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Adolphe Quetelet's

RESEARCH ON

THE PROPENSITY TO CRIME

Translated with an introduction by

Sawyer E. Sylvester

HV
6208
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1984

SCOTT

RESEARCH ON THE PROPENSITY FOR CRIME
AT DIFFERENT AGES

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PREFACE

George Sarton, the famous historian of science, said of Adolphe Quetelet and his relationship to August Comte, the person traditionally seen as representing the beginning of sociology:

Another great injustice is made when Comte is called the founder of sociology, for Quetelet has better claims to this title than he, or at least they should be mentioned together. ...Comte wrote on these matters as on many others with unbearable prolixity and conceit. In the meanwhile Quetelet was not only saying what to do, but was actually doing it, and doing it much better than Comte could imagine, for the real difficulties and the crucial points only appear when one is tackling concrete problems and tackling them in large numbers humbly and patiently; ...Comte was building proud castles on sand, Quetelet, humbler constructions on bedrock. Moreover, Comte had no appreciation of the importance of the theory of probability, nor of statistics, nor of the statistical approach to biology and sociology.¹

There is a parallel situation with the place of Quetelet in the history of criminology. Traditional wisdom says that the scientific study of crime began with the Positivist School and its founder Caesar Lombroso, particularly with the publication of his famous work *Criminal Man*. But Lombroso, for all his contributions to criminology, and they were considerable, was not even born until 1835. Quetelet's *Research on the Propensity for Crime* was published in 1831. Indeed, it could well be said that Quetelet's work is the first scientific treatise ever published on crime.

However, as a book by itself, *Research on the Propensity for Crime* has never been published in English, although due to Quetelet's habit of making later writings out of earlier ones, most of it appears in parts here and there in his larger

¹ Stimson, Dorothy (Ed.), *Sarton on the History of Science: Essays by George Sarton* (Cambridge, Harvard Univ. Press, 1962), pp. 236-237. (Originally published in *Isis* 23, 6-24 (1935))

work, *On Man and the Development of his Faculties, or Essay on Social Physics*, which was translated into English in 1842. Nonetheless, it would seem that *Research on the Propensity for Crime* is a sufficiently important work in the history of criminology to warrant being translated and presented whole and in its own right. In preparing this translation, I am especially indebted to Professor Alexis Caron for his care and kindness in reading the manuscript. Needless to say, I am solely responsible for any *gaucheries* which remain.

INTRODUCTION

Nicholas Mailly, one of his principal biographers, says of Quetelet that in youth he dreamed of "shining as a poet or as an artist." However, necessity thrust him into the field of statistics, and there he shone more brilliantly than he ever could have done in the arts. He was born in Ghent on the 22nd of February 1796, the son of a city functionary who died in 1803, thus creating the necessity for the young Quetelet to consider early in life the practical rewards of the callings he might follow.

After graduating from the lycée at Ghent, Quetelet chose to teach at a private school in Audenarde, but returned in February of 1815 to teach mathematics at what had become the royal college at Ghent. While thus employed, and still dabbling in literature and poetry, Quetelet witnessed the completion of the new university at Ghent. To occupy the chair in mathematics and astronomy at the new university, a former professor of the *École Polytechnique*, Jean Garnier, was called from Paris. It was Garnier's influence on Quetelet which was largely responsible for the latter's resolve to follow a career in science. Quetelet entered upon a course of study in higher mathematics with Garnier and even taught some of Garnier's courses at the University. In 1819, Quetelet took his doctoral degree at Ghent and joined the Brussels Athenaeum as Professor of Elementary Mathematics.

In the capital, Quetelet soon made the acquaintance of the aging Commandeur de Nieupoort whom he described as being almost the only representative of the exact sciences in the southern provinces. The crusty conservatism of the Commandeur and the liberalism of Quetelet apparently did not affect their professional relationship, because the old man encouraged Quetelet to draft a paper in mathematics which the Commandeur then presented to other members of the *Académie Royale des Sciences et des Belles Lettres* in support of Quetelet's nomination. With the additional sup-

port of his teacher and colleague, Garnier, Quetelet was elected to the Academy on the first of February 1820. It would be difficult to say who profited more from Quetelet's election, he or the Academy. All indications are that, at the time that Quetelet joined, the Academy was moribund. It was he who principally stirred it to life and made it one of the most respected centers of learning in Europe. Yet, for a young scholar, it was also an excellent setting to begin a career of research, teaching, and writing.

