the *Compte*, peaking in young adulthood, as an interaction of low self-control and detachment from family ties, as young men were controlled neither by their family of origin (parents) nor their destination (spouse, see Mittermaier 1829b: 369–70).

Commenting on the education–crime link, he observed that the high crime rates in urban areas were not necessarily caused by the average high educational level of city populations. Instead, cities were crime attractors to those who were crime-prone because they offered chances to avoid detection, and generally because of the self-selection of offenders to cities (pp. 37–2).

## Institutional and social embeddedness of crime statistics

Mittermaier (1830a) discussed at length the possibility of empirical comparisons of crime statistics in various countries, warning about the many validity threats involved in such comparisons. As a lawyer, he was particularly astute in observing how criminal laws and penal procedures influenced the extent of unrecorded, hidden crime. Possibly the simplest source of error was the different ways in which acts of varying seriousness were legally categorized. In some countries, minor assaults were police matters and did not enter criminal statistics, compromising the comparability of statistics (Mittermaier 1830: 206–7). Another was the possibility of the judge to sentence below the statutory minimum penalty. In places where this was possible, the sanctions were milder but impunity rarer (Mittermaier 1829b: 374–81).

Yet another factor was prosecution. Private prosecution underestimated crimes in relation to countries where public prosecution was strong, and where the police investigated crimes. If the role of the victim was central in prosecution, crimes more easily remained hidden (*unentdeckt*) and hence also unrecorded in crime statistics (Mittermaier 1830a: 200). One of the key factors was the evidentiary system. If the threshold of conviction was very high, this increased the likelihood of acquittal, and people did not have an incentive to report offences. The high evidentiary criteria in the German criminal law tradition of *Constitutio Criminalis Carolina* (1532) still influenced the operation of the criminal justice system by reducing people's proneness to report crimes. Here, the vestiges of the Napoleonic Empire allowed comparative insights. Since French law was still applied in the Rhine provinces, Mittermaier was able to compare how low and high evidence thresholds impacted people's behaviour. Based on his direct observations, he claimed that people in the Rhine provinces were more prone to report crimes because the judge had greater leeway in the consideration

of evidence (p. 202). This discussion was about validity threats in the use of crime statistics, especially the factors which impacted the extent of hidden crime.

Furthermore, the civilization perspective was needed to understand what was happening in criminal justice. The rise of civilization had led to more gentle mores and sensibilities. People did not want to punish harshly and started to circumvent the law to exercise penal moderation. For instance, people were reluctant to report timber theft committed by the poor, knowing that the consequences could be severe. The second example was criminalization of extramarital behaviour. As a result of civilization, this was no longer seen as crime by the people (pp. 202–3). Thus, social processes influenced the lower boundary of crime conceptions.

The Genevan law professor Pellegrino Rossi had published in 1828 a study of crime statistics pointing out the impact of cultural factors (Chapter 8). Mittermaier had read that paper and knew who was the author of the anonymous paper. Rossi had discussed informal social control as a *social fact* impacting crime statistics. Influenced by this example, Mittermaier discussed phenomena of informal social control below the level of official control contact. Where participation was strong, and people interested in matters of civil society (*bürgerliches Gesellschaft*), more crimes were reported to the authorities. In contrast, if people were characterized by ‘insolence’ and egoism, they withdrew from civic life and underreported crimes, an anomic state impacting crime victims as well. He also discussed these matters under the label of trust of justice (pp. 201–2).

Mittermaier recognized the policy core of the paradigm exemplified by the *Compte*: the planning needs of the criminal justice decision maker (*Criminalpolitiker*) should be supported by the criminologist (*Criminalstatistiker*). The latter was a concept he used for the first-generation criminologists using state-of-the-art data, as exemplified by the French model of national crime statistics. The in-depth understanding of the limitations of that data supported rather than compromised its validity, creating a space where disagreements could be solved empirically. Armed with that instrument, criminal justice policy could be based on the understanding of law in action, not only of law in books.

## Zachariä

Soon after the publication of the *Compte*, the German lawyer Karl Salomo Zachariä (1769–1843) published an essay on French national crime statistics in the *Heidelberger Jahrbücher der Litteratur*. Zachariä started his treatise by defining the science of criminal law drafting (*Wissenschaft der Gesetzgebung*) as based on probable effects. By this, he meant that the effects were not certain. The existence or lack of effects could be proved only empirically, by using statistics of criminal law. Unfortunately, European states had until recently neglected the production of such statistics (Zachariä 1828: 577–8). The first *Kriminaltabellen* were composed, according to Zachariä, in the German states during the eighteenth century (p. 579). The purpose of these tables was to control the work of the courts. However, the use of crime statistics progressed faster in England, and reached a new standard in France. Zachariä described the French *Compte*, published the year before, as *Nationalwerk* and *Denkmal*, a national monument (p. 581). Most prophetically, he predicted that the *Compte* would be the achievement of the Villèle administration that would live the longest, a far-sighted prediction as the *Compte* standard of national statistics is alive even today, 200 years later.

Like most initial users of the *Compte*, Zachariä was entirely aware of the methodological pitfalls and challenges in the statistical analysis of crime. While observing that numbers could be used as tests of ‘preconceived opinions,’ he nevertheless advocated the use of statistics in criminal justice policy (p. 585; Zachariä 1832). On the other hand, he recognized the danger of excessive empiricism, writing that numbers without meaning are mute. He also noted that cross-national comparison was difficult due to the differences of criminal laws, perhaps especially so when England was compared to continental countries (Zachariä 1828: 595). Despite these methodological nuances, Zachariä’s deepest contribution was on the level of interpretation, that is, in making mute numbers signify something in policy struggles.

In Zachariä, we see in a concise manner a criminal justice policy doctrine that would remain influential for a long time. The new data-linked interpretive maxims were the arguments of futility, mismatch, and perversity. In describing these rhetorical devices, I, of course, owe a lot to Albert Hirschman’s classic book *The Rhetoric of Reaction* (Hirschman 1991). It is a unique feature of the criminal justice field that, within it, these putatively reactionary arguments were harnessed for the purpose of progress. The

arguments of futility, mismatch, and perversity were present, in varying degrees of clarity, in most scholars who are examined in this book. For instance, Beaumont and Tocqueville (1833) repeatedly stressed that crime was influenced more by other factors than criminal justice, which had a considerable element of futility. The perversity argument was repeated hundreds of times as regards prison creating more crime rather than preventing it. Mismatch was similarly present in the civilization debates, as increasing mildness creating friction with laws.

## Futility

According to the futility argument, criminal sanctions are relatively ineffective when compared to the root causes of crime. The new data on crime showed that criminal law did not influence the rates of crime as much as was typically believed. This conclusion was based on a seemingly simple logical fact: crime varied in time and place when penal law remained the same. A constant cannot explain variation. The futility argument was older, but with the *Compte* data explosion it was grounded in empirical evidence. Zachariä discussed four pieces of evidence supporting the futility argument.

First, the new data showed that crime trends were associated with the long-term development of civil societies and economies. Most importantly, the process of civilization decreased violence and increased property crime. Civilization made mores gentler. As for the other side of the equation, the increase of property crime, Zachariä offered two interpretations. First, the technical 'western' civilization was driven by motives linked to capitalism and trade, such as luxury, monetary gain, and lust for ownership. The second interpretation referred to increasing opportunities to steal. He thus combined a German-style moral narrative with the French-style amoral opportunity structure interpretation to explain why property crime increased as civilization progressed (Zachariä 1828: 586; 1832: 182).

The second cause of crime was lack of education. Crimes became rarer as the number of those who were educated increased, referring to popular free schooling (*Volksunterricht*). Zachariä listed three mechanisms: the increase of the feeling of honour through spiritual education, the increasing deterrability through capability to calculate detection risks, and the decrease of crimes motivated by superstition. He then moved to the most modern available argument, the use of empirical data. In this case, he draws

on Charles Dupin's research on productive forces of France which indicated a link between increasing schooling and decreasing crime. Zachariä cites in full Dupin's additional cost argument: investing in popular education incurs extensive savings in the state budget by reducing the costs of incarceration. Zachariä was not uncritical towards Dupin's correlational evidence, and he noted that the increase of schooling in 1817–20 could not impact serious crime in so short a time frame, thus raising the issue of causation versus correlation. Yet he cleverly saved the argument by noting that the increase of schooling also measured the change of attitudes among adults, who decided about the extent of schooling (Zachariä 1828: 589–90).

The third major cause, economy, had a complex relation to crime. Poverty and economic conditions were linked to crime, as hunger knows no rules. Referring to UK parliamentary and newspaper sources, Zachariä examined crime trends in England and Wales from 1812 to 1823, comparing them with the price of grain and poverty tax expenditures and noting a correlation between economic strain and crime (p. 588). On the other hand, economic booms could also increase crime. In wine-producing areas, good harvest years were linked to increasing violence, alcohol consumption being the mediating mechanism. Thus, long-duration processes (civilization), intermediate duration projects (education), and sudden shocks (economy) impacted crime. Penal reactions paled in the face of such majestic forces (p. 590).

## Mismatch

The second major doctrine Zachariä derived from the newly emerging criminology was that criminal law needed to be consistent with the mores of civil society to be effective: 'Penal laws are of little or no help if they are not supported by the notion of immorality and shamefulness of the criminalized acts, or if they the laws contradict these concepts.' As an empirical example, Zachariä discussed the prevalent natural resources crimes, such as stealing firewood from forests. This was so prevalent that the people in the German states did not consider it a crime, and therefore did not want to see it harshly punished (pp. 590–1). Here Zachariä explored a mechanism that would be hugely boosted in the third data revolution of criminology, when surveys indicated the high prevalence and statistical normalcy of petty and infrequent crime (Kivivuori 2011). Another example given by Zachariä was the high acquittal rate of rebellion charges: as revealed by the *Compte*, the

majority of these charges were denied by the courts. Zachariä linked this to the observation that opposition to state authority was often linked, or interpretable as legitimate resistance, to overzealous or harsh implementation of state regulations. Juries therefore easily sided with the accused (Zachariä 1828: 594). Yet further proof that penal efficacy was based on mores was infanticide, which rarely led to capital punishment stipulated in law.

Summarizing these examples based on *Compte* data, Zachariä concluded that effective penal laws should be consistent with the perceived immorality of the act. In the historical context of the early nineteenth century, this meant that the laws should be mitigated. If popular penal opinions were given representation in the form of juries, pressure towards mitigation emerged in the historical context of excessive criminalization. Via perceived high prevalence, crime statistics served similar moderating policy purposes as crime surveys a century later (Kivivuori 2011).

## Perversity

The perversity argument claims that criminal justice can cause more crime than it prevents. The empirical corollary of this was often recidivism. Zachariä used the *Compte* to observe that thieves especially were likely to reoffend (Zachariä 1828: 599). He offered several suggestions to reduce this phenomenon, such as giving released ex-convicts some money, supporting their employment by supporting their employers, and types of half-way houses. He wondered if the disgrace attached to stealing, and people's habit of thinking 'once bad, always bad' would in fact be among the causes of recidivism in property crime (p. 602). It was tragic that the state punished what it caused. On a more positive note, this was a good thing insofar as the remedy was close at hand: the state could change its own behaviour easier than changing economic and civilizational conditions.

As examples of state-created crime generators, Zachariä mentioned national lotteries, poaching laws, customs payments, and low-value banknotes. The lottery question was a hot criminology topic during the late 1820s, as testified by Baron Dupin's analyses and speeches in the Chamber of Deputies. Of the examples given, the low-value banknote case is particularly interesting. Zachariä refers to the English withdrawal of banknotes of less than £5 in value in 1822, which decreased money forgery. The reason was that small banknotes circulated more, were not inspected closely, and were difficult to trace to the forger (pp. 604–5). This crime prevention case

is close to modern situational crime prevention thinking, an ancestor of modern initiatives to abolish non-electronic currencies altogether.

Zachariä concluded his take on the new data asset for crime studies by equating crime statistics with medical statistics. Crime was a 'moral disease' suffered by individuals and by the state. Crime statistics were thus part of 'political semiotics' (*Theil der politischen Semiotik*), the study of the signs of disease carried by civil society and by the state (pp. 605–6). After diagnosis, came the selection of remedies. In this, penal moderation was the order of the day. Futility, mismatch, and perversity arguments were deployed. Harsh criminal law was useless, it did not chime with people's feelings, and it led to negative consequences and more crime. The novelty was that these arguments were framed by the most powerful rhetoric of all, the force of numbers. If harshness led to negative consequences, the reverse gear of mildness might work.

## German reception

In the Introduction, I suggested that the history of data-based criminology benefits from going beyond the rise of the word 'criminology'. The thing existed before the word. Quetelet's *social physics* as a general social science, and the criminal anthropology school attached to the second criminology, are the best-known proposals. The early contribution of Germans shows how data-driven criminology was emerging under different conceptual labels. During the early nineteenth century, *prison science* (*Gefängnis-lehre*) was among the promising contenders for the name of general crime science. The prison scientists went on to develop their own conferences and societies but were later eclipsed by criminology and criminal justice studies. Descriptively, the substance and research programmes of nineteenth-century prison science closely resemble that of criminal justice studies as a sub-field of modern criminology. The notion of *political semiotics* of moral dysfunctions suggested by Zachariä was another initiative that did not gain momentum. Nobody could predict that all these would be superseded by the concept of criminology, a career began only in the 1880s.

German scholars immediately recognized the discontinuity created by the *Compte*, even though they had a rich pre-existing tradition of *Kriminaltabellen*. During the late 1820s and early 1830s, they engaged in enthusiastic commentaries on the new paradigm for national crime statistics. They recognized the civilization framework inherent in the *Compte* model,



and felt that they had something additional to say on this. French criminologists had already worked out the need to disaggregate crime to solve the crime–civilization dilemma. In joining the debate, the Germans disaggregated the civilization part of the equation. There were in fact two types of civilization: the secular–political and the moral–religious. According to the Germans, the secular type increased property and white-collar crime, while the religious–moral type, the *Kultur*, had the potential to reduce all types of crime. The differences between the French and German schools of civilization theory were not, however, insurmountable. After all, André-Michel Guerry's distinction between technical instruction and moral education was a secular version of the German distinction (Chapter 5).

What strikes the eye in the German reception of the *Compte* is how fast it was, how strongly the epochal nature of the event was recognized, and how it triggered a flood of theorizing about the causes of crime. It was an eye-opener: European readers of the French national crime statistical report realized that they could also draw on their own prior crime tables as data, even though they paled in comparison. Thus, the birth of criminology was also a retrospective act of creation. Furthermore, the triggered theorizing was mostly policy-relevant. The first German criminologists were intrigued by the possible contributions of empirical research to legislation and law drafting. Much later, during the nineteenth century, the German lawyer Franz von Liszt (1851–1919) would advocate the creation of a '*gesamte Strafrechtswissenschaft*', a kind of total crime science reflecting the notion that punishment can only be justified by its aims. He saw empirical approaches to crime as 'helping sciences' (*Hilfswissenschaften*) in the service of the discipline of criminal law (von Liszt 1881: 32). Fifty years earlier, Julius, Mittermaier, and Zachariä envisioned something similar, triggered by the French model of research-enabling national crime statistics. They certainly thought that criminal law should aim at effecting change, an endeavour whose success could be assessed only by empirical means.

In their unique reading of the new data asset of criminology, the Germans defended *Kultur* over Anglo-French secular and commercial civilization. While in their context the dimension of morality was carried by religion, this emphasis can also be seen as pointing to the moral content of education in a specific historical context. Morality was needed to balance the excessive emphasis on technological, scientific, and monetary civilization. In raising these interpretations, they also developed a specific criminal justice doctrine. This doctrine combined the idea of penal moderation as a means of making criminal justice more effective with a root-causes focus

on labelling, poverty, and lack of morally relevant education. Parts of this doctrine predated the studies discussed in this chapter, but there was a new element in the German reception: policy was developed in the context of discussing and interpreting national and international crime statistics as empirical anchors. While the evaluation of specific reforms or practices did not correspond to what is today expected from causal inference, the realistic idea of such an evaluation was a major change from that which had previously existed.

# Insight from critique: the Genevans

## Introduction

Jean-Jacques de Sellon (1782–1839) was a member of the Genevan aristocracy. From 1816 to 1825, he served as member of the Conseil représentatif of Geneva. During this time, his main goal was the abolition of the death penalty. Failing in this in the political arena, in 1825 Sellon changed strategy by becoming an independent influencer in criminal justice reform; a moral entrepreneur, as sociologists would say. In 1826, he declared an open essay competition for the best argument to abolish the death penalty. This was the prize won by Charles Lucas (Chapter 5).

The arguments used against the death penalty were multiple. They included the problem of wrongful convictions, a form of jeopardy argument. Purely moral and religious arguments were also used. In addition to these, Sellon was keen on grounding his case in empirical facts on crime, as revealed by the cutting-edge instrument of the day, crime statistics. In 1826, he praised the abolition of capital punishment in Tuscany with the sweeping claim that it was ‘the only part of Italy where crimes are almost never committed’ (Luginbühl 2000: 21–2). By 1835, he had moderated his position on Tuscany: the abolition was correlated with a decrease, not absence of crimes (pp. 90–2). The increasing mildness of civilized nations reduced both punishments and criminal behaviour. He welcomed the increasing availability of crime statistics as a means of proving a point he believed was true in any case.

The jury of the Sellon competition included two scholars from Genevan elite circles who figure in this narrative of the rise of criminology: Pellegrino Rossi and Augustin Pyramus de Candolle (Lucas 1872: xiv; Luginbühl 2000). Professor Rossi is an underestimated pioneer of criminology. De Candolle the elder was a botanist whose son Alphonse went on to study law and to publish critical reviews of modern crime statistics, formulating the core list of validity threats still known in register-based and comparative criminology.

The contributions of the Genevans to the rise of crime statistics were primarily methodological. They became the critics of the new instrument of criminology, charting the limits and caveats of its use. As such, the work of Pellegrino Rossi and Alphonse de Candolle bear some resemblance to the control–constructionist paradigm triggered by Kitsuse and Cicourel in 1963, as they too underscored the control-laden nature of crime statistics. Yet their critique was not total or ontological. Rather, they engaged in a comprehensive source critique of crime statistics as a source of criminology, thus making their use more circumspect and robust, rather than suspect. In so doing, they also reconnoitred novel aspects of understanding crime variation. De Candolle formulated, with unprecedented clarity, the basic axioms of what we would call routine activity or opportunity approaches. Rossi theorized on how people's cultural perceptions impacted the crimes they perceived—and counted. Informal social control was emerging as a criminologically relevant concept. Rossi explicitly linked such phenomena to the concept of social facts.

## The murdered criminologist

The Genevan law professor and later politician Pellegrino Rossi (1787–1848) has the rare distinction of being the first ever criminologist who died as the victim of homicide. In 1848, he was lethally stabbed on the steps of the Palazzo della Cancelleria in Rome. At the time, Rossi was serving as the Minister of the Interior of the Papal State. The motives for his murder were linked to the events of the 1848 revolutions and the complicated politics of Italy. In his book *Revolutionary Spring*, Christopher Clark (2023: 640–1) describes Rossi as an ‘intriguing figure, whose biography reminds us of how European Europeans were before the ascendancy of the nation state’. As minister, Rossi represented centrist and moderate politics defending laicization and representative politics, a position that made him hated among both democrats and conservatives (p. 641).

Thirty years before the revolutionary spring of 1848, Rossi was nominated as professor of criminal law at the Academy of Geneva, the first Catholic to be hired by the strictly Protestant institution (Schazmann 1939: 52–3). He was thus present in Geneva during the 1820s, when criminal justice reform and crime statistics were the order of the day. After the publication of the *Compte*, Rossi understood the revolutionary potential of the crime statistics. He joined the first generation of criminologists using

the new data asset and used it to compare France with Geneva, producing important criminological insights.

In his *Traité du droit penal* (1829a; 1829b) Rossi made broader and principled statements on the need to base criminal justice research on empirical analysis. In his view, at least three types of analyses were needed—the study of human nature, the study of the historical formation of criminal law, and the study of judicial statistics—to understand the target and outcome of penal control. In today's language, he was proposing a multidisciplinary criminal law reform project combining psychological, historical, and criminological components. His turn to empirical materials was consistent with his interest in natural science scholars such as Cuvier (Lescaze 1980: 137–41). Like the German reception of the *Compte*, the Genevan group shows how the integration of empirical and normative approaches to law in action predated von Liszt's (1882) 'combined criminal law science' by half a century.

## Social facts

In Rossi's view, legislators need to know 'the social facts [*faits sociaux*], the political requirements of each country' to avoid confusion and to proceed rationally towards penal reform. Judicial statistics were a key resource in this quest towards rational criminal justice policy (Rossi 1829a: 23–4). This involved both the description of crime trends and causes of crime as inter-related tasks. He wrote that 'an exact work of judicial statistics, such as that which is now done in France each year and which we have tried to imitate in Switzerland, would reveal after eight or ten years the main causes of crime in each State' (Rossi 1829b: 92). By France he meant the *Compte*; by work in Switzerland, he probably referred to his own plan for nationwide crime statistics (see pages 163–164).

It was the 'the duty of governments' to research 'the causes of crimes to remove them, the obstacles of crimes not to weaken them, and the means of repression other than formal punishments, to know their force and to profit from them' (p. 208). Rossi saw crime as also influenced by opportunities and informal sanctions, not only by formal state control. As regards formal punishments, their development also required nations 'to deepen the study of social facts', also by means of judicial statistics. This was so because speculative, non-empirical reasoning about the causes of crime was an often-misleading guide in the absence of facts (Rossi 1829c: 117–18).

The degree of civilization was a key social fact. This was so because the effects of punishments, and the type of appropriate punishments, depended on how civilized the societal conditions were. Rossi suggested that the process of civilization weakened criminal impulses via two mechanisms. First, there was a general decrease of the criminal impulses. Second, civilization meant that people became increasingly sensitive to the pains of punishments, meaning that lesser punishments were more effective (p. 116). Of the three core mechanisms of punishment—deterrence, incapacitation, and rehabilitation—the last mentioned would rise to prominence with the onward march of civilization. The social facts external to law, mainly enlightenment and welfare of all citizens, would secure order (pp. 218–19).

It is possible that Rossi's familiarity with the *Compte* and the Genevan statistics sensitized him to see crime as socially embedded, as moulded by social facts, including both personal risk factors and features of the social environment that prevented and forestalled crime. The aggregated nature of statistics led scholars to see crime as also determined by emergently social phenomena, prompting Rossi to suggest that some amount of crime was 'inevitable' (p. 117). The notion of social fact also connoted recalcitrance. Like many early data criminologists, Rossi found inspiration in the knowledge that facts could not be altered to confirm prior expectations, they did not bend to our wishes: *nous sommes sous l'empire des faits, et les faits sont inexorables* (Rossi 1828: 113).

## Principles of cross-national comparison

In 1828, Rossi published in *Revue française* a comparison of French and Genevan crime statistics (Rossi 1828). The paper was anonymous, but he confessed authorship in his proposal for Swiss national crime statistics (Rossi 1829d). With Lucas, Ducpétiaux, Julius, and Mittermaier (Chapter 7), he was among the first scholars to use the *Compte* for international comparisons. His 1828 article is outstanding in its sharp methodological source critique, making him one of the key innovators in the birth of first data criminology.

In this paper, Rossi compared France and Geneva. He acknowledged that 'on first sight, it may seem ridiculous' to compare such units (Rossi 1828: 94). France (population 30 million) and Geneva (population 60,000) were so different as to make the analysis technically strained. The immediate technical lesson was that he had to use rates of crime per population.

Comparing rates, he found that Geneva had more crimes than France per population. Yet, on closer inspection, the high crime rates of Geneva seemed to be caused by less serious offences. Thus, the differences between the examined areas provoked Rossi to discuss important methodological challenges and validity threats in comparative judicial statistics (*statistique judiciaire comparée*), as he named the emerging discipline of data-based criminology.

First, differences in legal systems should be acknowledged in assessing the validity of the comparative design. This pertained, of course, to the penal definitions of crimes, a simple caveat briefly underscored by Rossi. Differences in reported or processed offences could reflect differences in how social and cultural contexts influence the likelihood of conflicts entering the statistics. He saw French crime rates as likely underestimating the real crime levels, in a comparative sense. The French people and the magistrates were less likely to report offences and to convict offenders because their penal law was too harsh. As regards sentencing, Genevan judges could go below the minimum tariff. This Rossi saw as an expression of humane and rational criminal policy (p. 105). The lesson was that sentencing should be in harmony with the mores and attitudes of the people. Harsh law 'makes prosecution mute and judge a liar', thus paradoxically weakening the control power of the law (p. 106). All this Rossi discussed in the general context of cross-national criminology, as validity threats in comparative criminology.

Second, Rossi saw informal social control as a relevant factor in cross-national criminology. His chosen sites of comparison sensitized him to perceive how a close-knit small community operates differently from a large polity. He wrote that Geneva was more like a family than a state, meaning that citizens trusted authorities and were willing to help them, including by reporting offences (pp. 104–5). Effective informal control becomes a cultural basis for penal moderation. Here, the comparison of administrative crime statistics yields an incipient form of anomie theory linking low crime to high trust.

Third, Rossi pointed out that comparison should adjust for differential population composition. This is what is often done for age (age-adjusted figures), but he also added the role of occupation, level of education, and especially the size of the immigrant or foreign-born population (pp. 113–17).

Fourth, Rossi pondered the role of the opportunity structure. Any comparison of locations needed to acknowledge differential 'temptations' and differential facility of offending (pp. 111–12). This had already been

suggested by Lucas and Ducpétiaux. The aggregated nature of administrative crime statistics has an immanent quality of detaching aggregate-level crime comparisons from traits of individuals. Adolphe Quetelet (2013 [1842]: 82) would discuss the opportunity structure theory as it was formulated by Alphonse de Candolle.

The fifth validity threat discussed by Rossi was linked to cultural sensitivity. Due to affluence and effective social control likely forestalling serious crime, the attention of Genevans had turned to lesser, even minor, infractions, often related to health regulations on such things as dog muzzles and animal transport. When the 'house is in order', it starts to perceive and see as problematic even minor deviations. Rather than critiquing these regulations, Rossi was making cultural observations: 'the one who, in his house, has already provided for everything that is necessary or very useful, can pay attention to underscored purity, even to elegance'. Measures to 'ward off certain dangers, to increase healthiness, to ward off hideous or revolting spectacles' were also lessons of morality (Rossi 1828: 107–8).

This embryonic variant of the cultural sensitivity theory of crime perceptions would later be elaborated by Durkheim. His well-known 'society of saints' thought experiment resembles what Rossi saw as happening among Genevans lacking real crimes. Durkheim asked his readers to 'imagine a community of saints is an exemplary and perfect monastery' where 'crime as such will be unknown, but faults which appear venial to the ordinary person will arouse the same scandal as does normal crime in ordinary consciences' (Durkheim 2013 [1895]: 62). Had Durkheim read Rossi's paper? Were the saints Genevans? Not necessarily, as the argumentative contexts of the 'saint example' are different. For Durkheim, the saints showed the emergent nature of social facts. For Rossi, the sensitivity and informal control exerted by Genevans showed that cultural factors influenced the validity of cross-national comparative criminology. This research front is still being explored by criminologists as a substantial topic and as a methodological challenge of crime comparisons (Kivivuori 2014; Lynch and Addington 2015).

Rossi used the concept of social fact, underscoring the historicity of society as external to individuals. He may have been influenced by Savigny's (1814) historical approach to law, and by Constant's (1814) critique of imperial standardization, in seeing law as embedded in local sociocultural layers. Rossi's notion of reactions to crime as *social facts* and crimes as *inevitable* closely resembles Durkheim's later rules of sociological method. For Durkheim, it was a move in the issue ownership battle with



the individual-focused sciences such as psychology and medicine. He may have read Rossi, or maybe they shared common roots such as the historical school of law. Indeed, it has been argued that Durkheim was sloppy in recognizing possible influences from Guerry (Whitt 2002). The same could apply to his relation to Rossi, whom he likely had read. Be that as it may, the first-generation criminologists had already developed the notion that aggregated crime rates obey emergent laws, and that the lower boundary of conflicts defined as crimes was a culturally variant phenomenon.

Rossi discussed these mechanisms as reflections on the uses of the new instrument of criminology, the uniform crime statistics assembled by the state. This had opened a new frontier for research, comparative crime analysis. Rossi also cited the dichotomy of dark and enlightened France by Charles Dupin (Rossi 1828: 100). In Geneva, he had collaborated closely with Charles's elder brother, André Dupin, in scholarly pursuits (Schazmann 1939: 65–6). He was thus well placed in the academic networks and salons discussing and waiting for the national crime statistics, to be used in empirical observation.

Rossi's treatise on the differences of Geneva and France seems like comparing the incomparable: a tiny city-state with a modern nation-state. Yet this strange David and Goliath contrast allowed him to explore the role of informal social control in the genesis of recorded crimes, an important breakthrough in criminology. However, the French data should not be seen as monolithic. From the very beginning, it was intended to be comparative within France. Dupin's dualistic taxonomy and Guerry's more neutral five-region comparison testify to how comparisons were aggregated from the lower level of departments. It never escaped the creators of the *Compte* that, in principle, similar comparisons could be made between nations. Thus, Guerry (2002 [1833]: 14–16) devoted a longish discussion to the problems of international crime comparisons in his report on France, listing several validity threats, like differences in criminal law, sentencing severity, centralization of law, the scope of private versus public prosecution, and ease of non-detection. Yet this very discussion seemed to suggest that in some sense, international comparisons could be made in the same way as parts of France were now being compared. The idea of international criminology was built into the emergence of data-driven crime research.

Rossi ended his treatise on comparative criminology by pointing out that the recent advances were possible because of state decisions to publish the crime returns from the courts. In the absence of the new instrument, an *impenetrable veil* covered the realities of control and behaviour (Rossi

1828: 117). The national crime statistics lifted this *veil*, just as the twentieth-century inventors of the crime survey broke the official control *barrier* of crime measurement.

## Plan for Switzerland

As a federal structure, Switzerland lacked national crime statistics. In September 1828, Rossi presented a plan for such national, uniform statistics in the annual conference of the Swiss Society for the Common Good. Earlier the same year, Rossi had used the French *Compte* and the Genevan data for ground-breaking cross-national comparison. He was thus well placed to outline a plan to create national crime statistics, based on personal research experience. Rossi was fast in his initiative: his plan was read in the conference about eighteen months after the publication of the first *Compte*. Described by Rossi as a masterwork, the French system was the trigger and inspiration for the Swiss plan (Rossi 1829d: 343). It is thus instructive to also examine Rossi's proposal (Rossi 1829d) by comparing it to the French research programme.

Rossi started his proposal with a medical metaphor. To heal 'moral illnesses', a society working for the common good should know the state of morality prevailing in a nation. Criminal justice statistics were a means of 'taking the moral pulse of a nation' (p. 337). To do this, one had to rely on explicit facts (*offenbar gewordenen Thatsachen*) as placed in a standardizing frame. Rossi then moved on to list the variables he saw as necessary to the eventual national statistics. These were divided into two classes: the moral and the political variables. This innovative conceptual divide corresponded to crime counts and variables capturing risk factors of criminal behaviour (moral variables) and the evaluation of criminal justice institutions (political variables). The behavioural dimension included the number and type of offences, the number of offenders, the penalties, and recidivism. Rossi also included immigration status, class position (owner or worker), place of residence, occupational status, and religious denomination (pp. 338–9). The 'political' variables captured aspects of the criminal justice process: the number of criminal investigations by outcome, the number of convictions and acquittals, the number of appeals out of convictions in the primary courts, the results of the appeals, the duration of the criminal process, and the length of pre-trial detention (pp. 339–40).

Having described the suggested descriptive and evaluative variables, Rossi went on to discuss sources of resistance to crime statistics. He prioritized the descriptive-behavioural variables and defined the evaluative variables as optional. This he did because he wanted to 'calm the fearful and the anxious, and to convince them, that the aim of the proposal is in no respect a political one' (p. 340). Rossi underscored that statistics-based criminal justice evaluation would be very useful. This prevarication with evaluation was probably addressed to conservative circles; maybe Rossi estimated that different areas or stakeholders would receive his ideas differently. He had reason to believe that conservatives would fear statistics-based criminal justice evaluation. He returned to this problem when discussing the possible reluctance of specific locales to grant access to their protocols and archives. Rossi then exclaimed that in modernity, in the year 1828, there could hardly be magistrates wishing to draw a veil of secrecy over their use of penal power. The facts should not be hidden, as they were extremely important for the well-being of their locality (pp. 342–3).

An interesting part of Rossi's proposal was that he wanted the future dataset to be supplemented by retrospective data collection. He suggested that data from the ten previous years should be incorporated at the launch of the time series (p. 341). In that context, he briefly addressed the question of data validity, suggesting that dubious data should be omitted, erring on the side of caution (p. 341). Rossi's proposal was not as obviously oriented towards research uses as the French model. However, he gave two examples of research papers using the new kind of crime statistics. The one was his own comparative work on France and Geneva, the other one a paper on 'crimes of the press', the super-hot topic of French politics during the 1820s. He also suggested that it would be easy to find citizens to help with data collection, as the Swiss political structure made it difficult to issue central orders for data collection, as in France (pp. 342–3).

## The botanist

The young Swiss lawyer, Alphonse de Candolle (1806–93), was among the first to use national crime statistics in legal scholarship. In his study on grace (1829), he used the *Compte* and other statistical sources to give an empirical dimension to a legal argument. He referred to lectures given by Rossi, expecting most of his readers to have attended those lectures as well (p. 3). His legal research was influenced by Rossi, who knew his father (Lescaze

1980: 137; see also Bomio & Robert 1987). His interest in legal and criminal matters was probably instigated by his father, the botanist Augustine Pyramus de Candolle (1778–1841). While working with Lamarck in botanical research, de Candolle the elder had visited the hospitals and prisons of Paris on a self-appointed mission of social amelioration (de Candolle 1862: 122–3).

In the early nineteenth century, differences between various disciplines were not as great as they are today. In the emerging field of human and social sciences, Linnaean classification and observation were ideals to be followed rather than rejected. De Candolle eventually turned to botany, the profession of his father, after a brief sojourn in data criminology. When Alphonse published the memoirs of his father in 1862 (de Candolle 1862), he had deleted most of the materials related to his family, possibly also material related to his turn to botany. One of the key reasons seems to have been that making errors was not as fatal in botany as in law. Yet the overall impression was the consilience of empirical sciences. In old age, de Candolle stated that he had preferred the spirit of observation, *l'esprit d'observation*, to that of abstraction, not least because of its practical value in society (p. 447).

In 1830 and 1832, Alphonse de Candolle published two articles on the logic, uses, and limitations of administrative crime statistics (de Candolle 1830 and 1832). Uncannily modern in many respects, these articles show the great sophistication of methodological thinking and source critique among the first data-driven criminologists. Later criminologists have interpreted de Candolle's work from the vantage point of constructionism (Bomio & Robert 1987) or as contributions to criminological validity discussions (Aebi & Linde 2012). I think the latter interpretation is more correct.

De Candolle lamented that the goal of the first data criminology—knowledge accumulation based on a shared data base resistant to political biases—had not come true in the first fervent years after the publication of the *Compte*. He did not critique the new instrument as such, but rather how it had been used, too hastily. Comparing official crime statistics to instruments of physics, he noted that the users of this social science instrument needed to know how it should be used (de Candolle 1830: 160). His discussion of validity threats and interpretive challenges thus aimed at improving data-based research, almost like providing a 'user manual' or 'handle with care' warning for the new instrument. He was not offering an ontological denial of its isomorphic capacity to capture aspects of behaviour 'out there', beyond state control.

## Crimes in the shadows

The first users of modern national crime statistics were never naïve about the official control-based figures. They immediately recognized the most obvious failure of isomorphism between control data and behaviour: the exclusion of unrecorded crimes. Charles Lucas, for one, explained that crime figures were reliable in countries with modern central state administrations, like France, the US, and specific cantons of Switzerland. While discussing this, he used the concept of *crimes dans l'ombre*—crimes in the shadows—to capture the domain of hidden, unrecorded offences (Lucas 1828: lxi). If two countries with an unequal level of development were compared, this could lead to error, because in more civilized countries the police and the judicial administration were better in detecting and recording crimes. The statistics of Geneva and Pennsylvania, while not perfect, were still more reliable than those of Spain. Civilization camouflaged its own crime preventive effects by being so effective. This could produce the illusion that civilization increases crime.

In his 1830 paper, de Candolle added to the problem of hidden crime the spectre of its variability. If registration rates varied, this could threaten the validity of comparisons across time and space. 'The proportion of known and committed crimes is altogether unknown; it can vary extensively from one country to another and from one type of crime to another' (de Candolle 1830: 353). For the purposes of illustration, de Candolle suggested that the proportion of known (processed) crimes out of all crimes was 50 per cent in France, and 25 per cent in England; a comparison would need to weigh up the English figures to be more valid. He thus formulated a differential ratio doctrine regarding the problem of hidden crime. The problem was worse in cross-national comparison, he surmised, than in within-country analyses with more similar criminal justice frameworks (pp. 353–4).

At this point, Adolphe Quetelet enters the fray. He agreed with de Candolle that administrative data sources only included recorded crimes, 'out of an unknown sum total of crimes committed' (Quetelet 1984 [1831]: 17). In a pessimistic prophecy, he wrote that the sum total would 'probably remain unknown forever'—*cette somme totale de délits commis restera probablement inconnue à jamais* (Quetelet 1831: 18). However, pending such an unlikely breakthrough in crime measurement, he formulated the constant ratio doctrine which was at odds with de Candolle: 'There exists a relationship pretty nearly invariable between offenses known and judged and the unknown sum total of offenses committed.' (Quetelet 1984

[1831]: 17; Quetelet 2013 [1842]: 82; original Quetelet 1838: 8.) The ratio, while constant, would depend on the seriousness of the crime, the efficacy of the criminal justice system, the propensity of victims and bystanders to report crimes, and on people's understanding of conflicts as crimes.

The notion of shadow crimes comes close to the more famous and much later concept of the *Dunkelziffer*—dark number—by the Japanese lawyer Shigema Oba (1908). It is possible that Oba was inspired by the shadow metaphor used by Lucas to mean the same thing. Lucas discussed this in the context of the comparative validity of crime statistics (Lucas 1828: lxi). Be that as it may, the problem of hidden crime was born as an explicit discussion simultaneously with the rise of data-based criminology. The challenge of hidden crime and the official control barrier of crime measurement was to haunt criminology for more than a century (Kivivuori 2011).

## Recording ladder

De Candolle thus formulated a *differential ratio doctrine*, while Quetelet had a *constant ratio doctrine*. The positions seemed to differ from one another, at least as regards the main 'axiom'. On the other hand, they were tackling the same problem from different starting points: Quetelet started from the stability assumption and then discussed the caveats; de Candolle started from the instability assumption and then worked out how the instability could be compensated for. After his 1830 paper, de Candolle apparently felt that he had to revisit the topic after Quetelet's take on the problem. In the 1832 paper, he elaborated his thoughts on factors influencing the recording ladder. There were several stages in this voyage of an act from the sphere of hidden crime to administrative statistics. First, the act should be perceived by the victim. Second, the victim should report the offence. Third, the offender or suspect would have to be known. Fourth, the victim would need to be motivated to report the crime to the authorities. After that, the next steps took place within the criminal justice system: can the case be referred to the prosecutor, will the prosecutor prosecute, and will the court convict.

The recording ladder thus included social-psychological processes in human social behaviour, and legal decision behaviour in the criminal justice system; at all stages, de Candolle was describing empirical human behaviour, the *is*, not the *ought*, of social control (de Candolle 1830: 353; de Candolle 1832: 25–30). Here de Candolle followed the pathway of his professor Rossi, formulating a cultural perception theory of crime

reporting: the higher the crime rate, the less likely people were to perceive it as ‘crime’ and to report it to the authorities (de Candolle 1832: 29–30). The data showed a correspondence between human perception and institutional behaviour, yielding criminological insights still studied today. Knowing such perceptual regularities, one could reach isomorphic statements from data to patterns of human criminal behaviour.

De Candolle’s response to Quetelet was to probe the question of isomorphism with an empirical analysis of the recording ladder. He pointed out that the French cutting-edge statistics did not contain any information on unsolved cases (pp. 30–1). He then examined the legal segment of the recording ladder, as tracked by French and Genevan statistics. He concluded that the successive degree and pace of diversion of people from the criminal justice continuum reflected more the *nature of crimes* than the *disposition of authorities*. He then discussed the relative merits of various indicators of crime, veering towards the prosecution stage (number of accused) if the goal was to measure the absolute number of crimes in a country (pp. 33–8; Aebi and Linde 2012). Conviction statistics could be better when comparing crime types or patterns of crimes. He additionally tackled the question of hidden crime by an empirical analysis of how many people had been convicted *in absentia* (*par contumace*). Such cases were more prevalent in border regions if the border was not following a mountain range or facing an ocean. This called for behavioural interpretation: the statistics were connecting to external behavioural realities (de Candolle 1832: 38–41). De Candolle made the same argument based on the seasonal cycle of crime, as there was no reason why control activity might ‘construct’ such cycles (p. 52).

Quetelet had suggested that homicide stood out as an offence where all cases were included in administrative statistics (Quetelet 1984 [1831]: 18) because ‘no individual will disappear from the society by murder or assassination, without its being known’ (Quetelet 2013 [1842]: 82). De Candolle qualified this by accepting homicide as a relatively valid measure, even though it too had a margin of error. Proximity to rivers and mountains could hide some homicides as suicides (de Candolle 1830: 353; de Candolle 1832: 28–9). When de Candolle’s methods critique is inspected in the context of his substantial examples and use of the data,<sup>1</sup> we see him supporting, not denying, their correspondence with external facticity.

<sup>1</sup> The shortened versions of de Candolle’s 1830 and 1832 articles, containing only programmatic statements, make him seem more constructionist than he was, in line with the

## The essential conditions of crime

The critique of crime statistics, and the empirical inspection of their limits, inspired de Candolle to discuss crime causation. Methodological and substantial discussions were thus intertwined. The validity threats of administrative statistics on recorded crimes sensitized him to a new set of causal processes, as large differences in crime rates could not be plausibly explained solely by an inner propensity to offend. To highlight this, de Candolle used the England–France comparison as a pedagogical instrument. If there was more crime in England, would this mean that the English were *less moral or less religious* than the French? To so assume would be a mistake, de Candolle wrote. Other reasons could be related to the relative absence of capable guardians. The police could be laxer, and the citizens could be more reluctant to prosecute and report crimes because of the draconian laws.<sup>2</sup> Furthermore, the English population was more concentrated in space, and therefore provided more opportunities for crimes. The temptation to steal was high because of the wealth of the country; and because the wealth was often in a form that could be stolen; and because wealth was both unevenly distributed and visible to the poor (de Candolle 1830: 177–8).

From this, de Candolle generalized three factors impacting the frequency of crime in each location: personal propensity (motivation), the existence of possible targets of crime (opportunity), and the physical possibility to commit the crime (including guardianship). The first one, personal motivation, was an internal cause, and the most difficult to study. However, he pointed towards *morality* as the key concept in this regard; whatever produced it was relevant for aetiology and prevention, ‘arming the human heart against itself’, like self-control or moral circumspection learned in socialization (p. 162). Some aspects of his thought resemble modern situational action theory, which sees morality as influencing the perception of crime as a viable action alternative (Wikström et al 2024).

Kitsuse–Cicourel paradigm. See the short versions published in the special issue of *Déviance et Société* (introduced by Bomio & Robert 1987).

<sup>2</sup> Continental authors referred to the ‘bloody code’ of England, meaning that multiple crimes, including crimes considered petty elsewhere, could result in the death penalty. Following English criminal law reformers (Chapter 9), they saw this factor as increasing the dark figure of crime as people were presumed to be reluctant to initiate prosecution potentially leading to excessive punishment; similarly, jurors were believed to be affected by the prospect of the death penalty (impacting conviction statistics).



Opportunity referred to the availability of suitable targets of crime: even a hugely motivated offender would not be able to commit crimes if he were stranded on a remote island (de Candolle 1830: 161). The targets could be property or individuals. In this regard, he noted that the sheer massing of people to a given space increased, *ceteris paribus*, the prevalence of crimes, thus approximating the crime-generator concept of spatial criminology (p. 166). Similarly, material affluence increases property crime by creating situations for crime: one does not steal if there is nothing to steal (p. 167). A major factor was also the stealability of objects, one could not steal immobile property. Paper money created the object of forgery. The physical possibility of the facility for committing crimes, in turn, depended on police presence. The concept of 'policing' was broad, as people self-policed their homes by locking their doors, corresponding to the modern concept of place managers and capable guardianship. Furthermore, legal routines made crime commission rarer by time–budget effects: if you work, you do not have time to commit offences (p. 170).

De Candolle considered opportunities and guardianship as logical conditions for a crime to take place, almost identically to modern routine activity theory (Felson & Eckert 2016). Furthermore, as situational crime prevention is a policy corollary of situational action and rational choice theories, de Candolle saw his three dimensions as cause–prevention pairs. The personal morality part was the most difficult to harness to crime prevention purposes, possibly because morality took more time to develop and change. Regarding opportunity, he took a subjective turn, emphasizing the perceived availability of crime opportunities in a given incentive structure. This way, he was able to underscore the role of criminal law in increasing the costs of crime (de Candolle 1830: 166–70), an emphasis that does not resemble modern situational crime prevention approaches.