At this point in Quetelet's life, something occurred which was both fortunate and ironic. He proposed to the minister of education that an astronomical observatory be built in Brussels. There is no question that Quetelet was interested in astronomy, as his subsequent publications indicate. However, it should be remembered that he suggested the observatory before he had any extensive knowledge of the subject. The underlying reason for the observatory may well have been that Quetelet wanted to improve the fallen state of the sciences as a whole in Belgium, and the building of an observatory was a means toward that end. This would be especially so since it had been true in other countries in the early 19th century that the building of observatories as well as the founding of scientific societies were among the best ways to promote science generally. Quetelet says in one of his letters: "... that for the honor of the country and the dignity of the sciences it is necessary to build an observatory."

It has been suggested as well that astronomy provided Quetelet with a clear illustration of his conception of scientific method. Such a conception views the apparent precision of all astronomical observation as only approximate to a true representation of celestial phenomena due to the imperfection of instruments and the variations in observers. Hence, any statements based on such observations are probabilistic within a certain range of error rather than exact, and can only be made as the average of a large number

of observations. It is precisely this frame of reference which Quetelet later brought to the study of social data. Of course, Quetelet didn't invent the theories of probability statistics, but — oddly enough — his early exposure to them is still connected to the observatory.

Having favorably received Quetelet's recommendation, the minister of education, Falck, sent the young astronomer to Paris to see the royal observatory there and the instruments it contained. Quetelet was cordially welcomed by his fellow astronomers in Paris, but even more important, he was introduced to the famous statisticians: Fourier, Poisson, and LaPlace. It was especially through his acquaintance with LaPlace and his writings that Quetelet became steeped in the theory of probability and convinced that such an approach to science should be applied to terrestrial as well as celestial phenomena. By his own admission, it was from this point onward that he began his work.

The irony involved in the observatory episode is that while it sent Quetelet to Paris and elsewhere to gain the knowledge necessary for astronomical observation, the actual building of the observatory was proceeding at a speed that was truly glacial. One may speculate that it was, at least in part, the lack of an observatory in which to apply his newly discovered methodology to celestial phenomena which caused Quetelet to apply it elsewhere: to meteorological phenomena, physiological phenomena, and — finally — social phenomena. For the history of criminology, at least, these circumstances were fortunate as well.

On his return to Belgium early in 1824, Quetelet began the often frustrating task of persuading the powers that be to fund the building and equipping of the promised observatory; but, although appointed astronomer of the Royal Observatory of Brussels in 1828, he was not able to take up residence there until 1832. During this period, he traveled widely in Europe, wrote on mathematics and physics, with

Garnier edited *Physical and Mathematical Correspondence*, and not only increased the number of courses at the Brussels Athenaeum where he was teaching, but also began a series of popular courses in physics and astronomy at the Brussels Museum. He also published some of his earliest writings on social statistics in *Mémoires* of the Academy or in *Physical and Mathematical Correspondence*. For example, between 1825 and 1830, he published "Memorandum on the Laws of Births and Mortality in Brussels," "Research on Population, Births, Deaths, Prisons, Workhouses, etc., in the Kingdom of the Low Countries," "On the Number of Crimes and Offenses in the Provinces of Southern Brabant, Flanders, Hainaut, and Anvers During the Years 1826, 1827, and 1828," and "On the Constancy Which is Observed in the Number of Crimes Which are Committed."

There were other publications during these years and, of course, many more to follow; but probably the two most significant documents which illustrate the development of Quetelet's application of statistics to the study of human phenomena were published in 1831: *Research on the Law of Growth in Man* and *Research on the Propensity for Crime at Different Ages*. We are here principally concerned with the significance of the latter work; but to understand that significance we ought to at least scan the general history of the growth of science in England and Europe as background to Quetelet's statistics.

Few would doubt that one of the most notable features in the record of man's thought in the West has been the development of science; and some form of empiricism can be traced to the earliest part of that record. But the beginning of modern science, the kind of science that served as a model for Quetelet's social physics, might be said to begin with challenges to the traditional medieval view of the universe. Then the perception of the world began to change. It changed from a world of qualitative distinctions to quan-

titative, hierarchical to atomistic, idealistic to materialistic, spiritual to mechanical. Nature lost its enchantment. There were no longer levels of reality, but all nature became universally real; and consequently the search grew for widely applicable predicates, such as the concept of mass, which allowed quantification among widely disparate objects.