De Candolle's taxonomy of crime causation caught attention in the emerging intellectual field of criminology. The German criminologist Mittermaier used it in the civilization–*Kultur* debate (Chapter 8). He elaborated on what the three dimensions meant for crime prevention. While de Candolle had largely bracketed motivation, Mittermaier linked it to education and socialization. Crime motivation could be reduced by education which had a moral basis. Facility could be neutralized with penal deterrence and trust in the criminal justice system, reducing the need for self-help. Opportunities for crime could be reduced by target removal and

by clever legislation. In his view, concentration of people and their movement in space were crime generators especially when connected to enticing theft opportunities. Typical to many first criminologists, Mittermaier used customs to dissect how legal practices could engender crime by influencing motivation/morality, opportunity, and criminogenic habit formation (Mittermaier 1830b: 204–5). In so doing, he translated de Candolle's causal theory into crime prevention principles.

## Validity through critique

The nineteenth-century crime statistics had several problems in terms of validity and reliability. Thus, it has been correctly stated that users of nineteenth-century (and modern) administrative statistics should see the records as co-created by the control agencies (Aubusson de Cavarlay 1998; Walliss 2012: 575). However, the first creators of crime statistics were never naïve about their accuracy. Indeed, the first register researchers of crime were painstakingly aware of the limitations of their database (de Candolle 1830 and 1832; Quetelet 1984 [1831]). They understood that they had to rely on governmental processes when they used the registers for their analyses. Any total correspondence was blocked by what has been called the official control barrier of crime measurement (Kivivuori 2011). Yet, they did not see their critiques as throwing the baby out with the bathwater. Rather, good critique helped to create the space for agreement promised by the concept of statistics. This promise had been only partially fulfilled, as shown by de Candolle's work. Only when the house was in order would criminologists be able to proceed to more accurate analyses of crime causation. Indeed, de Candolle wrote that even the most exact figures—*les chiffres les plus exacts*—were useless unless potential confounders could be 'held constant' (de Candolle 1832: 355). The relative role of crime propensity could be specified only if opportunity structures were similar, and vice versa.

De Candolle's contribution to criminology was extensive and recognized by contemporaries. Seeking theoretical parsimony, he offered a taxonomy of crime-generating factors that went beyond the typical lists of causes. Comparing crime statistics to the instruments of physics, he thought that they needed an improved user manual. Using that guidance, the dream of

reaching reality via state control could be achieved. Rather than veering towards ontological relativity, he sought to fulfil the original promise of criminology's first data-driven revolution. This would support, not deny, the isomorphic capability of the instrument to approximate the recalcitrant contours of human behaviour.

# From piecemeal reform to incremental research

## Introduction

The statistical movement of the first part of the nineteenth century took place in most countries of Western Europe. The same applies to the development and use of crime statistics. After the rise of the *Compte* as a paradigmatic exemplar, it became a matter of national honour to start collecting and publishing national statistics on crime. In Germany, small statism hindered the rise of crime statistics while some localities, like the Duchy of Baden, were at the forefront of developments (Moses 2006). The enlargement of Prussia, however, enabled wider comparisons within Germany (Julius 1828). In the Nordic area, Sweden started collecting crime statistics in 1830, with Denmark (1832), the Grand Duchy of Finland (1840), and Norway (1846) soon following in sequence (Vuorela 2021: 31).

In England, the mid-1830s saw an explosion of data-driven crime analyses. This was triggered by the continental field of data-based criminology, which inspired more rigorous statistical compilations and analyses across the Channel. Before this, there was a long and rich tradition of crime tables in the *Kriminaltabellen* style from the late eighteenth century (Ward & Shoemaker 2017). However, data-based criminology requires more than crime returns. It requires variables designed for research, and the existence of scholars willing to use the data for research. In England, before the mid-1830s, such scholars were mostly found among the politicians who aimed to reform the ‘bloody code’.

David Garland has argued convincingly that the history of British criminology should not be connected to the word ‘criminology’ (Garland 1988). He locates the origins of criminology to medico-legal thinking from the 1860s. Yet, as observed from the perspective of this book, the conditions for the research use of crime statistics were met earlier. The onset of improvements in statistical compilations and analytic efforts from the mid-1830s indicate that the continental example influenced events. This chapter

examines the earliest stages of British data-based criminology from the perspective of the continental events described in previous chapters. The aim is thus not to write an exhaustive history of crime analyses in England during the first half of the nineteenth century, but rather to relate British developments to continental innovations, while also considering if and how British parliamentary proto-criminology had influenced the *Compte* explosion.

## England: prequel or sequel?

English data criminology, considered as research using large-scale datasets, emerged after 1834 with the statistical compilations of Samuel Redgrave, and the research activities of the London Statistical Society. Yet, as in France and other continental countries, crime data collection began much earlier, at least from the 1780s (Ward & Shoemaker 2017). As in France, some of this work remained as primary register sheets without summary reports. From 1805, English criminal statistics of indictable offences were published, in an improved form as proposed by Samuel Romilly in 1810 and continuing in that form until 1834 (Gatrell & Hadden 1972: 340–1). Now the question emerges, were the slowly improving English crime returns a prequel to truly modern research-enabling crime statistical reporting as epitomized by the *Compte*?

For certain, the *Compte* was not born in a void; there were both domestic and international precedents (see Chapter 4). Jacques Guerry de Champneuf conducted extensive preparatory works while leading the project, also internationally. The English movement to reform the ‘bloody code’ was well known in France, including the use of crime returns by reformers. Thus, Taillandier’s *Réflexions sur les lois pénales de France et d’Angleterre* (1824) included as appendices translated speeches by Samuel Romilly and James Mackintosh, some of which used crime numbers to make their case.<sup>1</sup> Many of the first continental criminologists were impressed by how the English criminal law reformers had used the crime returns. In 1828, Karl S. Zachariä praised English crime tables as better than the then existing German crime tables. He referred to the parliamentary speeches of criminal law reformers such as Thomas F. Buxton (Zachariä 1828: 580–1). Several continental criminologists commenting on the age–crime link referred to

<sup>1</sup> See Taillandier 1827a, 1827b, and 1828 for his reception of the *Compte* and his early attempt to quantify the France–England comparison.

the *Report of the Select Committee on the Police of the Metropolis* (1828), because its qualitative method found something that statistics could not find: proxy crime as a key learning mechanism (Quetelet 2013 [1842]: 95; Mittermaier 1830b: 194).

In the run-up to the creation of national crime statistics, the French felt that the English crime returns system was ahead of the French model; the development of statistics thus also became a project to surpass the English in this field (Aubusson de Cavarlay 1998: 156–7). The testimony of André-Michel Guerry supports this narrative. He named English crime statistics, as used by Romilly in the House of Commons in 1818, as a key source of inspiration: the French ministerial circles wanted to have similar data. They apparently believed that an Anglo-French comparison of crime rates would yield a flattering result for France (Guerry 1864: III). Guerry's recollections were published forty years after his entry to the *Compte* team and may have been influenced by his subsequent connections to British statistics and his efforts to compare the crimes of England and France.

While English crime returns go back to the eighteenth century, their analytic and policy use is closely linked to reforming criminal law. This movement gained momentum from the 1810s, spearheaded by Samuel Romilly, James MacIntosh, Thomas F. Buxton, and Robert Peel (Handler 2015). Their aim was to repeal the 'bloody code' which stipulated the death penalty for more than 200 offences. One of the core arguments of this movement was that the death penalty hampered crime reporting and prosecuting because victims and jurors did not want to have the offenders killed by the state. Excessive use of the death penalty no longer jibed with the sensitivity of the people.

## Romilly

The British lawyer and parliamentarian Samuel Romilly (1757–1818) is best known for his long, headstrong fight to reform English criminal law, the 'bloody code'. In addition to this, he was a persistent advocate of evidence-based criminal justice policy. As noted earlier, his 1818 speech inspired continental intellectuals as an example of parliamentary moderation and empiricism. Romilly saw the promised land of empirically evaluated criminal justice, but never reached it. That same year (1818), he committed suicide to follow his wife Anne to the grave.

But was he a 'continental intellectual' himself? One of his parliamentary colleagues commented that in proposing reforms of criminal law, he 'set about things in a foreign, and philosophical way' (Port 1986). He thus appeared like a continental philosopher transplanted into British parliamentary life. His background and education reflect this. Romilly's father, a jeweller from a Huguenot (French protestant) family, had raised his children in the continental cultural lineage, requiring them to speak French on Sundays. During the 1780s, he befriended Diderot and Mirabeau while touring Europe with a strong criminal justice bent. In 1788, he visited Bicêtre, the infamous general hospital of Paris. Like Liancourt some two years later (Chapter 6), he was shocked at what he saw. His critique was published as a pamphlet, *Observations d'un voyageur anglaise, Sur la Maison de Force appelée Bicêtre* (1788), translated into French by Mirabeau. Prior to his visit, he had known that Bicêtre doubled as a prison and hospital, but he had not known that 'the hospital was construed to propagate disease, and the prison to give birth to crimes' (Romilly 1788: 4). The pamphlet was duly censored by the French police (Romilly 1841: 71).

The prison essay included a French translation of a pamphlet on criminal law Romilly had published two years before in 1786, *Observations on a late publication, intituled, Thoughts on executive justice*. In that essay, he was responding to an earlier pamphlet by Martin Madan advocating a ruthless implementation of the 'bloody code'. The bone of contention in this debate was whether certainty of punishment could be combined with severity. Romilly was siding with the Enlightenment party, claiming that certainty was empirically achievable only through penal moderation, without severity. Here he formulated the social psychological mechanism that victims, witnesses, and jurors would decline to do their part in convicting if law was too severe (Romilly 1786: 89–90). The sentiments of the people were an external fact influencing the administration of justice.

Methodologically, Romilly's essays represent nineteenth-century thinking about crime, before the onset of data-based criminology. He drew on legal scholarship, classical sources such as Ovid and Cicero, and even cited Shakespeare. He contrasted the mild monetary punishments for property crime in republican Rome with the English 'bloody code' which stipulated the death penalty for similar crimes. Using Rome as the foil, he despaired over English criminal law: 'How different was the policy of the Roman republic! . . . Can one be surprised that . . . at Rome every bosom glowed with patriotism, and that at London public virtue is a jest?' (pp. 31–2). Romilly continued the principled, philosophical analysis he learned

from his classical studies and from his connections to French and Genevan intellectual circles.

## Call for returns

From his early writings, Romilly was making empirical claims about the number of crimes, and crime trends, moving the Enlightenment-style argumentation closer to empirical facts. An example of this is his critique of the idea that theft can be deterred by severity. He wrote that '*experience* shews the erroneousness of this opinion, because several European states, where the punishment of death is never inflicted but for the most atrocious crimes, these lesser offences are *very rare*; while in England, where they are punish with death, *we see them every day committed*' (pp.: 28–9, emphasis added). The experience in question remained unspecified. Possibly it referred to Montesquieu and the continental philosophers with whom he was personally in contact. For certain, he was part of the pre-criminological intellectual field which discussed crime without data.

Later, during his parliamentary career, Romilly continued to use the available returns, and to call for better data on crimes and law in action. When moving in the House of Commons for the abolition of the capital penalty in several property crimes, he used eighteenth-century statistics on executions and tables collected by Sir Stephen Janssen and published by John Howard (HC 9 February 1810) to highlight the increasing difference between severe criminal law and its lenient application. Because of the mismatch between law and civilized sentiments, '*great care should be taken to make the law which is executed known*, because it is that law alone which can operate to the prevention of crimes' (Romilly 1810: 25, emphasis added<sup>2</sup>). Better crime returns, and better summaries of them, were obviously a means of making the applied law known.

Later the same spring, Romilly moved for convict returns at least in 1809 and 1810, his object being 'to have, as nearly as possible, an exact state of the Criminal Law, *as it is executed*' (Romilly 1841a: 318 [4 May 1810], emphasis added). By 1815, he proposed legislation to 'compel clerks of assize and clerks of the peace regularly to make returns to the Secretary of State,

<sup>2</sup> The printed version of the 9 February 1810 speech (Romilly 1810) is more detailed than the parliamentary speech in which he may have suppressed some arguments to avoid testing the patience of the House.



in order that they may be laid before Parliament, of all criminals tried at the assizes and quarter sessions, and of their crimes and sentences' (Romilly 1841b: 158 [8 March 1815]), which later became law (55 Geo. III c. 49). The statute in question gave the exact table templates which the clerks were to use in collecting the returns. Representing the *Kriminaltabellen* tradition, these templates counted crimes and individuals but did not contain extra-legal variables, which would be central in the French model of 1827. The templates represented the crime tables logic: they were needed for the oversight of judicial practice and for some, for reform purposes, but they were not planned for scholars to use. However, it is likely that these tables were consulted by the French Ministry of Justice when it set out to create the research-enabling national crime statistics concept (Guerry 1864).

## Feelings and facts

After Romilly's death in 1818, others continued the project of criminal justice reform. There was pressure from business interests. The sheriffs of London, in petitioning for penal moderation, stated that overly harsh laws were out of step with the '*advanced state of civilization* in the country' (HC Deb 25 January 1819). Thus, penal moderation (in the sense of abolition of capital punishment) was a means of making criminal law more, not less, effective in protecting property. In some sense, what we may see as a 'liberal' or 'progressive' reform, was genuinely intended to be a 'crackdown' against excessive leniency and impunity, an attempt at 'net widening' in official control. It was in this spirit that Dr Julius included a longish appendix on English crime statistics in his Berlin lectures: more reasonable laws led to more effective repression of crimes (Julius 1828: 302–12).

The leading reform politicians like James MacIntosh and Thomas F. Buxton emphasized the increasing mildness of mores and sentiments. With connections to the Romantic literary movement, MacIntosh favoured a historicist–contextual approach where the changing feelings of people were central. In this, he opposed the rational 'Benthamite' calculus of rewards and punishments (Handler 2015). Similarly, in speaking to Parliament on 23 May 1821 for penal reform, Buxton used the word 'feeling' more than twenty times to capture people's distaste for excessive punishment (HC Deb 23 May 1821).

Irrespective of the emphasis laid on rational calculus or on moral sentiments, the reformers called for hard facts and numbers. In his speech,

Buxton repeatedly used the word 'fact' and referred to 'experiments'. In his usage, the concept of experiment meant empirical experience and legal reforms that could be used as natural experiments, not unlike regression discontinuity designs of our own times. Buxton gave statistical information capturing natural experiments in penal policy, one from Lancaster, the other from Northern Ireland. He saw the data as showing that with the abolition of the death penalty, people were more willing to report crimes and press charges against offenders. Buxton declared that he had received the data from a certain Mr Walter Bourne, clerk of the Crown, who had sent him 'a return of the number of committals and convictions for bleach-ground robberies on the north-east circuit of Ulster, for twenty years'. These statistics showed that mitigation of penal reaction had decreased crime, likely because the enforcement of law became more effective (HC Deb 23 May 1821). The origins of data in personal information highlight a difference from the later centralized French model.

## Peel praising the *Compte*

In 1828, parliamentary reformist proto-criminology culminated in a speech by Robert Peel on the metropolitan police. His speech contains two dimensions of interest: the quantitative description and related explanation of crime trends. As regards description, Peel offered aggregated crime figures to show that metropolitan crime was increasing (HC Deb 28 February 1828). But was it higher than in other parts of the world? To assess this, he had collected crime data from several continental and UK cities. Frustrated by their incomparability, he turned to the best available foreign crime data: the brand new *Compte* of France. Comparing the crime rates of London and Paris, adjusted for population size, he found near parity: 380 persons per one crime in London and 410 persons per one crime in Paris. In this type of persons-per-one-crime rate, lower figures stood for higher crime rates.

As regards explaining crime rates, Peel concluded that there was no single cause. The more he investigated crime data, the more he felt 'convinced how unsafe it is to rely on any one cause, as the origin of the evils of which we complain'. Two blocks of influence formed the core of his multifactorial explanation. First, crime trends reflected changes in the ease of committing crime, and in the opportunity structure. The rise of crime was thus explained by 'the exposed and insecure state in which property

is placed in many parts of the metropolis' and in the facility of transferring stolen property within the country. He additionally referred to an increase in crime skills of the offenders.

Second, he linked the increase in crime to institutions that discourage prosecution and thus lessen sanction certainty. These institutions included the devolved and incompetent police force, private prosecution, and the so-called compounding of felony, referring to informal and secret contracts where the offender paid the victim not to prosecute. It is of interest to note that Peel focused on opportunity structure and the immediate incentives of enforcement, rather than on the so-called root causes of crime. He was not a scholar interested in theoretical explanations of crime: attention was therefore focused on the foreground causes, which could be used in prevention.

## First criminology

England started to close the gap to the continental-style national crime statistics model from 1834, when Samuel Redgrave, a clerk in the Home Office, started to compile and report statistical overviews (Radzinowicz & Hood: 1986: 93). The timing of this turn suggests that it was, to a considerable degree, influenced by the *Compte* revolution. Already one year after the publication of the first *Compte*, Robert Peel had praised its quality in his police reform speech (see earlier). The French statistics were, he said, 'drawn up in so *admirable* a form, and the subjects so *ably* treated, that it is *well worthy* the attention of all those who feel inclined to turn their attention to such matters, either in this House or in our criminal courts' (HC Deb 28 February 1828, emphasis added).

Peel thus thought that there should be in England people willing to use crime statistics, but believed they would be found in the Parliament or in the courts. Perhaps his imagination was, in this regard, limited by the 'business' control aims of the crime tables tradition; perhaps Romilly, had he lived, would have seen the scientific horizon as well. Be that as it may, the *Compte* itself had addressed scholarly circles more broadly, confident that independent scholars would start using the new data asset. And, with some delay, there were also in England those outside the Parliament and the courts who wanted to analyse crime with data (see also Figure 10.1). From the mid-1830s, several English first-generation criminologists started to use data from their own country, often with explicit reference to the continental field which had emerged during the preceding decade. Alexander

Maconochie (1787–1860), George Richardson Porter (1792–1852), Whitworth Russell (1795–1847), Samuel Redgrave (1802–76), Rawson W. Rawson (1812–99), and Joseph Fletcher (1813–52), to name some of the more prolific writers, were aiming to detect patterns of criminal behaviour in the statistics, and their links to causes.

## Creation of a society

While English data-driven criminology was triggered by continental exemplars, in some respects the resulting field was more structured and more like an interconnected academic sub-specialty. This was so because it emerged with its own society and, from 1838, with its own journal. The Statistical Society of London was established in 1834, with the goal of collecting objective, non-partisan facts (Hilts 1978).<sup>3</sup> As noted earlier, England had a long tradition of statistical returns on crime and its control, but these emerged gradually without central planning comparable to the French model, and not for research. England needed an injection from the continent before the returns could be improved and harnessed for research.

This continental catalyst was none other than Adolphe Quetelet. He participated in the 1833 annual conference of the British Association for the Advancement of Science (BAAS) in Cambridge to give a presentation on his 'crime budget' and age-crime curve findings (Hill 1984: 130). These findings indicated stable isomorphic patterns detectable by using administrative crime data, made available by the *Compte*. The problem was, however, that there was no appropriate section to discuss crime and suicide at that conference. Therefore, a small group of scholars, including T. R. Malthus and Charles Babbage, discussed the paper in a panel the official status of which was unclear. As part of these events, Babbage was forcing the creation of a special statistical section of the BAAS (Morrell & Thackray 1981: 291–3, 374–5). In March of the next year, the London Statistical Society was created (Hill 1984: 132). Given these events and the role of Quetelet, it is hardly a surprise that crime was a frequent topic in the analyses published in the *Proceedings of the Statistical Society of London* from 1834 and, from 1838, in the *Journal of the Statistical Society of London*. The difference between them was mostly stylistic. The Proceedings described the papers read in the

<sup>3</sup> The Society became the Royal Statistical Society in 1887.

sessions in third person, while the journal articles were more modern, first-person authored papers. According to Radzinowicz and Hood (1986), the first twenty volumes of the journal contained twenty-two articles related to crime.

The beginnings of the crime analyses in the society sessions were internationally oriented. In the first session, 17 November 1834, Alexander Maconochie reviewed Guerry's *Statistique Morale de la France*. The presentation was among 'the most interesting papers read to the Section' (*Proceedings* I: 1, 8). The next year, in the 11 August session, William R. Greg gave a talk emulating the kind of analyses published by Guerry (Greg 1835). Having noted that English crime statistics were wholly inadequate for that task, he decided to use Dutch and French data. Following Guerry, he used maps to illustrate his findings (p. 63). He also found 'startling regularity' in the number of crimes. One of the co-founders of the Manchester Statistical Society (1833), Greg was connected to French political and scholarly circles, corresponding with Tocqueville among others (Middleton 2022).

Greg was not alone in using continental data and relating international crime statistical results to members of the society. John E. Drinkwater (1836) described crime statistics from the Austrian province of Veneto, today the Italian region where the city of Venice is located. In that paper, Drinkwater reproduced figures taken from a publication (1826) by the Italian geographer Antonio Quadri (1776–1849). The same year, Preston (1836) presented statistics from the kingdom of Saxony. Like Greg, Preston lamented the 'scantiness of existing documents connected with our domestic Statistics'. Turning to the 'collection of facts from foreign publications' would enable 'comparisons both useful and interesting not only of our own country with foreign nations, but likewise of foreign nations themselves in reference to each other' (p. 119). In his analysis, he found support for the crime preventive impact of popular education, while also observing the age–crime curve and the male-dominated gender distribution of crime. On 21 November 1836, Charles Dupin himself gave a talk to the society, exhibiting a map of England, illustrating the proportion of crime to the density of population. He found a positive correlation between property crime rates and population density (*Proceedings* I/8: 178). On 19 June 1837, Charles Dupin, André-Michel Guerry, and Nikolaus Heinrich Julius, the cream of continental criminology, were elected foreign members of the society (*Proceedings* I/11: 295). Like the German and Swiss response to the *Compte*, the British response shows how international criminology was in its cradle of its infancy.

## Replicating Guerry

Thus, in the absence of good national data, the first generation of English criminologists used continental data. Moreover, many of them also imported a key theoretical question relating to the moral effects of civilization and education. Having noted the inadequacy of English data, W. G. Greg concluded that education appeared to him to be correlated with less crime (Greg 1835: 645). Preston (1836) did the same with Saxonian crime statistics. Yet the most sophisticated analysis was conducted by George R. Porter, head of the Statistical Department of the Board of Trade, in the December meeting of the society (Porter 1835 and 1837).

Porter started his analysis with notes on the intellectual division of labour: some people collected data, while others used it in analysis. This division between data creators and research users had emerged on the continent with the rise of the *Compte* in 1827. Porter then continued with reflections on the self-correcting and cumulative nature of research. By critically revisiting the education–crime nexus, he did not mean to personally offend Guerry, but rather to serve the greater cause of truth. The data instrument was creating a space where scholars could temporarily disagree to cumulate knowledge.