Of course, the world was changing in another sense, too. Feudalism and the manorial system were disintegrating. Urbanism, commerce, and technology were growing as were nationalism, individualism, and — rationalism. It has been claimed that the first statistics responded to the desire of modern states for information on their own character and resources. In addition, governments no longer found their justification in divine and immutable principles, but increasingly were forced to respond to more immediate and secular needs. It became necessary to find a method for making a rational assessment of those needs and, consequently, there arose the science of "political arithmetic."

Political arithmetic is the work of Graunt, Petty, Halley, Arbuthnott, and Süßmilch; the studies commissioned by Colbert, the *mémoires* of the *Grande Enquête*, and the work of Lavoisier and Cabanis, to name only a few. But none of these efforts prior to Quetelet was characterized, as his was, by the self-conscious attempt to develop a methodology which would make the study of social facts scientific.

The perception of scientific analysis in the 17th and 18th century in Europe was of a process limited to physical facts and can be seen to stem from the philosophy of René Descartes. The statement, "Cogito ergo sum," leaves the existence of everything in doubt except the doubting mind. The same philosophy requires that the world be characterized by unassailable principles which that mind can grasp, that is, mathematics. The rational mind, using mathematics, could analyze everything in the world (except, of course, the mind itself). This was so because everything in the world was es-

essentially the same, made up of atoms mechanically related in a scheme which could be mathematically described.

Probably the most influential sciences at the time were the physical sciences, and it would be quite natural for Quetelet to use the perspective of these sciences in the development of what he comes to call "social mechanics" or "social physics." When he says: "It seems to me that that which is connected to the human species, considered as a body, is of the order of physical facts,"² Quetelet is merely stating a basic principle of his social science; namely, that the methods and techniques which had been so profitably used in the accepted scientific disciplines of astronomy, physics, chemistry, etc., could with equal profit be applied to social data if those data were viewed in the same manner as the data of the physical sciences. They should be considered as standing outside the observer and capable of being analyzed by mathematics. Such mathematical analysis would produce the generalizations from data on which science fundamentally depends. Thus, he says:

...the more the number of individuals is large the more the individual will be effaced and leaves behind to predominate the series of general facts which depend on general causes, according to which society exists and is maintained.³

Despite their having been accepted within the traditional physical sciences, Quetelet felt the need to defend use of such empirical principles in the social sciences against the charge of materialism. This is because Quetelet's assertion was as much subject to misunderstanding as was Durkheim's over sixty years later when he said in *The Rules of Sociological Method*, "Consider social facts as things."⁴

² Quetelet, Adolphe, *Recherches sur le penchant au crime aux differens âges* (Deuxieme Edition), (Bruxelles, M. Hayez, 1833), p. 80.

³ *Ibid.*

⁴ Durkheim, Emile, *The Rules of Sociological Method* (G.E.G. Catlin, Ed.), (New York, The Free Press of Glencoe, 1938), p. 40. Copyright 1938, University of Chicago.

Durkheim's justification could apply equally to Quetelet: "Our principle, then, implies no metaphysical conception. . . . What it demands is that the sociologist put himself in the same state of mind as the physicist, chemist, or physiologist. . . ."⁵ "To treat the facts of a certain order as things is not, then, to place them in a certain category of reality but to assume a certain mental attitude toward them."⁶

It is clear that both Durkheim and Quetelet denied any knowledge of the essential nature of society. They were interested in methodology. Quetelet also adds to his statement about social facts that they must be dealt with not individually but collectively. If seen only individually, their unique features prevent making the sort of general claim about data which is characteristic of science. Quetelet believed that the general features of social data can be shown only in the calculation of averages. Quetelet's sociology, although growing out of an earlier tradition of physical and mechanical sciences, recognized the problem of contingency in his emphasis on the theory of probability. When the calculation of averages is applied to the characteristics and behavior of human beings, it results in another of Quetelet's methodological concepts, even more misunderstood: the "average man"; and, when the statistics which make up the "average man" are concerned with behavior which results from the individual having to make choices, Quetelet characterized them by the term, "moral statistics." Let us look, then, at these three separate ideas in the works of Quetelet — the theory of probabilities, the average man, and moral statistics.

In Francis Bacon's allegory, the ant — the unreflective empiricist — spends a lifetime gathering individual grains of sand; at the other extreme, the spider — the unempirical reasoner — spins webs out of his own substance. The bee

⁵ *Ibid.* p. xlv.

⁶ *Ibid.* p. xliii.

adopts a middle course. It gathers from nature, but transforms what it gathers into something more useful. Quetelet views the method of science as being something like that of the bee. It is through the use of statistics that science moves from discrete observation to general principle without losing sight of the unique quality of either. In Quetelet's view of this, he uses the theory of probabilities in three separate, but essentially similar, ways.