Porter's main critique of Guerry's analysis was that Guerry had limited his data to a single year, even though the *Compte* had incorporated several observation years. Was it then correct to say, as Guerry had done, that there was no connection between education and crime, or that merely technical instruction could increase crime? To probe this question, Porter decided to contrast the extremes of the education continuum by comparing crime in the four French departments having the lowest literacy rates (13 per cent) with the four that had the highest rates of male literacy (73 per cent). The four high literacy areas were all north-western, 'above' the Geneva–St Malo line, while all the four low literacy areas were 'below' that line in central and south-western France.

Having formed the comparison design, Porter *aggregated* the crimes of five years in those areas. He found that the year examined by Guerry was an anomaly: generally, there were more criminals in the low-education areas. Moving on, he next *disaggregated* the number of criminals by crime type, considering that violent crime captured barbarism and property crime civilization (Porter 1835: 80–1). He found the difference in favour of the civilized areas much stronger for violent crimes than property crimes. Porter concluded that 'M. Guerry has fallen upon a wrong conclusion, and that

instruction, even in the unsatisfactory degree wherein it is now imparted to the mass, is not justly chargeable with the bad effect which he has attached to it' (p. 81).

In the third stage of the analysis, Porter turned to the data on educational levels provided by the *Compte*. Here he did something that was quite new for criminology by using a base number of illiterate individuals. Since he had the population sizes and the conscription-based illiteracy rates, he could count population sizes for illiterate and literate males. In other words, he calculated crime rates in sub-populations. Drawing on this, he moved on to what approximated an interaction analysis of contextual and individual-level analyses. He found that those who were illiterate had a high crime rate in high-literacy areas but not in low-literacy areas. What did this observation mean in terms of explaining crime? Porter's interpretation is worthy of full citation, as reported in the Proceedings:

The Author considered that it was not difficult to account for these results. In situations where education is pretty generally imparted, the wholly ignorant will find themselves at a disadvantage through greater proportion of employments being occupied by those who are instructed; the ignorant man is therefore more impelled to lawless courses than in other situations where the great bulk of the people, being equally instructed, all have nearly equal chance of obtaining honest employments

(Porter 1835: 82–3).

Was this a variant of the relative deprivation thesis advocated by many continental criminologists who had found high property crime rates in highly educated and affluent areas? Is there an element of 'Mertonian' frustration? Not necessarily. Rather, Porter's thesis relates to the rational choice perspectives used in the economics of crime or political economy.<sup>4</sup> Therein, labour markets and salary levels influence people's decisions as they weigh the costs and benefits to be derived from criminal and legal occupations. If legitimate employment is not available for those low on personal human capital, they rationally turn to crime.

<sup>4</sup> Porter was married to Sarah Ricardo, the sister of the economist David Ricardo. Sarah Porter was herself a published author in the field of arithmetic pedagogy and educational questions.

## Using English data

Regarding the use of English crime data, the articles published in the *London Statistical Journal* show differences and similarities to the continental model of national crime statistics. The sometimes-extreme locality of English data was the most obvious difference. To give examples published before 1840, authors could describe crime statistics for areas such as Newcastle-upon-Tyne (Cargill 1838), 'a District near Gray's Inn, London' (Felkin 1839a), 'Parishes of St. James, St. George and St. Anne, Soho, Westminster' (Edgell 1838), 'a section of the city of Norwich' (Felkin 1839b), or a single prison (Clay 1839). These short reports reflected the mission of the society 'simply to gather the facts, leaving it to others to draw whatever conclusions might be warranted' (Hilts 1978: 21). They were also consistent with the long tradition of grassroots-based data collections by individual data activists (Shoemaker & Ward 2017).

Yet the grander nomothetic research interest was too attractive to resist. In 1839, Rawson W. Rawson presented the findings from the first five-year period for England and Wales, incorporating a continental-style intention to detect and analyse patterns of crime with statistics at the national level. In this endeavour, several recalcitrant patterns of crime emerged. Thus, the gender distribution of crime was roughly similar in England and France. The uniformity was a 'result of the constant character of the tendency to commit crime' in two places sharing a degree of 'civilization' (Rawson 1839: 317). Another prime example was the constancy of the age-crime curve in England, proving that it was possible to arrive at constants of human behaviour (p. 327; Quetelet 1848). Fletcher reported on the age-crime curve and on the sex differences in crime (Fletcher 1843). Analogously, patterns linked to urbanity appeared meaningful. Big cities manifested higher crime rates, leading Rawson to conclude that 'the collection of large masses of population in crowded cities' triggered the causal mechanisms 'stimulating the commission of crime' (Rawson 1839: 344).

The link between education and crime was also something that was presumed to be out there, in the social reality, rather than constructed by bias. This question was, of course, suggested by the continental criminologists as an empirical resolution to a long-standing debate (Chapter 3). Inspired by prior French discussions, Rawson started his analysis by making a distinction between instruction and education. Instruction in turn had a restricted and wide meaning. In the limited sense, it referred only to the teaching of the basic skills of reading and writing. In the broader sense, it referred to



knowledge and the learning of facts. Both were contrasted with moral education which aimed at instilling self-control and virtue, often through religious content (Rawson 1841: 331–2). Yet, since primary education was often linked to religious content, Rawson claimed that ability to read and to write could be used as a proxy for education to study its link to crime.

Rawson could draw on data from 1835 when the instruction variable was added to English criminal returns (p. 333) following the continental *Compte* model. The English offenders were predominantly uneducated people as in France, but were they less educated than the general population? The problem of the base number prevented sound conclusions, especially as no French-style conscription data was available. Rawson was forced to rely on indirect estimates as regards the level of instruction in the population. This was estimated as the percentage of those who signed their marriage papers with a mark instead of a signature. The tentative conclusion was that criminals were less educated than the general population; lack of education was thus a risk factor of crime (Rawson 1841). Fletcher and Russell claimed to see a link between education and crime (Fletcher 1843; Russell 1847), while Redgrave (1846) saw the diminishing share of illiterate offenders as reflecting the increasing literacy among the lower classes.

## Methodological reflection

Like their continental counterparts, Redgrave, Rawson, and other English first criminologists were aware of the limitations and validity threats involved in the use of crime statistics. There were interpretive challenges involved in using such crime statistics as proxies for behaviour. Rawson enumerated the key validity threats: limitation to convictions at specific court types, exclusion of summary decisions concerning petty offences, changes in the law, and the efficacy of formal control were the most prominent problems. An important factor in the genesis of statistics was ‘the disposition of the injured parties or the public to prosecute’ and the ‘efficacy of police’ (Rawson 1839: 320; see also Redgrave 1837 and Gatrell & Hadden 1972). Crime statistics reflected prosecuted crimes, not committed crimes; they were as much about ‘the operation of laws’ as about the ‘prevalence of crime’ (Rawson 1839: 319–21). The propensity of the public to report offences to the authorities was not theorized as much as subsequent ladders of the registration process. Later Russell specified that mitigation of criminal law could lead to an increased reporting propensity

because people would be more willing to assist in the enforcement of harsh laws (Russell 1847: 39), thus connecting to prior criminal policy debates. To overcome the validity threats involved in the use of official statistics, Rawson visualized a public officer in each county, whose duty would be to 'ascertain and record every offence which is committed' (Rawson 1839: 320). Such an officer would aim to count 'every offence of which he can obtain information' (p. 337). The idea of the 'central register' was imminent in Rawson's thinking in 1839.

## The dynamics of interconnected fields

In this chapter, I have discussed how the continental rise of data-driven criminology related to events in England. The very short version would be that the *Compte* shock triggered similar developments across the Channel. The missionary visit by Quetelet in 1833, and the sheer power of example, explain the rise of a statistical society which, in its early years, was almost like a criminological society. Redgrave's improved system of national crime statistics from 1834 is linked to this. To conclude, the peculiarity of the English experience can be summarized from three angles: the role of criminal law reformers, the decentred nature of data emergence, and the goal to move beyond 'systems' and 'opinions'.

## The role of criminal law reformers

The interconnected nature of continental and English first criminology circles can be profitably examined from the perspective of predecessor selection (Camic 1992). In the pre-revolutionary period (before 1789), both English and continental scholars were still citing Roman and Greek sources from classical antiquity. These citations disappeared in the first constitutive data revolution of criminology from the 1820s. The citation time horizon was sharply truncated. It sometimes reached to eighteenth-century philosophers but rarely went further back in time. With this shortage of citable authorities, the first continental philosophers engaged in the creative act of choosing the British criminal law reformers as forerunners: the use of crime returns in policy argumentation made an impression, and Romilly, MacIntosh, and some other British politicians became 'pre-criminologists' for the continental field.

The English helped the continental first criminology not only by example but also by direct support. Thus, Julius thanks Peel and Buxton in his *Gefängniß-Kunde* (Julius 1828: XII) and cites the English criminal law reformers throughout his 1827 Berlin lectures. Guerry, forty years later, suggested that the original impetus for French crime statistics came from UK parliamentary debates using crime returns (Guerry 1864). In turn, when the continental field triggered an English expansion of crime statistical analyses, the English first criminologists chose the continentals as predecessors. This complexity shows that England was neither a prequel nor a sequel but served in both functions in the complex emergence of criminology as data-based social science.

The criminal law reformers' use of crime numbers was closely linked to grand shifts in thinking about crime. As in France and other parts of the continent, the English discourse was moving from an emphasis on penal severity to enforcement certainty. The reformers argued that severity preempted certainty and made criminal justice weak. The tectonic shift of crime discourse from severity to certainty originated with the moral and rational thinkers of the eighteenth century (Romilly 1786 and 1788). The crime data, in the 'crime tables' sense, were interpreted in this context. Attention started a slow migration from the last stage of the criminal process (sanction severity) to earlier stages, to enforcement certainty and social mores influencing control behaviour. The call for certainty jibed with the call for data, because certainty improved data.

The 'pre-criminology' of the criminal law reformers, or the decentred returns and *Kriminaltabellen* of the pre-*Compte* era, should not be exaggerated either. Apart from gender, the tables typically did not contain extrajudicial variables and did not allow for more nuanced analyses. They were not knowingly developed to support the kind of *standing state-funded social science data programme* first realized in France in 1827.

## Decentred and bureaucratic models

Recent historical studies have shown that a multitude of crime figures and formatted 'returns' were collected in both France and England much before 1827 (Leromain 2017; Shoemaker & Ward 2017). England had collected crime data from the 1780s, but these remained local initiatives or uncompiled records (Shoemaker & Ward 2017: 1450–1). There was no government-led research and statistics programme such as the one created

by Guerry de Champneuf's team in France. When national statistics started to emerge, their use was channelled via statistical societies. The sequence of events suggests that the external shock of the *Compte* model pushed the English scene from data-supported piecemeal reform to data-using incremental research. The continental–French model and the English road to data-driven crime analysis were thus different.

In England, the process was comparatively decentred and often driven by ‘amateurs’ such as prison chaplains and clerks. Their aim was to understand the causes of crime, to be able to prevent crime. This grassroots movement to create systematic data on offenders was not a plot of the elites to keep the underclasses at bay, or an unfolding of subject-free power and governmentality (Shoemaker & Ward 2017). In a way, the rise of national crime statistics was a result of a successful mission capture by the statistical movement (p. 1456).

In the continental–French model, the state tradition provided a matrix for central data collection, and the role of the state was consequently bigger in the genesis of statistics. Here, the bureaucratic transformation of the *Kriminaltabellen* tradition into modern crime statistics became explicitly a project to give social scientists data. Central movers and players were people inspired by theoretical research interests or curiosity-driven science. The anonymous voice of the bureaucracy adopted, and was inspired by, the idea of evidence-based crime policy. The external impetus provided by the Allied police operations (De Graaf 2020) may have helped in the process.

## Against systems and opinions

As on the continent, the English criminal statistical movement was inspired by the call for objectivity. The London Statistical Society was created to collect objective, non-partisan facts for others to apply in policy. This became somewhat of a problem because the society was struggling to see the difference between theoretical hypotheses and political biases (Hilts 1978: 42–3). And, certainly, some of the best early criminological work published in the journal of the society drew from continental theorizing, especially on hypotheses regarding the effects of education on crime.

Citing Édouard Ducpétiaux and André-Michel Guerry, Rawson argued that nobody could deny that ‘moral, no less than physical, phenomena may be found to be controlled and determined by peculiar laws.’ Natural sciences had revealed the regularities of human anatomy and the laws and

'adaptations' of nature, something that all agreed. In addition, there were laws concerning 'the actions of mind'. These laws reflected the workings of external circumstances on humans. Like the creators and continuators of the *Compte*, Rawson critiqued 'mere assumptions and a priori theories of speculative moral philosophers' (Rawson 1839: 316–18).

What was lacking was data on which researchers could apply the twin methods of 'classification and induction'. Scholars needed 'extensive and repeated observations' from the human sphere to specify 'constant and uniform tendencies'. These would benefit the legislator who would find such data 'more safe and useful guides' than vague theories (p. 318). Crime could be enumerated and disaggregated by 'sex, civil and social condition of the offender', and 'degree of instruction' which would be used as a proxy for 'the degree of moral restraint' and the 'intensity of passion' in humans—meaning that the higher the education, the more capable humans were of exercising self-control (p. 318).

The recalcitrance and stubbornness of the data was seen as its merit. In the words of Joseph Fletcher, statistical inquiry still sometimes presents unexpected results, which the 'bigot of theory' would despise. It was thus wrong to 'seek facts merely to illustrate a hypothesis'. Such a bigot believes in theories with blind faith, rejecting unexpected findings. A true researcher who 'uses a hypothesis merely to discover truth, will, on the contrary, abandon its use in the moment that he arrives at facts which resist all efforts to reduce them into accordance with it' (Fletcher 1847: 195). Like their continental counterparts, the English first criminologists saw data forming a new kind of space where disagreements could be exactly defined and then resolved. The instrument could pacify ideological fervour by allowing the facts to arbitrate disagreement.

# The origins of criminology

## Introduction

The core argument of this book is that criminology was born in the decade following 1825, triggered by a specific event: the creation of the first modern national crime statistical report, the French *Compte*. This does not mean that governments started to collect data on crime only at that time. The French crime returns system originates at least from the 1730s (Leromain 2017), while English data efforts date back to the 1780s (Shoemaker & Ward 2017). Crime tables were also made in other countries before the *Compte*. Yet these crime returns systems differ from the *Compte* in fundamental respects. They often remained as data collection sheets, without summary compilation into coherent, published national statistics or as crime tables with no research-enabling aspects. The systems were designed to be ‘business statistics’ or *Geschäftstatistik*, for the purposes of central state control and judicial overview. From a data perspective, the crime returns stage (c. 1730 to 1780s) was followed by the crime tables stage (1780s to 1827), ending with the publication of the fully modern concept of national crime statistics in 1827.

The canonical format of modern research-enabling crime statistics was created by the *Compte*. It was immediately recognized by Europeans, including the English, as a national monument, a *Nationalwerk* taking the game to a new level. The group of administrative intellectuals around Guerry de Champneuf deliberately incorporated non-judicial variables into their analytic grid. They addressed groups or scholars who might be willing to start analysing crime with the new instrument. Thus, the aim was to create a field of criminological research. In this, they also succeeded like no other prior data effort. The *Compte* shock created the first criminological research field of interconnected scholars that was made commensurate by joint reference to the variable structure of the *Compte* and its successor and imitator statistical compilations (see Figure 10.1). While the number of scholars was small, they reached a critical mass of cross-validation to give empirical criminology a self-sustaining momentum.

This final chapter summarizes the main arguments of the book. It starts by describing the historical conditions that made possible the transition from the returns stage to data-based criminology. The following two sections conceptualize these conditions as concentric rings, starting with the most general (state consolidation) and then moving closer to the singularity point of the event itself, to the intentions of the main actors in their historical-cultural setting. The next section revisits the question of whether the 1827 events signified a radical change in how the discipline developed. To demonstrate the complexity of the empirical contact, the chapter briefly discusses the multiple levels of data-reality correspondence. Importantly, the question of what was 'left out' by the new paradigm is only meaningful if one considers data-based criminology as connecting with some parts of empirical reality. Therefore, the chapter then examines some of the silences and caveats of the first data-based criminology. These also point towards the future, to the second and even the third criminology, as described earlier.

## **Structural conditions**

The emergence of data-based criminology required the 'vehicle' of data returns, codification of legal frameworks, similarity of legal categories enabling reliable behavioural comparison, and a generational break created by the revolutionary period.

## **State consolidation**

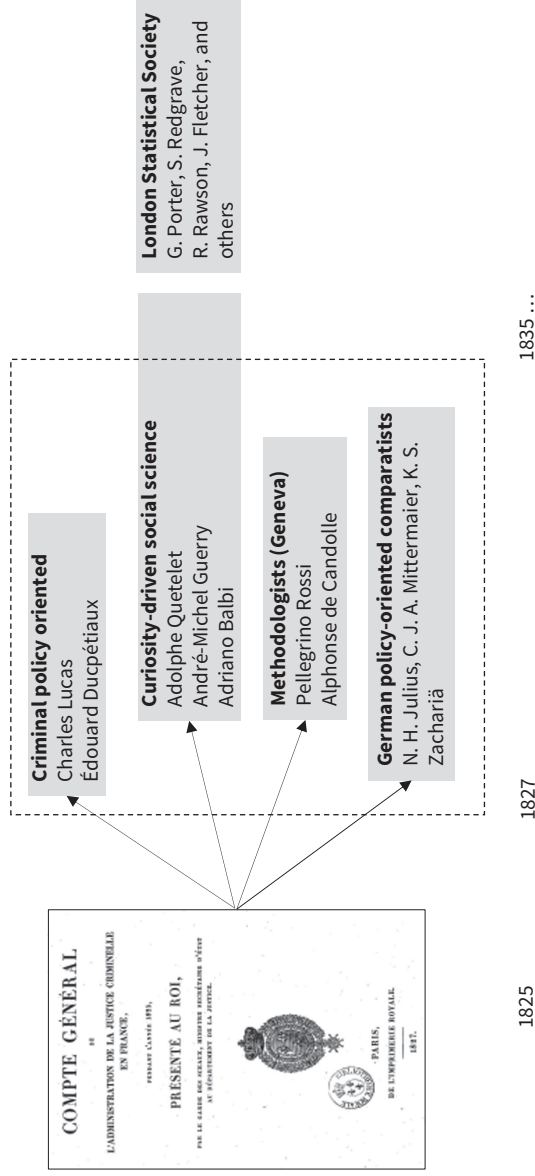
Data flows between local courts and the centre were created well before the French Revolution, both by the French administrative monarchy and the English parliamentary system. The clerks of the courts sent information compilations to the centre. From the early (France) or late (England) eighteenth century, the data flows were partially structured by using printed tables which the clerks could then fill in. Yet, this 'returns period' was not 'criminology' or 'criminological data collection'. It was more about state control and standardization of justice, sometimes incorporating elements of judicial review. Nevertheless, it was a praxis that could be harnessed to the service of social science research, a potential explored by Montyon and fulfilled by the team of Guerry de Champneuf.

The statistical turn was made possible by the consolidation of the central state during the revolutionary and Napoleonic eras (Rousseaux et al 1998). This trend continued in France into the Bourbon Restoration (1815–30) and the July Monarchy (1830–48). Building on earlier revolutionary measures to restructure the state, Napoleon had consolidated its bureaucracy (Rosanvallon 1990). The state increasingly penetrated the provinces, leading to an internal pacification of the nation (Bauer & Soullez 2012: 67–74). Napoleon's civil (1804) and penal (1810) codes gave a legal structure to administrative centralization. The modernization of police institutions was initiated at the same time.

These power mechanisms were accelerated across Europe by French conquests. Recall how Stendhal, following French occupation forces in northern Italy in 1800, observed the high Italian homicide rates and compared them with the lower rates in France (Stendhal 1997 [1801]). The French imperial administration was perceived as a civilizing force, able to reduce such high crime rates, as claimed by Montalivet in his State of the Empire address (de Montalivet 1813). He was justifying conquest to the whole world, while Stendhal had written only to his sister Pauline. Yet external observers could ascertain the same. For one, Samuel Romilly stated in his parliamentary diary that the French occupation reduced homicide in Italy. In Pescia, for instance, there had been one homicide per week before the occupation, and 'scarcely any' during it. Afterwards, homicide rates returned to their normal levels again. Romilly gave a control theoretical interpretation to this pattern: homicide offenders could avoid apprehension because of small statism. Nearby borders and even church premises offered sanctuaries for them (Romilly 1840b: 205–6 (20 September 1815)). As a British politician and criminal law reformer, Romilly was among the very few experts in interpreting crime trends, and he had no interest in glorifying Britain's erstwhile enemy. The crime-reducing power of the French administration cannot be completely written off as imperial propaganda; the effect could have been real, so that statistical patterns approximated reality.

Consolidation of central powers was not only happening at the level of nation-states. After the defeat of Napoleon in 1815, Europe did not return to the pre-1789 world. The Allied powers built new institutions to develop a contemporary type of international security matrix (De Graaf 2020). The 'balance of power' discussed in the Vienna Conference of 1815 meant that the balance needed to be *weighed* with the help of statistical resources. The power, population, and productive forces of nations needed to be measured. It is no coincidence that Charles Dupin and George R. Porter,





**Figure 10.1** The *Compte général* transformed the administrative 'returns' system into a social science instrument, triggering the first explosion of data-based criminology. Note that the figure does not include all key players in the 1827 data revolution

Source (*Compte cover*): gallica.bnf.fr / Bibliothèque nationale de France.

respectively, incorporated crime analyses into their examinations of the productive forces of France and Britain. They saw secular and technical enlightenment as increasing the power of nations whilst also reducing violence. The conservative innovations of the Vienna paradigm similarly called for measuring the strength of nations.

Contemporary observers saw that the creation of administrative criminal justice data was linked to state consolidation. It enhanced the power of the central state, enabling it to secure the operation of penal control by means of surveillance or repression (Ortolan & Ledeau 1831: 251–2). The counting forms sent to the courts conveyed the clear message that the judicial processes should be similar across the nation. They served the purpose of making penal law application uniform (Aubusson de Cavarlay 1998: 159). Punishments were standardized, just like the standard measures of weight, distance, and time. The authors of the annual crime report were themselves conscious of the fact that the *Compte* was based on the centralization of judicial power, and on the unification of penal laws (*Compte général* 1836: a). The new kind of national statistics was possible ‘thanks to our judicial and administrative centralization, and the unity of our legislation’. It was hardly a coincidence that the early criminologists used budget and tax metaphors in making sense of crime data. They drew on a state-funded, research-enabling data instrument. It is likewise not a coincidence that the 1820s witnessed an abrupt increase in the cultural salience of science and statistics (Carnino 2015: 24–6; Ycart 2016). The criminology explosion was part of a major change in the state–data nexus.