First, Quetelet applies the theory to measurement. According to Quetelet, any single observation of a natural phenomenon will always be imprecise. It is only by taking a large number of measurements that one can approach the "true" measurement. That which will represent such a true measurement is the average of all measurements taken. Hence, in Quetelet's view, the data of science always consist of averages or types, but empirically constructed.

Second, he applied probabilities to the search for causes. Quetelet proposed two basic types of cause: constant and accidental. The complexity of nature often makes it appear that events happen as the result of chance. However, for Quetelet, what appear to be anomalous cases are the result of accidental causes. To determine the constant causes of phenomena, one must again apply the theory of probability to large numbers of observations. The averages which result will show constant causes; and, to the degree the observations grow in number, the influence of accidental causes will become attenuated. In human affairs, for example, the vagaries of personality and "free will" would probably be classed as accidental causes, while such things as age, sex, race, education, and economic status would be seen as constant causes.

Finally, Quetelet applied the theory of probability to prediction. Because of his dictum that effects are always equivalent to their causes, if one observes that phenomenon *A* is regularly associated with phenomenon *B*, one can predict

that if the occurrence of *A* remains unchanged, so also will that of *B*. It is just this sort of prediction based on constant causes which serves as the thesis of *Research on the Propensity for Crime*.

Some general observations ought to be made about all three of these applications. It seems clear that Quetelet knew that one of the fundamental uses of statistics was to allow one to make claims about the world in the face of uncertainty. If one could be certain of the future occurrence of events in nature, one could predict them exactly. If one could be certain of completely accurate measurements, then average measurements would be unnecessary. If one could with full accuracy comprehend and describe nature in all its complexity, then typologies would serve no purpose. But none of these is the case. There are no certainties in science. Thus, we are left with only different orders of probability.

Quetelet assumed that events and qualities in nature were normally distributed, and that the more observations made, the closer any empirical distribution of deviations about a mean would resemble the theoretical normal distribution. In addition, the more often one element in nature was seen to be predictably related to another, the more likely that it could be seen as the cause of the other — but "cause" in the special sense that Quetelet meant it. He meant it in the context of the theory of probabilities, in a mathematical and not a metaphysical sense.

Quetelet felt no hesitation in applying this methodology to the realm of human physical and social phenomena because he did not believe that these differed in any radical way from other natural phenomena; only they were more complex, a difference in degree but not in kind. Quetelet sought regularities in data as the basis of scientific observation in all realms of nature. The instrument for demonstrating these regularities — mathematics — was quite indifferent to the area of human experience in which the data

were contained. Moreover, in his time, Quetelet was blessed with recurring evidence of the regularity of social data in the increasing number of publications of demographic and behavioral statistics. The most obvious example, for us, is the publication of the *Compte général de l'administration de la justice en France*. Had these not appeared in 1827, it is doubtful that there would have been a *Research on the Propensity for Crime* in 1831.

In applying the theory of probabilities to human data, physical or social, Quetelet realized that here too one could only approximate the real nature of the phenomena studied; since, if one chose to concentrate on details, all men were unique. However, if one dealt with the elements which human beings had in common — collective phenomena, so to speak — then, as in the other realms of science, one could speak of types and averages, of the "average man."

The concept of the average man is for Quetelet that of the typical man for whatever characteristics are under study. It is the mean dimension around which others are distributed according to the "law of accidental causes." As these deviations from the mean become greater, so also they become fewer. Despite one or two ambiguous statements by Quetelet himself, the overall use of the concept of the average man in his writings makes it clear that Quetelet meant it as nothing more than a tool for sociological thought and research. The average man is a fictional man that exists only in regard to specific characteristics designated for study. It does not represent an "ideal" man in the sense that it is a statement of value. The confusion on this point by some of Quetelet's critics seems quite unjustifiable. One is tempted to refer to the cautions which Max Weber surrounds his closely related concept of the "ideal type," but since Durkheim also used the idea of a constructed type as an "hypothesis of science," perhaps his explanation is best.

A satisfactory method must, above all, aim at facilitating sci-

entific work by substituting a limited number of types for the indefinite multiplicity of individuals. But it loses this advantage if the types have only been constituted after all the individuals have been reviewed and entirely analyzed. . . [I]t must be made not from a complete inventory of all the individual characteristics but from a small number of them carefully chosen. Under these conditions it will serve not only to put into some order knowledge already acquired but also to make new knowledge.⁷

The knowledge which Quetelet had in mind for the average man to further was, of course, social physics. This was precisely because that discipline dealt with characteristics which mankind shares in common and hence can be used to construct the type-concept of the "average man." With physical characteristics, this is all quite straightforward. For any specified group of human beings, there is an average height, weight, chest measurement, etc., and a series of deviations about that mean. However, with "moral" characteristics — we can as well call them "social" characteristics — the problem of measurement is more complicated. Height, for example, can be measured directly; but crime is almost invariably measured indirectly by recording directly some act of the judiciary or law enforcement. So many accusations or convictions in court, for example, can be said to indicate a crime rate of a certain dimension. Of course, it doesn't indicate any such thing without the additional presumption that the number of such judicial acts and the number of crimes bear a constant relationship to one another.

In *Research on the Propensity for Crime*, Quetelet demonstrates that he is clearly aware of this problem and that he is making exactly the presumption we have noted, a presumption students of criminal statistics have had to make ever since. Quetelet takes from such sources as the *Compte général de l'administration de la justice en France* the num-

⁷ *Ibid.* pp. 79-80.

bers of crimes seen regularly for several years and uses these figures as the basis for prediction of the number of crimes in succeeding years. However, Quetelet is careful to do this on the basis of rates, i.e., the number of crimes per standard unit of population. He then goes on to relate the rate of crime to certain other social factors.

Quetelet was well aware that means and opportunity are necessary conditions for the commission of crime; but these are conditions which pertain to the special situation of each individual offender — hence, accidental causes. He thus acknowledged that it was impossible to predict the behavior, criminal or otherwise, of any single individual. Prediction became possible only as groups became larger and one began to deal with social causes — which were constant causes.

Social causes, according to Quetelet, although having an effect on individuals, can be detected not by an assay of individual psychology but by recording their collective effect from resulting observable behavior. These social causes (or “moral” causes, as he called them) exist outside the individual, Quetelet asserted — as did Durkheim, some years later. They are general social conditions which tend to result in similar responses on the part of all individuals affected. It is these responses which are recorded as moral statistics. To the extent that moral or social causes remain the same, so also will the resulting social behavior tend to remain the same — by virtue of the principle that effects are equal to their causes. Quetelet is concerned generally with three types of moral statistics: those of marriage, suicide, and crime. Research on the Propensity for Crime at Different Ages is his most comprehensive study of the moral statistics of crime and, as previously stated, is probably the earliest example of scientific criminology in the literature.

RESEARCH ON THE PROPENSITY FOR CRIME AT DIFFERENT AGES

by A. Quetelet

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There is a budget which is paid with frightening regularity, it is that of prisons, hulks, and gallows; it is that one especially which it would be necessary to strive to reduce.

Second Edition

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M. Hayez, Printer to the Royal Academy

1833

I. CONCERNING THE POSSIBILITY OF ESTABLISHING THE FOUNDATIONS OF A SOCIAL MECHANICS

I have tried to indicate in a former *Mémoire*¹ of what importance observations would be which would have as their aim the study of the several components relating to man, either as regards physical or mental and moral qualities, and of the laws which these components follow in their development from birth to the grave.

The man which I considered is in society the analogue of the center of gravity in matter. He is a fictional being in regard to which all things happen in accordance with average results obtained for society. If the *average* man were ascertained for one nation, he would present the type of that nation. If he could be ascertained according to the mass of men, he would present the type of the human species altogether.

In being restricted to ascertaining the average man for one nation and studying him in a consistent way, one can judge the changes which he experiences because of the times, and recognize if these changes result from nature or from man who, in the social state, reacts on himself by virtue of certain forces which he has at his command from his free will.)

In admitting that these forces actually exist, as all observations appear to prove,² I call them *disturbing forces* of

¹ *Recherches sur la loi de la croissance de l'homme aux différens âges*, tom. VI. Nouveau Mémoires de l'Académie de Bruxelles.

² The famous Buffon shows very well the power of man to modify the works of nature: "All these recent and modern examples prove that man has known only late the extent of his power," he adds, "and that even he does not know it sufficiently. It depends entirely on the exercise of his intelligence. Thus the more he will observe, the more he will cultivate nature, the more he will have the means to subdue her ... and what would he not be able to do concerning himself, I mean concerning his own nature if the will were always directed by intelligence. Who knows to what point man would be able to perfect his nature, either intellectual or physical, etc." (*Époques de la nature.*)

man by analogy with the disturbing forces which scientists have considered in the system of the universe. One imagines that the effects which result from them act with such slowness that they could be called equally by analogy *secular disturbances*. The science which would have such a study as a goal would be a veritable *social mechanics*, which, no doubt, would present laws quite as admirable as the mechanics of inanimate objects, and would bring to light the conservative principles which perhaps would be only the analogies of those we already know.