## Codification and legal transplants

It is useful to think of penal codes as planned classification manuals telling prosecutors and judges how specific types of human behaviour (criminal behaviour) are subsumed under different labels (legal crime definitions). In addition to being transferred from the courts to the centre, the data had to be reliably ‘coded’. Codification meant that laws were drafted and/or collected to form consistent wholes, to replace prior multitudes of laws and customs. Described as a ‘codification fever’, the drive to codify laws started in the eighteenth century and continued during the nineteenth century (Herzog 2018: 207). This movement was well known to the people, to the

degree that literary figures could publish humorous ‘codes’ describing how people could defend themselves against criminals.

The codification and rationalization of criminal laws made international comparisons a possibility. This was partially due to the shared ideological bases of different national codes in Enlightenment rationality and legal principles. Particularly important for the rise of criminology was the codification and spread of French penal law. Thus, the early nineteenth century witnessed a radical new type of legal transfer on the European continent. The French penal system was applied, as an imposed legal transplant (Watson 1993: 29–30), in areas conquered by revolutionary and later Napoleon’s armies. Thus, the French penal system was applied in modern Belgium and the Netherlands for decades after the onset of revolutionary conquests in the mid-1790s (Rousseaux et al 1998; Cartuyvels 2018). The city of Geneva provisionally adopted the Code Penal, enabling the comparative work of Pellegrino Rossi. Furthermore, the French law was applied in the German provinces west of the Rhine (Härter 2018). This situation continued for some time after the defeat of Napoleon in 1814/15 in areas annexed by Prussia, Bavaria, and the Grand Duchy of Hessen-Darmstadt. The French code enjoyed popular support west of the Rhine because it was modern, rational, reliable, and effective in comparison to older legal pluralist traditions (pp. 65, 68–9). When several regimes incorporated these principles, borrowing elements from the French code, criminal justice was partially internationalized (Masferrer 2018: 19–21).

Thus, at the time of the *Compte* explosion from 1827, political constellations fostered transfer and unification in the realm of criminal law. Since criminal laws are classification manuals defining how human behaviour is described, using a shared or similar code standardized the core variable of criminology across a spectrum of social and cultural conditions. Once the modern concept of national crime statistics had been born, it was very soon transplanted to other countries—it became a *statistical transplant*. At that time, codification was not ‘needed’, as the English case shows. Nevertheless, it appears to me to be important for the understanding of criminology’s history that it originated in the early nineteenth century when the nation-states and nationalism were not yet such strong forces as they were from the mid-nineteenth century to the mid-twentieth century. As I see it, international criminology originated before national criminology; at least the comparative aim was at its heart from Day One. That is, from 11 February 1827.

## The generation of 1820

Data-based criminology was created by a young generation who understood themselves to be a 'generation'. One of the key players in this story, Charles Dupin, was also among the first social scientists to use the concept of generation as an explanation of the change in political values (Karila-Cohen 2009: 137–8). He saw the generation born in 1770 or later as a key carrier of liberal values. The political socialization of this group was dominated by the experience of revolution. As seen from this generational perspective, the rise of liberalism in the 1827 election reflected population turnover: the older cohorts, the conservatives, were dying and leaving the liberals to master the political field. Moreover, Dupin linked liberal values to his notion of technical and secular civilization: liberality was correlated with affluence (p. 138). More recently, Alan Spitzer claimed that Restoration France witnessed a unique generational constellation: the cohort born between 1792 and 1803 shaped the culture wars of the 1820s by taking the side of liberalism and secularism against the clerical, catholic, and royalist spirit of the Restoration regime (Spitzer 1987).

It is noteworthy that most of those who contributed to the birth of data criminology were of the same generation: Adolphe Quetelet (1796), Alphonse Taillandier (1797), Louis-Mathurin Moreau (1799), Gustave de Beaumont (1802), André-Michel Guerry (1802), Jean Arondeau (1803), Charles Lucas (1803), Édouard Ducpétiaux (1804), Alexis de Tocqueville (1805), and Alphonse de Candolle (1806) were born between 1796 and 1806. Three key figures, Charles Dupin (1784), Jacques Guerry de Champneuf (1788), and Pellegrino Rossi (1787) were older than the rest. They too belonged to the broader liberal generation of Dupin, meaning that their political socialization in adulthood was revolutionary and post-revolutionary. The same applies to the first generation of English data criminologists who published their work in the journal of the London Statistical Society. The five key authors—George R. Porter (1792), Whitworth Russell (1795), Samuel Redgrave (1802), Rawson W. Rawson (1812), and Joseph Fletcher (1812)—were all born during the revolutionary–Napoleonic era and entered public life during the Restoration period.<sup>1</sup>

These scholars shared generational experiences. The French among them went to school and college in the Napoleonic secular context but faced in

<sup>1</sup> The Germans were also somewhat older: Zachariä (1769), Julius (1783), and Mittermaier (1787) cannot be placed in Dupin's liberal generation scheme.

the 1820s a conservative–religious backlash. Yet the *Compte* group cannot be exclusively linked to liberal circles or aims. The stronger agenda was to transcend the political strife and upheavals of past decades. These were seen as results of excessive politicization and ideologies. They were thus seeking a solution to such excesses from research and data. On reading them, one senses an implicit, and in many places explicit, satisfaction in finding answers from empirical data rather than from moral or religious dogma. This also applies to the first generation of English criminologists (Chapter 9).

## Intentions in context

What were the members of the 1820s generation aiming at when they created and used systematically collected and compiled administrative data on crime? They were reacting against prior intellectual traditions, seeking to replace vague theories and ‘systems’ with a new type of research instrument: national crime statistics designed to incorporate extrajudicial social science research options. The new instrument would be open to results, serving as an impartial referee of dissent. The perennial question of how civilization impacts morals could be solved in that space.

## Fear of what?

As discussed throughout this book, there is a relatively strong standard narrative in prior research linking the rise of criminology to fear of crime, or fear of popular revolution. To some degree, emphasis on fear can be an anachronistic projection from our own sensitivities to the past. But, more often, the fear theory of criminology reflects a straightforward temporal interpretation: since criminology was born after the revolutionary era and Napoleonic wars, it must have been part of a conservative project. For later historical periods, there are primary studies drawing on a similar but subtler perspective. A sophisticated variant can be found in the history of German criminology by Silviana Galassi (2004). Her aim was to explain the rise of criminology in the unified Bismarckian Germany from the 1880s.

Galassi starts with the deep social and cultural history of how the rising bourgeoisie had tried to mark its place in the social world. The bourgeoisie

used Romantic anti-norm authenticity to create distance from court nobility. Towards the lowest classes, a different approach was taken. While the workers and marginal social categories were criminal, the bourgeoisie was law abiding. Normativity was thus its strategy of *Abgrenzung nach unten*, boundary-raising against the lower classes. This distinction strategy formed the basis of the '*Stimmungslage*' driving the social call for criminology in the newly unified Germany (p. 111). More proximate external causes were also at play. An economic crash in the early 1870s made the bourgeoisie feel insecure, and further motivated distancing from underclass realities. Galassi offers a functionalist explanation: condemnation of the 'dangerous' underclass leads to a stabilization of bourgeois norms. Together with more visceral fears stimulated by the press, such structural causes produced a 'deeply ingrained and extremely diffuse feeling of insecurity and anxiety' (pp. 114–19).

The fear narrative is thus socio-Freudian: economic-structural fears of the bourgeoisie were sublimated into fear of crime and, from there, to the need for criminology. In this constellation, criminologists offered themselves as problem solvers (pp. 120–2). They claimed issue ownership of crime-related matters from previous owners like priests and moralists. This explanation does not require that crime scholars such as Franz von Liszt or Gustaf Aschaffenburg were personally fearful of crime. Rather, they claimed to possess a remedy to the problem of fear: crime prevention through empirical research.

In contrast, during the period of first data-based criminology, roughly between 1825 and 1835, the criminological discourse was less obviously connected to fear of street crime. The young generation of scholars using the *Compte* and other crime statistical sources expressed positive attitudes towards applying the natural scientific model to human affairs. They feared vague theories, philosophical systems, political selection of facts, and what Max Weber would later call 'prophets of the lecture room.' True data and proper analysis were intended to replace these. Questioning the separation of human and natural sciences, they resembled the Vienna Circle of logical empiricists of the early twentieth century. At the same time, the first data criminologists were counteracting what is today called 'governing through crime.' Recall how at the apex of Terror in 1794, Maximilien Robespierre had described himself as a 'man born to fight crime.' The founder of modern crime statistics, Guerry de Champneuf (1832), defended the rule of law over the political instrumentalization of crime. Thus, the mood of the key

innovators during the 1820s and early 1830s was optimistic: they were perfecting the project of civilization by fighting ideological biases and excesses, and by making the rule of law visible.

## Civilization as process and project

When Charles Dupin opened his annual lectures of applied geometry on 2 December 1838, reflecting the trends of the previous two decades, he saw a consistent record of legal reforms aiming at penal moderation. Similarly, George R. Porter, one of the first English criminologists using crime statistics in complex analysis, worked from within the civilization frame. In his 1836 book *The Progress of the Nation*, he observed a consistent reduction of violence since the previous century. This was connected to a period of piecemeal reforms starting from Romilly's first initiatives against the 'bloody code' in 1808 (Porter 1847 [1836]). The civilization process was an overarching cultural context of discovery which impacted the rise of first criminology in several ways. National crime statistics, with in-built research options, emerged with five connections to the civilization debate:

- i. *Making the question of civilization effects solvable.* The new kind of crime data was developed and used as a means of answering the question of how civilization impacted morality. Was secular and technical civilization advancing or corrupting the morality of peoples? Rousseau had written that civilization bred crime and corruption, while most Enlightenment philosophers saw it as promoting milder and gentler manners, and less crime. By the 1820s, scholars were starting to see that crime statistics could solve this endless debate of armchair theorizing. The first data criminologists placed themselves outside the civilizing process to observe its existence and effects.
- ii. *Advancing the project of civilization.* For many of the key innovators of first data-based criminology, civilization was more than an unfolding process: it was also a project they wanted to advance. Many of them were education activists, like Guerry de Champneuf and Dupin, or interested in the education-crime link, like Jomard, Balbi, and Guerry, and of course the Germans. The educational techniques of the age, such as the Lancastrian system of mutual education, today mostly forgotten, claimed to increase the morality, and reduce the crimes, of the working classes. The debates between different methods

of schooling, and secular versus religious goals of education, resemble our own time's debates on 'what works' in crime prevention.

- iii. *Data as a probe to what works in criminal justice.* First data-based criminology tackled not only criminal behaviour, but also the informal and formal reactions to crime. In this field, they feared that harsh punishments made penal justice ineffective by making judges and jurors reluctant to punish. To make penal law effective, punishments had to be reduced and thus made consistent with the prevailing civilized standards of mildness. This argument was older than the statistics asset, but it gained momentum with the new data. In addition to charting such mismatches between law and cultural change, data was seen as a means of testing the effects of specific criminal justice reforms. Their project was not simply 'liberal' or 'conservative', but beyond or above that distinction.
- iv. *Data as a bulwark of the rule of law.* The fourth aspect of the link between the rise of modern crime statistics and civilization was linked to the rule of law. National crime statistics made the monopoly of state violence visible and transparent. The decision to make these statistics public was itself contentious and radical. Many foreigners were astonished by such a 'confession of a nation'. The innovators of crime data were fearful of the kind of political 'governing through crime' exemplified by Robespierre. Guerry de Champneuf's (1832) critique of the July Monarchy's martial law practices linked to these sentiments.
- v. *Data as a civilizer of research.* Finally, crime statistics were intended to civilize the scholarly community itself. By anchoring hypotheses to a shared database, the research process became more disciplined. This enabled the chaotic field of vague theories and 'systems' to transform into an incremental and cumulative research programme. In this shift, national crime statistics served the same function as Boyle's air pump in the genesis of experimental natural science from the 1660s (Shapin & Schaffer 1985). Like the experiment (using instruments such as the pump), the national crime statistics emerged in a postwar situation to solve the problem of order, both within research and within the polity. It enabled scholars to disagree in a gentlemanly manner, replacing the dangerous kind of zealotry in philosophical systems building.

It is possible that the first criminology emanated from the civilization frame of optimism, while the second data revolution, the Lombroso-dominated era, could be influenced by other contexts, including fear



(Galassi 2004). Perhaps the first ten years of data-based criminology were an exceptional period. Maybe there was a turn to a more conservative mood, signified by works such as Honoré-Antoine Frégier's *Des classes dangereuses* (1840). Already in his 1838 speech, Dupin had claimed that penal moderation had gone too far, as the weakening of penal deterrence had caused an increase in crimes. There was a debate as to whether penal moderation had in fact led to this increase, during which Jean Arondeau drew on the *Compte* asset to critique conservative claims, pointing out how crime trends in administrative data were influenced by a complex set of factors. But fear was not the main driver explaining the rise of national crime statistics and criminology from the 1820s. The generation who first broke the crime measurement barrier supported milder manners, saw data itself as a gentle civilizer of scholarly and social conflicts, whilst aiming to make the rule of law stronger by making it visible.

## Most remarkable uniformity

I have argued that crime statistics was the instrument whose emergence created criminology as an effort to study crime and crime control with systematic data. Once this data became available, it started to influence the content of criminological thought and theory. There was a data-driven discontinuity, or at least a marked acceleration of innovation based on empirical studies. Ideas related to routine activities, opportunity structures, and the role of informal social control were developed soon after statistical records were published. Extensive research was also focused on the links between education and crime, both within countries and internationally. The aim was to anchor the civilization and crime drop debates to data, by disaggregating crime before correlating it with other variables. It was argued that violence really was decreasing, while property crime increased as a function of opportunity structure. Thus, it seems to me to be plausible to say that the new instrument really 'influenced what can be thought', as expressed by Van Helden and Hankins (1994). The rise of research-enabling national crime statistics was the first, constitutive data revolution of criminology. Just like the telescope and the microscope made new objects visible, the assemblage of standardized crime data made new things visible and thinkable. Yet this claim is quite provocative in our own age. Why is that?

Long after the beginnings of data-based criminology, researchers considered administrative crime statistics as usable in the study of behaviour

(Zauberman & Robert 2011), especially if supplemented with crime surveys. The 1960s, however, witnessed a change of paradigm in this regard. The new constructionist view was formulated by Kitsuse and Cicourel in their seminal paper 'A Note on the Uses of Official Statistics' (1963). In that paper, they suggested that official crime records only reflect control, not the behaviour of people. Possibly supported by Anglo-American anti-psychiatry and later by the influential thought of Michel Foucault, data were now approached from the perspective of how they *created* rather than *reflected* realities. From the 1970s, the reception of the *Compte* became influenced by the Kitsuse–Cicourel paradigm (Robert 1979: 32; Bomio & Robert 1987; Perrot & Robert 1989: 14; Aubusson de Cavarlay 1993; see also Renneville 1994: 49).

This relativizing climate of opinion reflected a wider shift in historical scholarship. Historians of crime and control started to name their books with titles underscoring the construction of crime. Consider the titles *Inventing the Criminal* (Wetzell 2000), *Creating Born Criminals* (Rafter 1997), *Les bas-fonds—Histoire d'un imaginaire* (Kalifa 2013), translated as how the 'Western Imagination Invented the Underworld' or *Die Konstruktion des Rückfalltäters* (Hofinger 2015) translating into 'The Construction of the Repeat Offender'. On reading these excellent books, one sometimes gets the impression that the title is more constructionist than the content. Titles such as *Inventing Criminology* (Beirne 1993) and *Inventing Sociology* (Whitt 2002) see intellectual traditions rather than criminal behaviour as constructed.

While the influence of external reality can sometimes be bracketed for methodological reasons, it may not be sufficient in disciplinary historiography. Since our own hermeneutical horizon is permeated by constructionism, it is difficult to see things as they saw things. To understand the first criminologists, there is a need to address their struggle to capture behavioural aspects of crime and control behaviour. They acted on the notion of isomorphism: they believed that the control data they used, if handled with care, corresponded to behavioural aspects of crime. Therefore, it is important not to project our ontic doubts onto their epistemic efforts; methodologically, they were quite sophisticated. De Candolle and others formulated all the standard validity threats in the genesis of administrative crime statistics.

To understand how the first criminology saw the data-reality isomorphism, it is useful to remember that there are different types and degrees of isomorphism between data instruments and reality. We often tend to

equate the validity problems with the challenge of hidden crime, because in most crime types only a small and varying fraction of offences are recorded (Kivivuori 2011; Zauberman & Robert 2011). Yet the statistics–behaviour correspondence is much more complex than the gap between recorded and unrecorded crimes. *Prevalence isomorphism* can be absolute or relative. It is absolute if the statistics are believed to capture real crime rates without error; it is relative, if the data are presumed to correctly capture the rank order of crimes, in relation to the referent. In addition, the relation between statistics and behaviour can manifest *trend isomorphism*: two indicators can give different levels but the same trend, and both levels can be wrong while the trend is correct.

Third, control data can manifest *pattern isomorphism*. For example, official statistics can correctly reveal the age–crime curve or the sex distribution of crime. When the early criminologists were astonished by the stability of crime, they were also thinking about such patterns. Thus, Porter observed the stability of the age–crime curve, describing it as the ‘*most remarkable uniformity*’ (Porter 1847 [1836]: 655).<sup>2</sup> The same goes for findings on education and tables on the motives of homicide. These distributions can be valid even though they are based on recorded crimes or measured via control data. Fourth, there can be *correlational isomorphism* between official data and its referent, if the statistics validly capture correlations between variables even if they do not include all the cases; the various area-based analyses of the first criminologists are a case in point. Finally, the data can reveal *causal isomorphism* between predictors and outcomes even though it does not include ‘all cases’. So, the isomorphism assumption does not depend on ‘full inclusion’ or a ‘constant ratio’ between recorded and unrecorded crimes.

The first constitutive data revolution of criminology can be seen as the moment when the reality of crime increased its impact on research. Committing oneself to data is like Ulysses binding himself to the mast: such ‘discipline’ enables researchers to see new things. Once committed to data produced by an instrument, researchers cannot construe and say just anything about it. Its nature, patterns, and correlates influence what they can say about it, thus ‘civilizing’ the intellectual space itself. Recorded crimes are not entirely arbitrary and driven by control ideologies or anonymous power formations (Perrot 2001). We are used to seeing

<sup>2</sup> For a modern discussion on the stability of the age–crime curve, see Ulmer & Steffensmeier 2014.

our vision of reality as inherently corrupted and constructed by control. Perhaps this has led prior research to see the third data revolution, the rise of the crime survey, as criminology's declaration of independence from the state and its control architecture (Kivivuori 2011). Yet, the story of the rise of the modern national crime statistics allows another narrative. Rather than being underlabourers or subalterns to state power, independent scholars captured for social science an asset created by the state, originally for other purposes.

## Conclusion

In February 1818, Samuel Romilly was invited to a dinner party where he met a certain Mrs Fry, the wife of a rich city banker. As it happens, Elizabeth Fry (1780–1845) was a philanthropist seeking to improve the lot of female prisoners. She impressed Romilly by providing qualitative information about how penal conditions impacted women. He appreciated the fact that Mrs Fry ‘has had such opportunities of *seeing and conversing with* the prisoners’, enabling her to relate ‘*facts* respecting the *effects* produced by capital punishments’. Many of these facts described the subjective experiences of the convicts, such as their ‘great sense of injustice’ of punishing petty crime ‘in the same manner as murders’. Furthermore, women suffering from excessive punishment felt they could be sure of their salvation as their ordeal in this world would be ‘rewarded in that which is to come’. Finally, kinder treatment ‘called forth, even in the most depraved, grateful feelings’ (Romilly 1840b: 332–3, emphasis added).

Romilly's dinner experience is reminiscent of the masculine world in which criminology was born. Gender was subsequently incorporated as a variable to the *Compte* and its successors, and this variable was used in research. Females were generally observed to be less criminal and thus more civilized than men, whilst also having different patterns of crime reflecting their different life conditions and routines. Yet there were no female scholars playing main roles in the first act of criminology. Similarly, the non-European world was largely absent, mainly because there were no data from elsewhere. When such data started to emerge, it was created by colonial rule. The analysis of crime statistics in Madras and Bengal tentatively suggested that the inhabitants of British India were less criminal than the British (Sykes 1843). Even though the crimes of the ‘Thugs’ were excluded from this analysis, the findings were not consistent with racist forms of

civilization theory. On the side of the predictors, 'Lancastrian' mutual education was originally adopted from India, as a tool for civilizing the working classes of Europe.

## Silences

The notion of correspondence between data and reality raises the question, did the new instrument leave something outside its purview? When the new data instrument influenced what could be thought, did it also influence what was not thought? Were there important biases and silences? Qualitative data is a case in point; it exemplifies a shortcoming of the first data-based criminology.

Some of the free-ranging theories of the eighteenth century were not amenable to testing with administrative crime data. Most notably, possibly the most popular theory of crime in the eighteenth century, labelling theory, is largely absent from the first criminology field. The data itself soon introduced recidivism as an important field of inquiry. Yet the question of why people reoffended remained obscure, or the mechanisms were taken for granted. Was the labelling theory so thoroughly accepted that it was not really researched? It may not be a coincidence that some of the most instructive analyses of labelling mechanisms are based on qualitative data, such as Schiller's case study on how social ostracism causes criminal careers (von Schiller 1786). The first data revolution of criminology was, in contrast, quantitative. The biggest silence of the earliest criminological studies was the omission of non-numeric data, the kind of data possessed by Elizabeth Fry who knew facts based on seeing and conversing with the people she observed.

In the absence of systematic qualitative approaches, labelling became the domain of the novelists. The great crime novels of the nineteenth century were obsessed with people falsely or excessively labelled as criminals, as in Sue's *Mysteries of Paris*, Dumas's *Count of Monte Cristo*, and Hugo's *Les Misérables*. This theme co-evolved with empirical analyses of recidivism, lending additional weight to labelling theoretical discussions. Indeed, narrative literature was not divided into clear segments of fiction and fact. Rather, the great novels of the nineteenth century aimed at capturing realities and social problems (such as labelling). 'Fiction' occupied the terrain, which would later be taken by qualitative and ethnographic criminology, mixing non-numeric data, narrative structures, and political agendas and

activism. Zola's twenty-volume novel series *Rougon-Macquart* was the apogee of this placeholder qualitative approach linking fiction, ethnography, and medical theory on hereditary processes.

White-collar and upper-class crimes were condemned by the pre-revolutionary *philosophes* (Renneville 2006: 31–2). They were, however, only fragmentally considered by the first data criminologists, sometimes almost like lip service to Enlightenment discourse, as in Guerry's essay on crime in France (1833). Some such crimes were included in the *Compte*, but the main research interest of first-generation data-based criminology was in the sphere of so-called conventional or street crime. It is interesting that literary figures such as Balzac (2015 [1825]) treated common thieving and various forms of white-collar fraud and exploitation as a continuum. This idea, fertile for satire, was to be revived in the path leading to the third data revolution of criminology which initially wanted to show that the putatively 'law abiding' bourgeoisie was, deep down, 'criminal' as well.