This way of looking at the social system has something positive about it which must, at first, frighten certain minds. Some will see in it a tendency to materialism. Others, in interpreting my ideas badly, will find there an exaggerated pretention to aggrandize the domain of the exact sciences and to place the geometrician in an element which is not his own. They will reproach me for becoming involved in absurd speculations while being occupied with things which are not susceptible to being measured.

With regard to the accusation of materialism, it has been reproduced so often and so regularly every time that the sciences have tried a new step, and when the philosophical mind in flowing outside ancient ruts searched to open up new paths for itself, that it has become almost superfluous to respond to it—today, especially, when it has been stripped of the appearance of chains and torments. Who could say, moreover, that one insults the divinity in exercising the most noble faculty which He has placed in us, in turning one's meditations toward the most sublime laws of the universe, in trying to discover the wonderful economy, the infinite wisdom that presided at its composition? Who would dare to accuse of baseness the scholars who, for the narrow and shabby world of the ancients, have substituted the knowledge of our magnificent solar system, and who have pushed back so far the limits of our starry sky that genius

no longer dares to fathom the depths lest with a religious respect? Certainly the knowledge of the marvelous laws which rule the system of the world which we owe to the research of scholars offers a very great idea of the power of the divinity in a manner other than that of that world which wishes to impose on us a blind superstition. If the rough pride of man felt itself frustrated on seeing how small is the place which he occupies on the grain of dust of which he made his universe, how much must his intelligence have rejoiced in having carried his power so far and having plunged so in depth into the secrets of the heavens.

After having seen the progress which the sciences have pursued in regard to universes, are we not able to try to pursue it in regard to men? Would it not be absurd to believe that, while all happens according to such admirable laws, the human species alone remains blindly neglected by itself, and that it possesses no principle at all of conservation? We are not afraid to say that such a supposition would be more offensive to the divinity than the very research which we intend to do.

But here a second objection is presented: is there a possibility of realizing what we have in view? We have said that the first step to take would be to ascertain the average man of different nations, either in physical or moral and intellectual qualities. Perhaps one will accord us the possibility of such an appreciation for the physical qualities of man which allow measurement directly, but how will it be proper to grasp them for moral and intellectual qualities? How will one ever maintain without absurdity that the courage of one man is to that of another as five is to six, for example, pretty nearly as one would say of their height? Would not one laugh at the pretention of a geometrician who would maintain seriously that he has calculated that the genius of Homer to that of Virgil is as three is to two? Certainly such pretentions would be absurd and ridiculous, and the one who

would maintain them would prove himself of little judgment. It is advisable before all to be well understood on the meaning of words and to examine if what we want is possible. I am not even speaking according to the present state of science, but a state where science will be able to be raised one day. We can, in fact, demand of those who are occupied with social mechanics no more than of those who would have seen imperfectly the possibilities of forming a celestial mechanics in an age where there existed only defective astronomical observations and void or false theories with insufficient means of calculation. The first step to take was to come to an agreement on the means of performance and on the possibility of obtaining them. It was then necessary to gather together with zeal and perseverance precise observations, to create and perfect methods for putting these to work, and thus to prepare all the necessary elements of the structure which it was a question of setting up. But it is the course which I believe will be proper to follow to form a social mechanics. I think therefore that it is a question of examining if there is a possibility of obtaining the means of performance, and first if there is a possibility of ascertaining the average man.

II. CONCERNING THE POSSIBILITY OF ASCERTAINING THE AVERAGE MAN IN ONE NATION

Among the components relating to man, some are susceptible to a *direct* appreciation, and the numbers which represent them are of true mathematical dimensions. Such are, in general, physical qualities. Thus, the weight and height of man can be measured directly, and one can then compare them with the weight and height of another man. In comparing different men of one nation from this point of view, average values are attained which are the weight and height

which it is proper to assign to the average man of that nation. It is in this way then that one could say that the Englishman, for example, is taller than the Frenchman or the Italian. This way of proceeding is analogous to that which is followed in physics for determining the temperatures of different countries and comparing them. Thus, it is very rightly said that in Paris the average summer temperature is eighteen degrees centigrade although the thermometer has been almost constantly higher or lower than that point. One imagines, moreover, that the relationship which exists between the temperatures of two countries, the same as the relationship which exists between the weight and height of the average native man of these two countries, can be altered because of the times.