## Seeds of later revolutions

In this book, I have suggested that the first data revolution of criminology was a singular turning point which created criminology as an intellectual field. In addition, this first explosion created the shock waves which later triggered the next stages of criminology. Perhaps the greatest caveat of the first data-based criminology was the individual. In the period I have called 'first criminology', all data and all analyses were at the level of aggregates: countries, counties, cities, or socio-demographic aggregates constituted by the variables used in *Compte*-type statistical compilations. Nobody had the kind of individual-level register data today routinely used by quantitative criminologists.

The first data criminologists lacked the means and concepts of analysing complex relations in quantitative data, such as correlation and regression. They implicitly discussed moderation, spuriousness, and interaction, but lacked the statistical means and standardized concepts to capture them. I believe they sensed a gaping absence in their analytic powers, there was a sense of 'lag': their newly won data and their research questions suggested that something was missing if they wanted to explore correlational and causal patterns embedded in the data. This methodological dissonance triggered new thoughts 'out of the box'. Alphonse de Candolle formulated the need for experimental design, the need to 'hold everything constant' except

the presumed causal factor (de Candolle 1830: 185–6). Quetelet's analysis of factors influencing sentencing reads like a painstaking effort to reach multivariate analysis and to quantify the 'effect sizes' of key predictors (Quetelet 2013 [1842]: 104–5). Guerry's heroic but lost efforts to build an *ordonnateur statistique*, a 'calculating machine' (Friendly & de Sainte Agathe 2012),<sup>3</sup> reflected efforts to make *analytic* breakthroughs that would match the *data* breakthroughs of 1827.

The rise of the individual as the focal point of interest formed the epicentre of the second criminology from the 1850s. Like the first criminology, it was linked to the use of instruments and measurements. These were taken mostly from medical practice. If the first criminology was symbolically born in 1827, when was second criminology born? The publication of Lombroso's *The Criminal Man* in 1876 is a possible date. Benedict Augustin Morel's *Traité des Dégénérescences*, published in 1857, or Franz von Liszt's *Zweckgedanke im Strafrecht* (1882), are also symbolic watersheds. These works testify, each in its own manner, to the rise of the medical model of analysis and measurement, and a surge of interest in how society can be protected from negative interactions between hereditary processes and environmental factors. There was a notable similarity between the medical gaze of the Morel–Lombroso complex and the booming proto-qualitative literature describing criminal life-worlds: both were, like Elizabeth Fry and other 'prison visitors', seeing individual offenders face to face, instead of the highly mediated picture provided by aggregate crime statistics. Both traditions continued the deep humanistic tradition connecting people's external appearance to their inner moral qualities.

Another continuity from the first data-based criminology to the second stage of the discipline is linked to their relation to the state. Both derived their data from state power: the first one, examined in this book, used the assembled returns from the courts, while the second marshalled conscripts and convicts to total institutions where they could be measured. It was left for the third criminological data revolution, the rise of the crime survey from the 1930s, to sever this connection to the state by reaching out directly to the people, and thus breaking the official control barrier of crime measurement (Kivivuori 2011). Yet the hidden crime researchers also took individual-level measurement further by creating psycho- and sociometric

<sup>3</sup> Both Guerry and Quetelet cooperated with Charles Babbage (1791–1871), the inventor of the *Analytical Engine*, the forerunner of the modern computer.

scales for new theoretical constructs, ultimately refuting their own quest to 'normalize' crime.

So, from the perspective of the present, the three data revolutions of criminology *supplemented* each other. All three vectors are still with us, as parts of the discipline: as aggregated crime statistics, as clinical and psychological observation of individuals, and as surveys also capturing the 'hidden,' less serious everyday crime and victimization. Possibly future historians of criminology will see the internet and social media as triggering the fourth data revolution of criminology, associated with new modes of analysis such as natural language processing and artificial intelligence, invoking the distant memory of Guerry's data machine. Perhaps the fourth revolution has already begun; we do not know, as we are standing too close to the pointillistic painting of the present.

The historically developed and layered nature of criminology explains why first-generation data criminology feels familiar to us. Its pioneers created a living tradition that is still going strong, both in the aggregate national statistics form and as individual-level register research. The work of the pioneers described in this book seems like something criminologists still do, much more so than eighteenth-century thinking about crime before criminology. They addressed concerns that we still recognize, like the need to fight confirmation bias in research. They wanted to put the speculative theories and 'systems' of armchair theorists to the test, without opposing or endorsing them. At the same time, civilization was for them more than a process unfolding in history. As educational activists, they wanted to advance civilization and popular education to decrease crime. They made rule of law more transparent by making it visible to all as the 'confession of a nation'. In so doing, they created a tradition that has withstood the often-warranted onslaught of criticism, remaining meaningful to this day. The first criminologists, including the datafication mastermind Jacques Guerry de Champneuf, surely deserve a place in the Pantheon of Criminology.





# Bibliography

Major electronic source repositories are indicated by general reference: Gallica (<https://gallica.bnf.fr/>), Google Books (<https://books.google.com/>), and HathiTrust (<https://babel.hathitrust.org>).

Aaslestad, K. B. 2015. 'Serious Work for a New Europe: The Congress of Vienna after Two Hundred Years.' *Central European History* 48: pp. 225–37.

Aebi, M. and Linde, A. 2012. 'Conviction Statistics as an Indicator of Crime Trends in Europe from 1990 to 2006'. *European Journal of Criminal Policy and Research* 18: pp. 103–44.

Alt, P. 2000. *Schiller: Leben—Werk—Zeit*. Erster Band. Munich: Beck.

Andersen, S. N. 2022. 'The Scandinavian prison project: What happens when Scandinavian correctional principles and practices travel to the US?' *Nordic Criminology Blog* 19 May 2022. Accessed 20 March 2024, [www.nsfk.org/blog/the-scandinavian-prison-project-what-happens-when-scandinavian-correctional-principles-and-practices-travel-to-the-us/](http://www.nsfk.org/blog/the-scandinavian-prison-project-what-happens-when-scandinavian-correctional-principles-and-practices-travel-to-the-us/).

Anon. 1817. Correspondance. Département de la Vienne. Poitiers. *Journal d'éducation*, publié par la Société formée à Paris pour l'amélioration de l'enseignement élémentaire. Source: [gallica.bnf.fr/Bibliothèque nationale de France](https://gallica.bnf.fr/Bibliothèque_nationale_de_France).

Anon. 1833. 'Review of Essai sur la Statistique Morale de France by A-M. Guerry'. *Athenaeum* 303: pp. 537–9.

Anon. 1848. 'Arondeau, Janet, Benoiston de Chateauneuf und Vingtrinier über die französische strafrechtspflege in den zwanzig Jahren von 1826 bis 1845'. *Jahrbücher der Gefängnisskunde und Besserungsanstalten* 11: pp. 193–212.

Arondeau, J. 1842. 'Répression devant les cours d'assises. Influence de la loi du 18 avril 1832 et de l'admission dans notre législation pénale des circonstances atténuantes'. *Revue étrangère et française de législation* 9: pp. 831–9. Source: [gallica.bnf.fr/Bibliothèque nationale de France](https://gallica.bnf.fr/Bibliothèque_nationale_de_France).

Arondeau, J. 1847. 'Mouvement de la criminalité en France. Compte rendu de l'administration de la justice criminelle pendant l'année 1845'. *Revue de Droit Français et Étranger* 4: pp. 897–912. (Continuation of *Revue étrangère et française de législation*.) Source: [gallica.bnf.fr/Bibliothèque nationale de France](https://gallica.bnf.fr/Bibliothèque_nationale_de_France).

Auber, C.-A. 1852. *Biographie poitevine*. M. Guerry-Champneuf, Avocat de barreau de Poitiers. Poitiers: Imprimerie de Henri Oudin. Source: Google Books.

Aubusson de Cavarlay, B. 1993. 'Can Criminal Statistics Still Be of Scientific Use? The French Criminal Justice System, 1831–1980'. *Historical Methods: A Journal of Quantitative and Interdisciplinary History* 26 (2): pp. 69–84.

## 212 Bibliography

- Aubusson de Cavarlay, B. 1998. 'De la statistique criminelle apparente à la statistique judiciaire cachée'. *Déviance et société* 22 (2): pp. 155–80.
- Balbi, A. 1822. *Essai statistique sur le royaume de Portugal et d'Algarve, comparé aux autres Etats de l'Europe et suivi d'un coup d'oeil sur l'état actuel des sciences, des lettres et des beaux-arts parmi les Portugais des deux hémisphères*. Paris: Rey et Gravier. Source: Google Books.
- Balbi, A. 1828. *L'Empire Russe comparé aux principaux États du monde, ou Essai sur la statistique de la Russie, considérée sous les rapports géographiques, moral et politique*. Paris: Paul Renoyard.
- Balbi, A. 1829. 'Rapport du nombre des crime a l'état de l'instruction publique en France'. *Bulletin des sciences géographiques* 20: pp. 253–64. Paris: Bureau central du Bulletin.
- Balbi, A. and Guerry, A.-Y. 1829. *Statistique comparée de l'état de l'instruction et du nombre des crimes dans les divers Arrondissements des Académies et des Cours Royales de France*. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Balzac, B.-F. 1807. *Mémoire sur les moyens de prévenir les vols et les assassinats et de ramener les hommes qui les commettent aux travaux de la Société*. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Balzac, H. 2015 [1825]. *Code des gens honnêtes ou l'art de ne pas être dupe des fripons*. Paris: Éditions de L'Herne.
- Barbin, E. and Marec, Y. 1987. 'Les recherches sur la probabilité des jugements de Simon-Denis Poisson'. *Histoire & Mesure* 2 (2): pp. 39–58.
- Bate, J. 2020. *The Radical Wordsworth. The Poet Who Changed the World*. London: William Collins.
- Bauer, A. and Soulez, C. 2012. *Une histoire criminelle de la France*. Paris: Odile Jacob.
- Beaumont, G. and Tocqueville, A. 1833. *Du Système pénitentiaire aux États-Unis et de son application en France, suivi d'un appendice sur les colonies pénales et de notes statistiques*. Paris: H. Fournier Jeune. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Beccaria, C. 2003 [1764]. *On Crimes and Punishments and Other Writings*, edited by Bellamy, R. Translated by Davies, R. with Cox, V. and Bellamy, R. Cambridge: Cambridge University Press.
- Beirne, P. 1987. 'Adolphe Quetelet and the Origins of Positivist Criminology'. *American Journal of Sociology* 92(5): pp. 1140–69.
- Beirne, P. 1993. *Inventing Criminology. Essays on the Rise of 'Homo Criminalis'*. Albany, NY: State University of New York Press.
- Belhoste, B. 1991. *Augustin-Louis Cauchy. A Biography*. Translated by Ragland, F. New York: Springer-Verlag.
- Bellamy, R. 2003. 'Introduction'. In *On Crimes and Punishments and Other Writings*, edited by Bellamy, R. Translated by Davies, R. with Cox, V. and Bellamy, R. Cambridge: Cambridge University Press.
- Benoiston de Chateauneuf, L.-F. 1827. *De la colonisation des condamnés, et de l'avantage qu'il y aurait pour la France à adopter cette mesure*. Paris: Martinet. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Bentham, J. 1789. *An Introduction to the Principles of Morals and Legislation*. London: T. Payne and Son. Source: Google Books.

- Berno, F. R. 2023. *Roman Luxuria. A Literary and Cultural History*. Oxford: Oxford University Press.
- Besserman, L. 1996. *The Challenge of Periodization. Old Paradigms and New Perspectives*. New York: Garland Publishing.
- Bigg, C. 2016. 'Diagrams'. In *A Companion to the History of Science*, edited by Lightman, B. John Wiley & Sons. ProQuest Ebook Central, <https://ebookcentral.proquest.com/lib/helsinki-ebooks/detail.action?docID=4386906>.
- Bindler, A. and Hjalmarsson, R. 2018. 'How Punishment Severity Affects Jury Verdicts: Evidence from Two Natural Experiments'. *American Economic Journal: Economic Policy* 10 (4): pp. 26–78.
- Bomio, G. and Robert, C.-N. 1987. 'Alphonse de Candolle ou pourquoi lire un botaniste égaré dans la statistique judiciaire au début du XIXe siècle'. *Déviance et société* 11 (4): pp. 337–51.
- Bourquin, J. 2007. 'La Rochefoucauld-Liancourt et le projet de prison d'essai pour jeunes détenus'. *Revue d'histoire de l'enfance 'irrégulière'*, Hors-série 2007: pp. 195–206. Accessed 15 June 2023, <https://journals.openedition.org/rhei/3015?lang=en>.
- Bradley, M. 2012. *Charles Dupin and His Influence of France. The Contributions of a Mathematician, Educator, Engineer, and Statesman*. Amherst, NY: Cambria Press.
- Broers, M. 2015. *Napoleon. Soldier of Destiny*. New York: Pegasus Books.
- Cairns, D. 1989. *Berlioz. Vol. One: The Making of an Artist*. London: Andre Deutsch.
- Camic, C. 1992. 'Reputation and Predecessor Selection: Parsons and the Institutionalists'. *American Sociological Review* 57: pp. 421–45.
- Camic, C. 2020. *Veblen*. Harvard University Press. ProQuest Ebook Central, <https://ebookcentral-proquest-com.libproxy.helsinki.fi/lib/helsinki-ebooks/detail.action?docID=6374103>.
- Caradonna, J. L. 2012. *The Enlightenment in Practice: Academic Prize Contests and Intellectual Culture in France, 1670–1794*. Cornell University Press. ProQuest Ebook Central, <https://ebookcentral.proquest.com/lib/helsinki-ebooks/detail.action?docID=3138303>.
- Cargill, W. (1838). 'Educational, Criminal, and Social Statistics of Newcastle-upon-Tyne'. *Journal of the Statistical Society of London*, 1(6): pp. 355–61. <https://doi.org/10.2307/2337753>.
- Carnino, G. 2015. *L'invention de la science. La nouvelle religion de l'âge industriel*. Paris: Éditions du Seuil.
- Cartuyvels, Y. 2018. 'The Influence of the French Penal Code of 1810 on the Belgian Penal Code of 1867: Between Continuity and Innovation'. In *The Western Codification of Criminal Law. A Revision of the Myth of its Predominant French Influence*, edited by Masferrer, A. Cham: Springer.
- Channing, I., Churchill, D., and Yeomans, H. 2023. 'Renewing Historical Criminology: Scope, Significance, and Future Directions'. *Annual Review of Criminology* 6: pp. 339–61.
- Chevalier, L. 1973 [1958]. *Laboring Classes and Dangerous Classes in Paris During the First Half of the Nineteenth Century*. Princeton, NJ: Princeton University Press.
- Christen, C. and Vatin, F. 2009. 'Introduction'. In *Charles Dupin (1784–1873). Ingénieur, savant, économiste, pédagogue et parlementaire du Premier au Second*

- Empire*, edited by Christen, C. and Vatin, F. Rennes: Presses Universitaires de Rennes.
- Clark, C. 2023. *The Revolutionary Spring. Fighting for a New World, 1848–1849*. London: Allen Lane.
- Clay, J. (1839). 'Annual Report of the Rev. John Clay, Chaplain to the Preston House of Correction'. *Journal of the Statistical Society of London*, 2(2): pp. 84–103. <https://doi.org/10.2307/2337978>.
- Compte général. 1827a. *Compte général de l'administration de la justice criminelle en France, pendant l'année 1825, présenté au roi, par le garde des sceaux, ministre secrétaire d'état au département de la justice*. Paris: Imprimerie royale. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Compte général. 1827b. *Compte général de l'administration de la justice criminelle en France, pendant l'année 1826, présenté au roi, par le garde des sceaux, ministre secrétaire d'état au département de la justice*. Paris: Imprimerie royale. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Compte général. 1829. *Compte général de l'administration de la justice criminelle en France, pendant l'année 1828, présenté au roi, par le garde des sceaux, ministre secrétaire d'état au département de la justice*. Paris: Imprimerie royale. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Compte général. 1831. *Compte général de l'administration de la justice criminelle en France, pendant l'année 1831, présenté au roi, par le garde des sceaux, ministre secrétaire d'état au département de la justice*. Paris: Imprimerie royale. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Compte général. 1836. *Compte général de l'administration de la justice criminelle en France, pendant l'année 1834, présenté au roi, par le garde des sceaux, ministre secrétaire d'état au département de la justice et des cultes*. Paris: Imprimerie royale. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Compte général. 1852. *Compte général de l'administration de la justice criminelle en France, pendant l'année 1850, présenté au prince président de la République par le Garde des sceaux, ministre de la justice*. Paris: Imprimerie nationale. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Comte, C. 1826. *Traité de Legislation, ou exposition des lois générales suivat lesquelles les peuples prosperent, dépérissent ou restent stationnaires. Tome premier*. Paris: A. Sautelet. Source: Google Books.
- Constant, B. 1814. *De l'esprit de conquête et de l'usurpation, dans leurs rapports avec la civilisation européenne*. Paris: Le Normant. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Cottret, B. and Cottret, M. 2023. *L'Europe des Lumières 1680–1820*. Paris: Perrin.
- Criminocorpus. 2013. '25 juin 1824. Loi contenant diverses modifications au Code pénal', Musée Criminocorpus. Accessed 2 August 2023, <https://criminocorpus.org/fr/ref/25/17146/>.
- de Candolle, A. 1829. *Dissertation sur le droit de grace*. Geneva: J. Barbezat et comp. Source: Google Books.
- de Candolle, A. 1830. 'Considérations sur la statistique des délits'. *Bibliothèque Universelle* 1830: pp. 159–86. Source: Google Books.

- de Candolle, A. 1832. 'De la statistique criminelle.' *Bibliothèque universelle* 1832: pp. 23–59.
- de Candolle, A.-P. 1862. *Mémoires et souvenirs de Augustin-Pyramus de Candolle. Écrits par lui-même et publiés par son fils*. Geneva: Joël Cherbuliez. Source: Google Books.
- de Curzon, E. 1852. 'Obituary of Séverin Guerry-Champneuf'. *L'Ami de la religion at la Roi: journal ecclésiastique, politique et littéraire*, 4 April: pp. 168–9. Provenance: Bibliothèque nationale de France. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- de Graaf, B. 2020. *Fighting Terror after Napoleon. How Europe Became Secure after 1815*. Cambridge: Cambridge University Press.
- de La Rochefoucauld-Liancourt, F. A. F. 1790. 'Rapport fait au nom du comité de mendicité, des visites faites dans divers Hôpitaux, Hospices et Maisons de charité de Paris'. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- de La Rochefoucauld-Liancourt, F. A. F. 1815. 'Préface du traducteur'. In *Joseph Lancaster: Système anglaise d'instruction, ou recueil complet des ameliorations et inventions mises en pratique aux écoles royales, en Angleterre*. Paris: Impr. de Mme Huzard. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- de La Rochefoucauld, J.-D., Wolikow, C., and Ikni, G. 1980. *Le duc de La Rochefoucauld-Liancourt, 1747–1827. De Louis XV à Charles X, un grand seigneur patriote et le mouvement Populaire*. Paris: Librairie Académique Perrin.
- de La Rochefoucauld-Liancourt, F. A. F. 1819 [1789]. *Des prisons de Philadelphie; par un Européen*. 4th edn. Paris: Madame Huzard. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- de Las Cases, E. 1823. *Mémorial de Sainte-Hélène, ou Journal où se trouve consigné, jour par jour, ce qu'à dit et fait Napoléon durant dix-huit mois; par le comte de Las Cases*. Paris. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- de Montalivet, J.-P. 1813. *Exposé de la situation de l'empire, présenté au Corps législatif dans sa séance du 25 février 1813*. Paris: Imprimerie Impériale. Source: Google Books.
- de Waresquiel, E. and Yvert, B. 1996. *Histoire de la Restauration 1814–1830. Naissance de la France moderne*. Paris: Perrin.
- Debuyst, C. 1995. 'Les savoirs diffus et pré-scientifiques sur les situations-problèmes au XVIIIe siècle'. In *Histoire des savoirs sur le crime et la peine. Tome I. Des savoirs diffus à la notion de criminel-né*, edited by Debuyst, C., Digneffe, F., Labadie, J.-M., and Pires, A. P. Brussels: De Boeck-Wesmael.
- Debuyst, C., Digneffe, F., and Pires, A. P. 1998. *Histoire des savoirs sur le crime & la peine. 2. La rationalité pénale et la naissance de la criminologie*. Paris: De Boeck & Larcier.
- Debuyst, C., Digneffe, F., Labadie, J.-M., and Pires, A. P. 1995. *Histoire des savoirs sur le crime & la peine. 1. Des savoirs diffus à la notion de criminel-né*. Brussels: De Boeck-Wesmael.
- d'Enfert, R. 2014. 'Jomard, Francœur et les autres . . . Des polytechniciens engagés dans le développement de l'instruction élémentaire (1815–1850)'. *Bulletin de la Sabix* 54 | 2014: pp. 81–94.

## 216 Bibliography

- Desrosières, A. 1998. *The Politics of Large Numbers: A History of Statistical Reasoning*. Cambridge, MA: Harvard University Press.
- Dickens, C. 2003 [1837–88]. *Oliver Twist*. London: Penguin Books.
- Dickens, C. 2003 [1841]. 'The Author's Introduction to the Third Edition (1841)'. In Charles Dickens: *Oliver Twist*. London: Penguin Books.
- Diderot, D. 2009 [1755]. 'Natural Rights'. In *The Encyclopedia of Diderot & d'Alembert Collaborative Translation Project*. Translated by Gendzier, S. J. Ann Arbor, MI: Michigan Publishing, University of Michigan Library. Accessed 19 February 2024, <http://hdl.handle.net/2027/spo.did2222.0001.313>. Originally published as 'Droit naturel'. In *Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers* 5: pp. 115–16 (Paris, 1755).
- Dimbath, O. 2016. *Soziologische Zeitdiagnostik*. Paderborn: Wilhelm Fink.
- Donnelly, K. 2016. *Adolphe Quetelet, Social Physics and the Average Men of Science, 1796–1874*. Pittsburgh, PA: University of Pittsburgh Press.
- Drinkwater, J. E. 1835. 'Statistics on Venice'. *Proceedings of the Statistical Society of London* 1 (2): pp. 26–33. Accessed 19 February 2024, [www.jstor.org/stable/29765587](http://www.jstor.org/stable/29765587).
- Ducpétiaux, É. 1827. *De la justice de prévoyance, et particulièrement de l'influence de la misère et l'aisance, de l'ignorance et l'instruction sur le nombre des crimes*. Brussels: de l'imprimerie de J. J. Cautaerts et Ce. Source: Google Books.
- Dunoyer, C. 1825. *L'industrie et la morale considérées dans leurs rapports avec la liberté*. Paris: A Sautelet & Cie. Source: Google Books.
- Dupin, C. 1827. *Situation progressive des forces de la France depuis 1814*. Paris: Rachelier. Source: Google Books.
- Dupin, C. 1838. *La morale, l'enseignement et l'industrie. Discours prononcé pour l'ouverture du cours de géométrie et de mécanique appliquées aux arts, au conservatoire des arts et manufactures, le 2 décembre 1838*. Paris: Firmin Didot Frères. Source: Google Books.
- Dupin, É. 1803. *Mémoire statistique du département des Deux-Sèvres: adressé au ministre de l'intérieur, d'après ses instructions ([Reprod.])* Paris: Imprimerie de la République. Source: [gallica.bnf.fr/Bibliothèque nationale de France](http://gallica.bnf.fr/Bibliothèque_nationale_de_France).
- Durkheim, E. 2013 [1895]. *The Rules of Sociological Method and Selected Texts on Sociology and Its Methods*, edited and with a new introduction by Lukes, S. New Edgell, E. W. (1838). 'Proceedings of Statistical Societies'. *Journal of the Statistical Society of London*, 1(1), 50–52. [www.jstor.org/stable/2337857](http://www.jstor.org/stable/2337857) York: Free Press.
- Edgell, E. W. (1838). 'Proceedings of Statistical Societies'. *Journal of the Statistical Society of London*, 1(1): pp. 50–2. [www.jstor.org/stable/2337857](http://www.jstor.org/stable/2337857).
- Felkin, W. (1839a). 'Moral Statistics of a District Near Gray's Inn, London, in 1836'. *Journal of the Statistical Society of London*, 1(9): pp. 541–2. <https://doi.org/10.2307/2338082>.
- Felkin, W. (1839b). 'Moral Statistics of a Section of the City of Norwich'. *Journal of the Statistical Society of London*, 1(9): pp. 540–1. <https://doi.org/10.2307/2338081>.
- Felson, M. and Eckert, M. 2016. *Crime and Everyday Life*. Thousand Oaks, CA: Sage.