In certain cases, *non-material* measures are employed when it is a question of judging the average life of a designated nation, or of estimating the age at which the average man of that nation dies. Life has for measurement time, and this measurement allows quite as much precision as those which we employ in physics.

Finally one can employ *conventional* measurements, as when it is a question of estimating wealth, production, and consumption of one country, and of comparing them to those of another country. All these estimates have already been made by economists with more or less exactitude. They ought thus to offer nothing which could appear strange to us.

There are elements relating to man which cannot be measured directly and which can only be perceptible *by their effects*: of this number are man's strengths. One imagines that it would be no absurdity to say that such a man is twice as strong for hand pressure if this pressure applied against an obstacle produces effects which are as two to one. It is only necessary to admit, then, that causes are proportional to effects, and necessary to be very careful in mea-

suring the effects, to place individuals in similar circumstances. Thus, one could make enough serious errors in employing Regnier's dynamometer indistinctly for all individuals, because the size of hands or the height of stature can be influential and cause one to handle the instrument with more or less facility.

Certain moral qualities are pretty nearly in the same state of things. Thus, one would not raise objections in saying that one worker has two or three times more activity than another if, all things being equal in other respects, he does each day work double or triple the work of that other worker. Here, the effects are purely physical as was the compression of energy when it was a question of strength. We only acknowledge the hypothesis that causes are proportional to the effects produced by them. But in a great number of cases, this estimation becomes impractical. When man's activity is distributed on immaterial works, for example, what will be our measure even though works such as books, statues, or paintings will be produced; because how is the research and the meditation which they will have necessitated to be judged? The number of works could, at most, give an idea of the fruitfulness of an author, as the number of children sent into the world would reveal the fruitfulness of a woman — that is to say, in paying no regard to the value of the works produced.

If, like the fruitfulness of woman, the different qualities of man were made manifest by acts to which one could have attributed the same value, one imagines that these qualities would be exactly perceptible and comparable among themselves. Thus, one would not be astonished at hearing people say that such a man is two times more courageous as such another and has three times less genius. But, as such an evaluation has nothing precise about it, one is limited to saying that an individual has courage, does not have it, or else is a coward; that which in mathematical language would be expressed in saying that his courage is positive,

zero or negative. Yet it is said that he is more courageous than another. This judgment results because, often having seen the two individuals in question behave, one estimates the one inferior to the other without being able to estimate precisely the degree of their courage. One perceives here how arbitrarily it exists and how similar judgments are subject to being contested. Also, he would be regarded as absurd who would wish to express by numbers courage relative to two individuals, or their genius, or their prudence, or their propensity for good or for evil. However, let us examine such an assertion closer at hand. Let us try to discover why it is absurd, and let us see if the relationship in question would not be able to be fixed in certain circumstances.

Let us suppose that two individuals are each day in a position to do acts of courage, and the facility of devoting themselves to them is exactly the same. Let us suppose, besides, that each year we count pretty regularly 500 acts of courage for one and only 300 for the other. These acts, moreover, although more or less remarkable, can be considered collectively as having each the same value, because it recurs generally with the same circumstances. This conceded, and considering causes as proportional to their effects, one does not scruple to say that these two individuals have courage which is in the relationship of 500 to 300, or of five to three. Such an evaluation would have so much more the character of truth when results are effective over a greater number of years, and when results vary within more narrow limits. Absurdity only originates here then from the *impossibility* in which we find ourselves: first, in placing two men in a position equally favorable to do acts of courage; second, in bearing in mind each occasion of these acts; third, finally, in collecting a sufficiently great number of them for which the judgment we wish to produce is removed as little as possible from the truth. We regard, in consequence, the correspondence as absurd only because we believe it *impossible* to determine. However, let us assume that the two individ-

uals of whom we have just spoken were chosen in France and represent, the one, the mass of men of 21 to 25 years; and, the other, the mass of men 35 to 40 years. Moreover, for acts of courage we substitute thefts likely to be judged by criminal tribunals. And all the rest will be found to have come true, from the experience of four years, in such a way that we can consider at least as very probable that the propensity for theft in France is pretty nearly five to three for men from 21 to 25 years and those of 35 to 40. In fact, one can concede that men from 21 to 25 years who, according to population tables in France, are in the same number as men from 35 to 40 years, have the same facility as the latter to indulge in theft; and that, moreover, the thefts judged by the criminal tribunal appear with circumstances equally grave for one and for the other. If one objects that only thefts judged before the tribunals can be taken into consideration here, I would say that when the mortality or fecundity of a nation is calculated, one also only knows births and deaths written in the civil register and that a great number could be omitted. The probability of omissions is, moreover, as great for individuals from 21 to 25 years as for those from 35 to 40.