- Fielding, H. 1988 [1751]. *An Enquiry into the Causes of the Late Increase of Robbers and Related Writings*, edited by Zirker, M. R. Oxford: Oxford University Press. Source: Google Books.
- Fletcher, J. 1843. 'Progress of Crime in the United Kingdom: Abstracted from the Criminal Returns for 1842, and the Prison Returns for the Year Ended at Michaelmas, 1841'. *Journal of the Statistical Society of London* 6 (3): pp. 218–40.
- Fletcher, J. 1847. 'Moral and Educational Statistics of England and Wales'. *Journal of the Statistical Society of London* 10 (3): pp. 193–233.
- Foucault, M. 1986 [1975]. *Discipline and Punish. The Birth of the Prison*. London: Penguin.
- Fox, R. 2012. *The Savant and the State. Science and Cultural Politics in Nineteenth Century France*. Baltimore, MD: Johns Hopkins University Press.
- Friedrichs, D. O., Schoultz, I., and Jordanoska, A. 2018. *Edwin H. Sutherland*. Routledge Key Thinkers in Criminology. London: Routledge.
- Friendly, M. 2007. *The Life and Works of André-Michel Guerry (1802–1866)*. Accessed 19 February 2024, <http://130.63.91.53/datavis/papers/GuerryLife.pdf>.
- Friendly, M. 2022. 'The Life and Works of André-Michel Guerry, Revisited'. *Sociological Spectrum* 42 (4–6): pp. 233–59.
- Friendly, M. and de Sainte Agathe, N. 2012. 'André-Michel Guerry's Ordonnateru Statistique: The First Statistical Calculator?'. *The American Statistician* 66 (3): pp. 195–200.
- Furstenberg, F. 2014. *When the United States Spoke French. Five Refugees who Shaped a Nation*. New York: Penguin Press.
- Galassi, S. 2004. *Kriminologie im Deutschen Kaiserreich. Geschichte einer gebrochenen Verwissenschaftlichung*. Munich: Franz Steiner Verlag.
- Gandon, J. 1971. 'Jacques Guerry-Champneuf. Avocat des Affaires Criminelles et des Grâces au Ministre de la Justice (1824–1830)'. *Bulletin de la Société des Antiquaires de l'Ouest et des Musées de Poitiers*. 4me Série—Tome XI.
- Garland, D. 1988. 'British Criminology before 1935'. *British Journal of Criminology* 28 (2): pp. 1–17.
- Garland, D. 1990. *Punishment and Modern Society. A Study in Social Theory*. Oxford: Clarendon Press.
- Gatrell, V. A. C. and Hadden, T. B. 1972. 'Criminal Statistics and Their Interpretation'. In *Nineteenth-Century Society. Essays in the Use of Quantitative Methods for the Study of Social Data*, edited by Wrigley, E. A. Cambridge: Cambridge University Press.
- Gatti, U. and Verde, A. 2012. 'Cesare Lombroso: Methodological Ambiguities and Brilliant Intuitions'. *International Journal of Law and Psychiatry* 35: pp. 19–26.
- Gauchet, M. 2022. *Robespierre. The Man who Divides Us the Most*. Translated by DeBoise, M. Princeton, NJ: Princeton University Press.
- Gibson, M. 2006. 'Cesare Lombroso and Italian Criminology: Theory and Politics'. In *Criminals and Their Scientists. The History of Criminology in International Perspective*, edited by Becker, P. and Wetzell, R. F. Cambridge: Cambridge University Press.
- Gillis, A. R. 1994. 'Literacy and the Civilization of Violence in 19th-Century France'. *Sociological Forum* 9 (3): pp. 371–401.



- Godwin, W. 2013 [1793]. *An Enquiry Concerning Political Justice*, edited with an Introduction and Notes by Philp, M. Oxford: Oxford University Press.
- Greenfield, J. 2022. *The Making of a Fiscal-Military State in Post-Revolutionary France*. Cambridge: Cambridge University Press.
- Greg, W. R. 1835. 'On the Social Statistics of the Netherlands'. *Proceedings of the Statistical Society of London* 1 (3): pp. 63–5.
- Guerry, A.-M. 1833. *Essai sur la statistique morale de la France*. Paris: Crochard. Source: Google Books.
- Guerry, A.-M. 2002 [1833]. *Essay on the Moral Statistics of France*, edited and translated by Whitt, H. P. and Reinking, V. W. Studies in French Civilization, Vol. 26. Lewiston, NY: Edwin Melle Press. Source: Google Books.
- Guerry, A.-M. 1864. *Statistique morale de l'Angleterre comparée avec la statistique morale de la France, d'après les comptes de l'administration de la justice criminelle en Angleterre et en France, etc.* Paris: J.-B. Baillière et fils. Digital version by Philipps-Universität Marburg. Accessed 19 February 2024, <https://archiv.ub.uni-marburg.de/ubfind/Record/urn:nbn:de:hebis:04-eb2011-0007/View>.
- Guerry de Champneuf, J. 1817. *Projet d'une société pour la fondation à Poitiers d'une Ecole élémentaire gratuite suivant la nouvelle méthode d'Enseignement mutuel*. Poitiers: Catineau.
- Guerry de Champneuf, J. 1832. *De l'état de siège, considéré comme moyen de suspendre la Charte et les lois*. Poitiers: F.-A. Saurin.
- Guerry de Champneuf, J. 1840. *De l'enseignement mutuel et des frères des écoles chrétiennes*. Poitiers: Fr.-A. Barbier.
- Guizot, F. 1828. *Cours d'histoire moderne*. Brussels: Imprimerie de Vandooren frères.
- Hacking, I. 1983. 'Nineteenth Century Cracks in the Concept of Determinism'. *Journal of the History of Ideas* 44 (3): pp. 455–75.
- Härter, K. 2018. 'The Influence of the Napoleonic Penal Code on the Development of Criminal Law in Germany: Juridical Discourses, Legal Transfer and Codification'. In *The Western Codification of Criminal Law. A Revision of the Myth of its Predominant French Influence*, edited by Masferrer, A. Cham: Springer.
- Herzog, T. 2018. *A Short History of European Law. The Last Two and a Half Millennia*. Cambridge, MA: Harvard University Press.
- Hill, I. D. 1984. 'Statistical Society of London—Royal Statistical Society: The First 100 Years: 1834–1934'. *Journal of the Royal Statistical Society. Series A (General)*, 147 (2): pp. 130–9.
- Hilts, V. L. 1978. 'Aliis extendum, or, the Origins of the Statistical Society of London'. *Isis* 69 (1): pp. 21–43.
- Hirschman, A. O. 1991. *The Rhetoric of Reaction. Perversity, Futility, Jeopardy*. Cambridge, MA: Harvard University Press.
- Hobsbawm, E. 1971 [1959]. *Primitive Rebels: Studies in Archaic Forms of Social Movement in the 19th and 20th Centuries*. Manchester: Manchester University Press.
- Hofinger, V. 2015 *Die Konstruktion des Rückfalltäters. Von Lombroso bis zu den Neurowissenschaften*. Weinheim: Beltz Juventa.

- Howard, J. 1777. *State of the Prisons in England and Wales*. London: William Eyres.  
Source: Google Books.
- Hugo, V. 2004 [1831]. *Notre-Dame de Paris*, translated and edited by Sturrock, J. London: Penguin Classics.
- Ignatieff, M. 1989. *A Just Measure of Pain. The Penitentiary in the Industrial Revolution, 1750–1850*. London: Penguin Books.
- Jenkins, P. 1984. 'Varieties of Enlightenment Criminology'. *British Journal of Criminology* 24 (2): pp. 112–30.
- Jomard, E.-F. 1827. *Du Nombre des délits criminels comparé à l'état de l'instruction primaire, par un membre de la Société formée, à Paris, pour l'amélioration de l'enseignement élémentaire*. Paris: L. Colas.
- Jones, C. 2021. *The Fall of Robespierre. 24 Hours in Revolutionary Paris*. Oxford: Oxford University Press.
- Julius, N. H. 1828. *Vorlesungen über die Gefängniß-Kunde, oder über die Verbesserung der Gefängnisse und sittliche Besserung der Gefangenen, entlassenen Sträflinge u.s.w.* Berlin: Stuhr. Accessed 19 February 2024, [www.digitale-sammlungen.de/de/view/bsb10766842?page=5](http://www.digitale-sammlungen.de/de/view/bsb10766842?page=5).
- Kalifa, D. 2013. *Les bas-fonds. Histoire d'un imaginaire*. Paris: Éditions du Seuil.
- Kaluszynski, M. 2005. 'Quand est née la criminologie? ou la criminologie avant les Archives ...' Criminocorpus, Archives d'anthropologie criminelle and related subjects.
- Kaluszynski, M. 2006. 'The International Congresses of Criminal Anthropology. Shaping the French and International Criminological Movement, 1886–1914'. In *Criminals and their Scientists. The History of Criminology in International Perspective*, edited by Becker, P. and Richard, F. W. Cambridge: Cambridge University Press.
- Karila-Cohen, P. 2009. 'L'impossible ligne Saint-Malo-Genève des opinions? Un essai de "statistique politique" sous la Restauration'. In *Charles Dupin (1784–1873). Ingénieur, savant, économiste, pédagogue et parlementaire du Premier au Second Empire*, edited by Christen, C. and Vatin, F. Rennes: Presses Universitaires de Rennes.
- Kent, S. 1975. *The Election of 1827 in France*. Cambridge, MA: Harvard University Press.
- Kitsuse, J. I. and Cicourel, A. V. 1963. 'A Note on the Uses of Official Statistics'. *Social Problems* 11 (2): pp. 131–9.
- Kivivuori, J. 2007. 'Crime by Proxy. Coercion and Altruism in Adolescent Shoplifting'. *British Journal of Criminology* 47 (5): pp. 817–33.
- Kivivuori, J. 2011. *Discovery of Hidden Crime. Self-Report Surveys in Criminal Policy Context*. Oxford: Oxford University Press.
- Kivivuori, J. 2014. 'Understanding Trends in Personal Violence: Does Cultural Sensitivity Matter?'. In *Crime and Justice: Why Crime Rates Fall, and Why they Don't*, edited by Tonry, M. Crime and Justice 43. Chicago, IL: University of Chicago Press.
- Kivivuori, J., Rautelin, M., Netterstrøm J. B., Lindström, D., Guðbjörg, S., Bergsdóttir, G. S., Jónasson J. O., Lehti, M., Granath, S., Okholm, M., and Karonen, P. 2022. *Nordic Homicide in Deep Time. Lethal Violence in the Early Modern and Present*

- Times*. Helsinki: Helsinki University Press. Accessed 19 February 2024, <https://hup.fi/site/books/m/10.33134/HUP-15/>.
- Krebs, A. 1974. 'Julius, Nikolaus Heinrich'. *Neue Deutsche Biographie* 10: pp. 656–8. Accessed 19 February 2024, [www.deutsche-biographie.de/pnd118907441.html](http://www.deutsche-biographie.de/pnd118907441.html).
- LaFree, G. and Jiang, B. 2023. 'Does Globalization Reduce Personal Violence? The Impact of International Trade on Cross-National Homicide Rates'. *Social Forces* 102 (1): pp. 353–76.
- Lanteri-Laura, G. 1994. 'Phrénologie et criminologie au début du XIX<sup>ème</sup> siècle. Les idées de F. J. Gall'. In *Histoire de la criminologie française*, edited by Mucchielli, L. Paris: L'Harmattan.
- Lecuir, J. 1974. 'Criminalité et "moralité": Montyon, statisticien du parlement de Paris'. *Revue d'histoire moderne et contemporaine* 21 (3): pp. 445–93.
- Leonhardt, J. 2016. *Latin. Story of a World Language*. Translated by Konenber, K. Cambridge, MA: Belknap Press of the Harvard University Press.
- Leromain, É. 2015. 'Les états des crimes dignes de mort ou de peines afflictives: une source sur la criminalité et l'activité des juridictions dans tout le royaume au xviii<sup>e</sup> siècle'. In *Brutes ou braves gens? La violence et sa mesure (XVI<sup>e</sup>–XVIII<sup>e</sup> siècle)*, edited by Follain, A. Strasbourg: Presses universitaires de Strasbourg.
- Leromain, É. 2017. *Monarchie administrative et justice criminelle en France au XVIII<sup>e</sup> siècle: les 'états des crimes dignes de mort ou de peines afflictives' (1733–1790)*. Strasbourg: Université de Strasbourg.
- Lescaze, B. 1980. 'Rossi et la systématique du droit pénal ou la forme d'un traité'. In *Des libertés et des peines: actes du colloque Pellegrino Rossi*, edited by Rens, I. Geneva: Georg.
- Liem, M., Ganpat, S., Granath, S., Hagstedt, J., Kivivuori, J., Lehti, M., and Nieuwbeerta, P. 2013. 'Homicide in Finland, the Netherlands, and Sweden: First Findings from the European Homicide Monitor'. *Homicide Studies* 17 (1): pp. 75–95.
- Lombroso, C. 2006 [1876]. *Criminal Man*. Translated and with a new introduction by Gibson, M. and Hahn Rafter, N. Durham, NC: Duke University Press.
- Lottin, J. 1912. *Quetelet. Statisticien et Sociologue*. Bibliothèque de l'institut supérieur de philosophie, Louvain. Louvain: Imprimerie Ceuterick.
- Lucas, C. 1827. *Du système pénal et du système répressif en général, de la peine de mort en particulier*. Paris: Charles-Bechet. Source: Google Books.
- Lucas, C. 1828. *Du système pénitentiaire en Europe et aux États-Unis*. Paris: Bossange. Source: Google Books.
- Lucas, C. 1872. 'Préface'. In *Exposé d'un système de législation criminelle pour l'état de la Louisiane et pour les États-Unis d'Amérique*, Livingston, E. Tome 1. Paris: Guillaumin et Cie. Source: [gallica.bnf.fr/Bibliothèque nationale de France](http://gallica.bnf.fr/Bibliothèque_nationale_de_France).
- Luginbühl, B. 2000. *Im Kampf gegen die Todesstrafe: Jean-Jacques Comte de Sellon (1782–1839): ein Plädoyer für die Unantastbarkeit des menschlichen Lebens*. Zurich: Schulthess Juristische Medien.
- Lynch, J. P. and Addington, L. A. 2015. 'Crime Trends and the Elasticity of Evil: Has a Broadening View of Violence Affected Our Statistical Indicators?'. *Crime and Justice* 44 (1): pp. 297–331.

- Lyon-Caen, B. 2014. 'Du sérieux à l'essai: lecture du Code des gens honnêtes (Balzac)'. *Romantisme* 164: pp. 41–9.
- Mallet, E. 1835. 'Review of Adolphe Quetelet's "Sur l'homme et le development de ses facultés, our essai de physique sociale"'. *Bibliothèque universelle des sciences, belles-lettres et arts, rédigée à Genève*. XX Année. Littérature, Tome LIX: pp. 297–317. Source: HathiTrust.
- Marsan, J. 1932. *Stendhal*. 3rd edn. Paris: Editions des cahiers libres.
- Martus, S. 2018. *Aufklärung. Das Deutsche 18. Jahrhundert—Epochenbild*. Hamburg: Rowohlt Taschenbuch Verlag.
- Masferrer, A. 2018. 'Tradition and Foreign Influences in the 19th Century Codification of Criminal Law: Dispelling the Myth of the Pervasive French Influence in Europe and Latin America'. In *The Western Codification of Criminal Law. A Revision of the Myth of its Predominant French Influence*, edited by Masferrer, A.. Cham: Springer.
- Merton, R. K. 1938. 'Social Structure and Anomie'. *American Sociological Review* 3 (5): pp. 672–82.
- Middleton, A. 2022. 'William Rathbone Greg, Scientific Liberalism, and the Second Empire'. *Modern Intellectual History* 19: pp. 681–707.
- Mittermaier, C. J. A. 1829a. 'Der französische Compte général de l'administration de la justice criminelle pendant l'année 1827. Dargestellt und verglichen mit den Nachrichten über den Zustand der Verbrechen in Nordamerika, England, der Schweiz, Baiern, Würtemberg und Baden, mit Untersuchung über die Ursachen der Vermehrung der Verbrechen'. *Annalen der deutschen und ausländischen Criminal-Rechts-Pflege* 3 (5–6): pp. 154–80.
- Mittermaier, C. J. A. (1829b) 'Der französische Compte général de l'administration de la justice criminelle pendant l'année 1827. Dargestellt und verglichen mit den Nachrichten über den Zustand der Verbrechen in Nordamerika, England, der Schweiz, Baiern, Würtemberg und Baden, mit Untersuchung über die Ursachen der Vermehrung der Verbrechen (Beschluss des in vorigen Hefte S. 154–180 abgedruckten Aufsatzes)'. *Annalen der deutschen und ausländischen Criminal-Rechts-Pflege* 3 (5–6): pp. 355–86.
- Mittermaier, C. J. A. (1830a). *Das heutige englische, schottische und nordamerikanische Strafverfahren*. Heidelberg: J. C. B. Mohr.
- Mittermaier, C. J. A. (1830b). *Vergleichung der Strafrechtswissenschaft Deutschlands und Frankreichs*. Heidelberg: J. C. B. Mohr.
- Montesquieu, C.-L. de Secondat. 1891 [1721]. *Persian Letters*. Translated by Davidson, J. London: George Routledge. Accessed 19 February 2024, <https://archive.org/details/in.ernet.dli.2015.97067/page/n211/mode/2up?q=crime>.
- Montesquieu, C.-L. de Secondat. 2001 [1748]. *The Spirit of the Laws*. Translated by Nugent, T. (1752). Kitchener: Batoche Books.
- Mooney, J. 2020. *The Theoretical Foundations of Criminology. Place, Time and Context*. London: Routledge.
- Moreau-Christophe, L.-M. 1838. *De la réforme de des prisons en France, basée sur la doctrine du système pénal et le principe l'isolement individuel*. Paris: Huzard. Source: Google Books.

## 222 Bibliography

- Morrell, J. and Thackray, A. 1981. *Gentlemen of Science. Early Years of the British Association for the Advancement of Science*. Oxford: Clarendon Press.
- Moses, A. 2006. *Kriminalität in Baden im 19. Jahrhundert. Die 'Übersicht der der Strafrechtspflege' als Quelle der historischen Kriminologie*. Stuttgart: W. Kohlhammer Verlag.
- Mucchielli, L. 1994. 'Naissance de la criminologie'. In *Histoire de la criminologie française*, edited by Mucchielli, L. Paris: L'Harmattan.
- Nelken, D. 2015. 'Foil Comparisons or Foiled Comparisons? Learning from Italian Juvenile Justice'. *European Journal of Criminology* 12 (5): pp. 519–34.
- Nelken, D. 2019. 'Whose Best Practices? The Significance of Context in and for Transnational Criminal Justice Indicators'. *Journal of Law and Society* 46 (1): pp. 531–50.
- Normandeau, A. 1970. 'Pioneers in Criminology: Charles Lucas—Opponent of Capital Punishment'. *Journal of Criminal Law and Criminology* 61 (2): 218–28.
- Oba, S. 1908. *Unverbesserliche Verbrecher und ihre Behandlung. Inaugural-Dissertation der juristischen Fakultät der Friedrich-Alexanders-Universität zu Erlangen*. Borna-Leipzig: Buchdruckerei Robert Noske.
- Ortolan, J. L. E. and Ledeau, L. 1831. *Ministère public en France; Traité et Code de son organisation, de sa compétence, et de ses fonctions dans l'ordre politique, judiciaire et administrative. Tome II*. Paris: Fanjat. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Palsky, G. 1996. *Des chiffres et des cartes. La cartographie quantitative au XIX siècle*. Paris: Comité des travaux historiques et scientifiques.
- Palsky, G. 2008. 'Connections and Exchanges in European Thematic Cartography. The Case of 19th Century Choropleth Maps'. *Belgeo* 3–4: pp. 413–26.
- Perrot, M. 1977. 'Premières mesures des faits sociaux: Les débuts de la statistique criminelle en France (1780–1830)'. In *Pour une histoire de la statistique. Tome 1: contributions*, edited by F. Bedarida. Paris: Insee.
- Perrot, M. 2001. 'Délinquance et système pénitentiaire en France au XIXe siècle'. In *Michelle Perrot: Les ombres de l'histoire. Crime et châtement au XIXe siècle*. Paris: Flammarion.
- Perrot, M. and Robert, P. 1989. *Compte général de l'administration de la justice criminelle en France, pendant l'année 1880 et rapport relatif aux années 1826 à 1880. Publié et commenté par Michelle Perrot et Philippe Robert*. Geneva: Slatkine Reprints.
- Peterson, G. 1945. 'II. Political Inequality at the Congress of Vienna'. *Political Science Quarterly* 6 (4): pp. 532–54. Accessed 19 February 2024, [www.jstor.org/stable/2144669](http://www.jstor.org/stable/2144669).
- Pires, A. 1995. 'La criminologie d'hier et d'aujourd'hui'. In *Histoire des savoirs sur le crime et la peine. Tome I. Des savoirs diffus à la notion de criminel-né*, edited by Debuyst, C., Digneffe, F., Jean-Labadie, M., and Pires, A. P. Brussels: Les Presses de l'Université de Montréal, Les Presses de l'Université d'Ottawa et De Boeck.
- Porret, M. 2012. 'La cicatrice pénale: Doctrine, pratiques et critique de la marque d'infamie'. *Sens-Dessous* 10: pp. 47–63.

- Port, M. H. 1986. 'Romilly, Sir Samuel (1757–1818)'. The History of Parliament, Member Biographies. Accessed 19 February 2024, [www.historyofparliamentonline.org/volume/1790-1820/member/romilly-sir-samuel-1757-1818](http://www.historyofparliamentonline.org/volume/1790-1820/member/romilly-sir-samuel-1757-1818).
- Porter, G. R. 1835. 'On the Connection between Crime and Ignorance, as Exhibited in Criminal Calendars'. *Proceedings of the Statistical Society of London, 1835–1835* 1 (4): pp. 77–86. [See also Porter 1837.]
- Porter, G. R. 1837. 'On the Connection between Crime and Ignorance, as Exhibited in Criminal Calendars'. *Transactions of the Statistical Society of London* 1 (1): pp. 97–103. [See also Porter 1835.]
- Porter, G. R. 1847 [1836]. *The Progress of the Nation, in its Various Social and Economical Relations, from the Beginning of the Nineteenth Century*. London: John Murray. Source: Google Books.
- Porter, T. M. 1986. *The Rise of Statistical Thinking 1820–1900*. Princeton, NJ: Princeton University Press.
- Powers, G. 1828. *Report of Gershom Powers, agent and keeper of the state prison at Auburn. Made to the Legislature, Jan 7, 1828*. Albany, NY: Groswell and Benthuyssen. Source: Google Books.
- Preston, Mr. 1836. 'Statistics of the Kingdom of Saxony, compiled from the publications of the Central Committee of the Statistical Association of that Kingdom, to the 1st December, 1834'. *Proceedings of the Statistical Society of London* 1 (5): pp. 119–52.
- Quetelet, A. 1827. *Recherches sur la population, les naissances, les décès, les prisons, les Depots de Mendicité dans le royaume des Pays-Bas*. Brussels: H. Tarlier. Source: [gallica.bnf.fr/Bibliothèque nationale de France](http://gallica.bnf.fr/Bibliothèque nationale de France).
- Quetelet, A. 1829. *Recherches statistiques sur le royaume de Pays-Bas*. Brussels: M. Hayez, Imprimeur de l'académie royale. Source: [gallica.bnf.fr/Bibliothèque nationale de France](http://gallica.bnf.fr/Bibliothèque nationale de France).
- Quetelet, A. 1831. *Recherches sur le penchant au crime aux différents âges. Lues en la séance de 9 juillet 1831*. Bruxelles: M. Hayez, Imprimeur de l'académie royale. Source: Google Books.
- Quetelet, A. 1984 [1831]. *Research on the Propensity for Crime at Different Ages*. Translated by Sylvester, S. F. Cincinnati, OH: Anderson Press. Source: Google Books.
- Quetelet, A. 2013 [1842]. *A Treatise on Man and the Development of his Faculties*, edited by Smibert, T. Translated by Knox, R. Cambridge: Cambridge University Press. Source: Google Books.
- Quetelet, A. 1846. *Lettres à S.A.R. le Duc régnant de Saxe-Cobourg et Gotha, sur la Théorie des Probabilités, appliquée aux sciences morales et politiques*. Brussels: M. Hayez. Source: Google Books.
- Quetelet, A. 1848. *Sur la statistique morale et les principes qui doivent former la base. Mémoires de l'académie impériale et royale des sciences, des lettres et des beaux-arts de Belgique. Tome XXI*. Brussels: M. Hayez.
- Radzinowicz, L. 1956. *A History of English Criminal Law and its Administration from 1750. Vol. 5: The Emergence of Penal Policy*. London: Stevens & Sons.

## 224 Bibliography

- Radzinowicz, L. and Hood, R. 1986. *A History of English Criminal Law and its Administration from 1750. Vol. 2: The Clash between Private Initiative and Public Interest in the Enforcement of the Law*. London: Stevens & Sons.
- Rafter, N. H. 1997. *Creating Born Criminals*. Chicago, IL: University of Illinois Press.
- Rafter, N. H., Posick, C., and Rocque, M. 2016. *The Criminal Brain. Understanding Biological Theories of Crime*. New York: New York University Press.
- Rawson, R. D. 1839. 'An Inquiry into the Statistics of Crime in England and Wales'. *Journal of the Statistical Society of London* 2 (5): pp. 316–44.
- Rawson, R. D. 1841. 'An Enquiry into the Condition of Criminal Offenders in England and Wales, with Respect to Education; or, Statistics of Education among the Criminal and General Population of England and Other Countries'. *Journal of the Statistical Society of London* 3 (4): pp. 331–52.
- Redgrave, S. 1837. 'Abstract of Criminal Tables for England and Wales, 1837; with Remarks Thereupon, Chiefly by the Compiler'. *Journal of the Statistical Society of London* 1 (4): pp. 231–45.
- Redgrave, S. 1846. 'Criminal Tables for the Year 1845. England and Wales'. *Journal of the Statistical Society of London* 9 (2): pp. 177–83.
- Reinke, H. 1990. 'Die "Liaison" des Strafrechts mit der Statistik. Zu den Anfängen kriminalstatistischer Zählungen im 18. und 19. Jahrhundert'. *Zeitschrift für Neuere Rechtsgeschichte* 12: pp. 169–79.
- Reinke, H. 1998. 'Une "bonne" statistique pour la lutte contre la criminalité? Observations sur les origines de la statistique criminelle au XIXe siècle'. *Déviance et société* 22 (2): pp. 113–25.
- Renneville, M. 1994. 'Entre nature et culture: la médecine du crime dans la première moitié du XIXe siècle'. In *Histoire de la criminologie française*, edited by Mucchielli, L.. Paris: L'Harmattan.
- Renneville, M. 2003. *Crime et folie. Deux siècles d'enquêtes médicales et judiciaires*. Paris: Fayard.
- Renneville, M. 2006. 'The French Revolution and the Origins of French Criminology'. In *Criminals and their Scientists. The History of Criminology in International Perspective*, edited by Becker, P. and Wetzell, R. F. Cambridge: Cambridge University Press.
- Renneville, M. 2015. 'Exploring the History of French Criminology (1885–1939): The Case of the Archives de l'Anthropologie Criminelle'. *Criminocorpus. Histoire de la justice, des crimes et des peines*. Accessed 19 February 2024, <https://journals.openedition.org/criminocorpus/2753?lang=en>.
- Renneville, M. 2020. 'Matter over mind? The rise and fall of phrenology in nineteenth-century France'. *Journal of the History of the Neurosciences* 291 (1): pp. 17–28.
- Renouard, C. 1827. 'Rapport de monsieur Charles Renouard, au nom de la commission (1) chargée de l'examen des mémoires sur la question de la peine de mort (2)'. In *Du système pénal et du système répressif en général, de la peine de mort en particulier*, edited by Charles, L., pp. 391–407. Paris: Charles-Bechet.
- Renouard, C. 1828. 'Review of Sellon's Declaration of Concours on the Abolition of the Death Penalty and Ducpétiaux's *De la justice de prevoyance*'. *Revue Encyclopédique*



- Tome XXXVII: pp. 632–43. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Renouard, C. 1837. [Memorandum on the statistics of civil law, presented at the Academy of Moral and Political Sciences] In *Mémoires de l'Académie royale des sciences morales et politiques de l'Institut de France. Tome 1er (2e Série)*. Paris: Firmin Didot Frères et Cie. Source: Google Books.
- Riemer, L. H. (ed.). 2005. 'Das Netzwerk der "Gefängnisfreunde" (1830–1872). Karl Josef Anton Mittermaiers Briefwechsel mit europäischen Strafvollzugsexperten.' In *Studien zur europäischen Rechtsgeschichte. Veröffentlichungen des Max-Planck-Instituts für europäische Rechtsgeschichte*, Band 192.1. Frankfurt-am-Main: Victor Klostermann.
- Ringer, F. 1990. 'The Intellectual Field, Intellectual History, and the Sociology of Knowledge'. *Theory and Society* 19 (3): pp. 269–94.
- Robb, G. 2000. *Balzac. A Biography*. London: Picador.
- Robert, C.-N. 1979. 'Statistiques de la délinquance et chiffre noir'. *Bulletin de Criminologie* 5 (1): pp. 31–41.
- Romilly, S. 1786. *Observations on a Late Publication, intituled, Thoughts on Executive Justice; to Which is Added, a Letter Containing Remarks on the Same Work*. London: T. Cadell. [Work published anonymously.] Accessed 19 February 2024, [https://openlibrary.org/books/OL23411349M/Observations\\_on\\_a\\_late\\_publication\\_intituled\\_Thoughts\\_on\\_executive\\_justice](https://openlibrary.org/books/OL23411349M/Observations_on_a_late_publication_intituled_Thoughts_on_executive_justice).
- Romilly, S. 1788. *Observations d'un voyageur anglaise, Sur la Maison de Force appelée Bicêtre; suivies De Réflexions sur les effets de la Sévérité des Peines, & sur la Législation Criminelle de la Grande-Bretagne. Imite de l'anglais. Par le Comte de Mirabeau; Avec un Lettre de Mr. Benjamin Franklin*. Source: Google Books.
- Romilly, S. 1810. *Observations on the Criminal Law of England, as it Relates to Capital Punishments, and on the Mode in Which it is Administered*. London: T. Cadell and W. Davies. Source: Google Books.
- Romilly, S. 1840a. *Memoirs of the Life of Sir Samuel Romilly, Written by Himself; With a Selection From His Correspondence*, edited by his sons. Vol. 2. London: John Murray. Source: Google Books.
- Romilly, S. 1840b. *Memoirs of the Life of Sir Samuel Romilly, Written by Himself; With a Selection From His Correspondence*, edited by his sons. Vol. 3. London: John Murray. Source: Google Books.
- Romilly, S. 1841. *Memoirs of the Life of Sir Samuel Romilly, Written by Himself; With a Selection From His Correspondence*, edited by his sons. Vol. 1. 3rd edn. London: John Murray. Source: Google Books.
- Rosanvallon, P. 1990. *L'état en France. De 1789 à nos jours*. Paris: Éditions du Seuil.
- Rosenfeld, R. and Messner, S. 2011. 'The Intellectual Origins of the Institutional-Anomie Theory'. In *The Origins of American Criminology*, edited by Cullen, F. T., Jonson, C. L., Myer, A. J., and Adler, F. New Brunswick: Transaction Publishers.
- Rossi, P. 1828. 'Compte général de l'administration de la justice criminelle en France, pendant des années 1825 et 1826'. *Revue française* II: pp. 92–116. Paris: A. Sautelet. Source: Google Books.
- Rossi, P. 1829a. *Traité du droit pénal. Tome premier*. Paris: A. Sautelet. Source: Google Books.



## 226 Bibliography

- Rossi, P. 1829b. *Traité du droit pénal. Tome deuxième*. Paris: A. Sautelet.  
Source: Google Books.
- Rossi, P. 1829c. *Traité du droit pénal. Tome troisième*. Paris: A. Sautelet.  
Source: Google Books.
- Rossi, P. 1829d. *Ueber Statistik der Criminalrechts-Pflege. Aus dem Französischen von Herrn Oberrichter J. J. Hess in Zürich. Verhandlungen der Schweizerischen Gemeinnützigen Gesellschaft*. Zurich: Drell, Füssli und Compagnie.  
Source: Google Books.
- Rousseau, J.-J. 2018 [1750]. 'Discourse on the Sciences and Arts or First Discourse'. In *Rousseau: The Discourses and Other Early Political Writings (Cambridge Texts in the History of Political Thought)*, edited by Gourevitch, V. Cambridge: Cambridge University Press.
- Rousseaux, X., Stevens, F., and Tixhon, A. 1998. 'Les origines de la statistique pénale en Belgique (1795–1835)'. *Déviance et société* 22 (2): pp. 127–53.
- Rubbens, E. 1922. *Édouard Ducpétiaux 1804–1868. Tome Premier*. Brussels: Librairie Albert Dewit.
- Russell, W. 1847. 'Abstract of the "Statistics of Crime in England and Wales, from 1839 to 1843"'. *Journal of the Statistical Society of London* 10 (1): pp. 38–61.
- Safranski, R. 2004. *Friedrich Schiller oder die Erfindung des Deutschen Idealismus*. Munich: Carl Hanser Verlag.
- Sampson, R. and Laub, J. (1997). 'A Life-Course Theory of Cumulative Disadvantage and the Stability of Delinquency'. In *Developmental Theories of Crime and Delinquency, Advances in Criminological Theory*. Vol. 7, edited by Thornberry, T. P. New Brunswick: Transaction.
- Savelsberg, J. J. and Flood, S. M. 2004. 'Criminological Knowledge: Period and Cohort Effects in Scholarship'. *Criminology* 42 (4): pp. 1009–42.
- Savelsberg, J. J., Cleveland, L. L., and King, R. D. 2004. 'Institutional Environments and Scholarly Work: American Criminology, 1951–1993'. *Social Forces* 82 (4): pp. 1275–302.
- Schazmann, P.-E. 1939. *P. Rossi et la Suisse*. Geneva: Éditions Sonor.
- Schikore J. and Steinle, F. (eds.). 2006. *Revisiting Discovery and Justification: Historical and Philosophical Perspectives on the Context Distinction*. Dordrecht: Springer.
- Select Committee on the Police of the Metropolis. 1828. *Report*. Ordered by the House of Commons, to be printed, 11 July 1828. Source: HathiTrust.
- Sgard, J. 2010. *Les Comptes Généraux de la Justice: une description statistique des institutions judiciaires de la France au XIX siècle*. hal-01064422. Accessed 19 February 2024, <https://sciencespo.hal.science/hal-01064422/document>.
- Shapin, S. and Schaffer, S. 1985. *Leviathan and the Air-Pump. Hobbes, Boyle, and the Experimental Life*. Princeton, NJ: Princeton University Press.
- Shapiro, D. M. 2019. 'Solitary Confinement in the Young Republic'. *Harvard Law Review* 133 (2): pp. 542–98.
- Sherman, L. W. 2005. 'The Use and Usefulness of Criminology, 1751–2005: Enlightened Justice and Its Failures'. *Annals of the American Academy of Political and Social Science* 600 (1): pp. 115–35.

- Shoemaker, R. and Ward, R. 2017. 'Understanding the Criminal: Record-Keeping, Statistics and the Early History of Criminology in England'. *British Journal of Criminology* 57: pp. 144–261.
- Skinner, Q. 1988. 'Meaning and Understanding in the History of Idea'. In *Meaning and Context. Quentin Skinner and his Critics*, edited by Tully, J. Princeton, NJ: Princeton University Press.
- Skinner, Q. 2002. *Visions of Politics. Vol. 1: Regarding Method*. Cambridge: Cambridge University Press.
- Spitzer, A. B. 1987. *The French Generation of 1820*. Princeton, NJ: Princeton University Press.
- Stendhal. 1997 [1801]. 'A Pauline Beyle, 24 février 1801'. In *Correspondance Générale. Tome I (1800–1809)*, edited by Litto, V. D in collaboration with Williamson, E., Houbert, J., and Slatkine, M.-E. Paris: Honoré Champion.
- Stendhal. 2017 [1827]. *Armance*. Scotts V alley, CA: CreateSpace Independent Publishing Platform (6 February 2017).
- Stendhal. 2009a [1830]. *The Red and the Black*. Translated by Slater, C. Oxford: Oxford University Press.
- Stendhal. 2009b [1839]. *The Charterhouse of Parma*. Translated by Mauldon, M. Oxford: Oxford University Press.
- Sykes, W. H. 1843. 'Statistics of Civil and Criminal Justice in British India, Chiefly from the Year 1836 to 1840 Inclusive'. *Journal of the Statistical Society of London* 6 (2): pp. 94–119.
- Taillandier, A.-H. 1824. *Réflexions sur les lois pénales de France et d'Angleterre*. Paris: B. Warée. Source: Google Books.
- Taillandier, A.-H. 1827a. 'Compte général de l'administration de la justice criminelle en France, pendant l'année 1825'. *Revue encyclopédique* XXXIV: pp. 360–74. Source: HathiTrust.
- Taillandier, A.-H. 1827b. 'Compte général de l'administration de la justice criminelle en France, pendant l'année 1826'. *Revue encyclopédique* XXXIV: pp. 734–737. Source: HathiTrust.
- Taillandier, A.-H. 1828. 'Compte général de l'administration de la justice criminelle en France, pendant l'année 1827, présente au roi par le garde des sceaux, ministre secrétaire d'état au département de la justice'. *Revue encyclopédique* XV: pp. 600–12. Source: Google Books.
- Tixhon, A. 1999. 'Contrôler la Justice, construire l'Etat et surveiller le crime au XIXe siècle. Naissance et développement de la statistique judiciaire en Belgique (1795–1901)'. *Revue belge de philologie et d'histoire* 77 (4): pp. 965–1001.
- Ulmer, J. T. and Steffensmeier, D. 2014. 'The Age and Crime Relationship: Social Variation, Social Explanations'. In *The Nurture Versus Biosocial Debate in Criminology: On the Origins of Criminal Behavior and Criminality*, edited by Beaver, K. M. et al. Sage. ProQuest Ebook Central, <https://ebookcentral.proquest.com/lib/helsinki-ebooks/detail.action?docID=1680058>.
- van Helden, A. and Hankins, T. L. 1994. 'Introduction: Instruments in the History of Science'. In *Osiris* 9: pp. 1–16.

- van Kerckwoorde, J. 1994. 'Les débuts de la statistique morale et de statistique criminelle'. In *Histoire de la criminologie française*, edited by Mucchielli, L. Paris: L'Harmattan.
- Vidocq, E.-F. 1837. *Voleurs. Physiologie de leur mœurs et de leur langage*. Paris: Imprimerie Beaulé et Jupin. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- Vingtrinier, A.-B. 1846. *Statistique criminelle. Examen des comptes de l'administration de la justice criminelle, publiés depuis 1825 jusqu'en 1843 et présentés chaque année au Roi par M. le Ministre de la justice*. Rouen: Alfred Péron. Accessed 19 February 2024, [https://numelyo.bm-lyon.fr/f\\_view/BML:BML\\_00GOO0100137001101048226](https://numelyo.bm-lyon.fr/f_view/BML:BML_00GOO0100137001101048226).
- Voltaire. 1821 [1766]. 'Commentaire sur le livre des délits et des peines'. In *Cesare Beccaria: Des Délits et des peines. Traduction nouvelle et seule complète suivie du Commentaire de Voltaire sur le Livre des délits et des peines, et du Discours de J.-M.-A. Servan sur l'administration de la justice criminelle*, edited and commented by Dufey, P. J. S.. Paris: Dalibon. Source: gallica.bnf.fr/Bibliothèque nationale de France.
- von Liszt, F. 1881. *Lehrbuch des Deutschen Strafrechts*. Leipzig: F. C. W. Vogel.
- von Liszt, F. 1882. *Der Zweckgedanke im Strafrecht*. Marburg: C. L. Pfeil. Universität Regensburg Universitätsbibliothek. Accessed 22 March 2024, <https://nbn-resolving.org/urn:nbn:de:byb:355-ubr15787-7>.
- von Savigny, F. C. 1814. *Vom Beruf unsrer Zeit für Gesetzgebung und Rechtswissenschaft*. Heidelberg: Mohr und Zimmer.
- von Schiller, F. 2014 [1781]. *Die Räuber*. Stuttgart: Reclam.
- von Schiller, F. 2013 [1786]. *Der Verbrecher aus verlonerer Ehre*. Husum: Hamburger Lesehefte Verlag.
- Vuorela, M. 2021. *Autonomian ajan rikos ja rangaistus oikeustilaston valossa. Tutkimus rikollisuuden ja rangaistuskäytännön kehityksestä Suomessa ja muissa pohjoismaissa vuosina 1809–1917*. Kriminologian ja oikeuspolitiikan instituutin tutkimuksia 6/2021. Helsinki: Helsingin yliopisto. [Abstract: Crime and Punishment according to Justice Statistics during the Finnish Autonomy—The Development of Crime and Sentencing Practices in Finland and the other Nordic Countries in 1809–1917.]
- Walliss, J. 2012. 'Lies, Damned Lies and Statistics? Nineteenth Century Crime Statistics for England and Wales as a Historical Source'. *History Compass* 10 (8): pp. 574–83.
- Watson, A. 1993. *Legal Transplants. An Approach to Comparative Law*. Athens: The University of Georgia Press.
- Wetzell, R. F. 2000. *Inventing the Criminal. A History of German Criminology 1880–1945*. Chapell Hill, NC: University of North Carolina Press.
- Whitt, H. P. 2002. 'Inventing Sociology: André-Michel Guerry and the Essai sur la statistique morale de France'. In *André-Michel Guerry: Essay on the Moral Statistics of France*, edited and translated by Whitt, H. P. and Reinking, V. W. Studies in French Civilization. Lewiston, NY: The Edwin Mellen Press.

- Wikström, P.-O., Treiber, K., and Roman, G. 2024. *Character, Circumstances, and Criminal Careers. Towards a Dynamic Developmental and Life-Course Criminology*. Oxford: Oxford University Press.
- Wright, G. 1983. *Between the Guillotine and Liberty. Two Centuries of the Crime Problem in France*. New York: Oxford University Press.
- Wulf, A. 2022. *Magnificent Rebels. The First Romantics and the Invention of the Self*. London: John Murray.
- Ycart, B. 2016. 'La mode de la statistique en France'. *Histoire & mesure* 23 (1): pp. 161–94.
- Yvernès, M. 1887. 'Procès-verbal de la séance du 19 janvier 1887'. *Journal de la société statistique de Paris* 2 (Février): pp. 34–8.
- Zachariä, K. S. 1828. 'Compte général de l'administration de la justice criminelle en France, pendant l'année 1825, présenté au roi, par le Garde des sceaux, ministre secrétaire d'état au département de la justice'. *Heidelberger Jahrbücher der Literatur* 21, Erster Hälfte: pp. 577–610.
- Zachariä, K. S. 1832. 'Statistik der Strafrechtspflege'. *Kritische Zeitschrift für Rechtswissenschaft und Gesetzgebung des Auslandes* 4: pp. 169–84. Digitale Bibliothek des Max-Planck-Instituts für Europäische Rechtsgeschichte. Accessed 26 February 2024, [https://dlc.mpg.de/image/mpirg\\_escidoc\\_87175/175/](https://dlc.mpg.de/image/mpirg_escidoc_87175/175/).
- Zauberman, R. and Robert, P. 2011. 'Statistique criminelle et mesure de la délinquance'. *Electronic Journal for History of Probability and Statistics—Journal Electronique d'Histoire des Probabilités et de la Statistique* 17:1.



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