Thus it can be said: first, that the individuals which we compare are pretty nearly exactly in the same circumstances; second, that if one does not know in an absolute way the number of thefts which they commit, one knows at least the probable relationship; third, that this relationship must inspire confidence in the same proportion as it results from observations of several years and as it varies within sufficiently narrow limits. The relationship of 5 to 3 has been calculated in fact according to the results from four years; and it has been for two years nearly exactly 5 to 3; at one time it has been a little greater and another time a little less. These variations are such as if one would measure four days consecutively the relationship in strength of two men by means of Regnier's dynamometer. The variations

from the general average which would present the four particular values observed in this way would be without doubt more considerable than those which we have found. Thus we are able to regard as very probable that the degrees of the propensity to theft are in fact just as we have established them.

Let us suppose now that society, in a state of perfection greater than it is at present, takes care daily to register and appraise actions of courage and virtue, as one does today in regard to crimes. Would one not have the means to measure the relative degrees of courage and virtue for different ages? The absurdity which one finds in the evaluation of this relationship for the average man is thus more apparent than real, and is related to the impossibility which still exists in the present state of society of procuring the components necessary for calculation.

That which will seem to me always impossible to estimate is the absolute degree of courage, or that which it has been agreed to regard as such in an isolated individual, because what is the unit of measurement which it will be proper to adopt? Will we be able to observe this individual during a sufficiently long time and in a manner sufficiently coherent to make allowances for all his acts, to assess courageous actions for their value? And these actions, will they be in sufficiently great number to be able to infer something satisfactory? Who will satisfy, moreover, that during the course of the observations this individual will not have changed? When one operates on a large number of men, these difficulties disappear almost entirely, especially if one only has in view ascertaining relationships and not absolute values.

Thus, one could estimate the propensity for certain vices or for certain virtues, either for man at different ages, or for both sexes, when it is a question of the same nation. But the difficulties will become very great when one will compare among them for different nations, because many circum-

stances which, in the first two cases, were the same, can be very dissimilar in the last.

In recapitulating what has just been said on the possibility of measuring the qualities of man which are only perceptible by their effects, I believe that one can employ numbers without absurdity in the following cases:

First. When the effects can be assessed by a direct measure which makes known their degree of energy, like those produced by strength, speed, activity applied to material work of the same nature;³

Second. When qualities are such that the effects are pretty

³ Perhaps we could return again to the same class of effects produced by man's memory, either on account of his facility to apprehend, or on account of his energy to retain. For example, two persons having an equally calm mind and finding themselves in preparations equally favorable for the experience, succeed in committing to their memory a few pages from a book, the one in the space of two hours, the other in the space of four hours only. But the first, after a month, would no longer find himself in a proper condition to repeat with coherence the passages in question, while the second would only give proof of the absence of memory at the end of two months. According to such an experience, the facilities for learning would be as one to two, and the energies for retaining would be in the inverse relationship; time would serve here as a measure. It will be said, without doubt, that it is impossible to apprehend exactly when one has succeeded in committing entirely a passage to memory in the same way as where memory begins to be lacking. But one could do here what is done in regard to the phenomena of physics which present the same inconvenience, as in the estimation of the duration of the sensation of sight or of hearing, or of the loss of electricity through air more or less humid, or the cooling of bodies. The memory apprehends and loses in a gradual manner and according to a certain law; but there exists a relationship between the facilities of grasping and retaining among different men independent of this law. This relationship must be chiefly variable with age. It is these variations which we will be able to fix, I believe, in a satisfactory way by multiplying the experiences sufficiently in order to correct what could be defective observation itself. I do not think we have yet occupied ourselves in researching the variations which age brings to the duration of sensations, whether sight or hearing. I am not speaking of other senses whose mode of action is scarcely known.

nearly the same, and when they only depend on the frequency of these effects as with the fruitfulness of women, intoxication, etc. If two men placed in the same circumstances became intoxicated regularly, the one once per week, the other twice, it would be said that their propensity for intoxication is as one to two;

Third. Finally, numbers can again be employed when the causes are such as it is necessary to regard as much the frequency of the effects as their strength. Although the difficulties then become very great, and even insoluble in several cases according to the few data which we possess up to now, it is this which one will particularly note in regard to moral and intellectual qualities such as courage, prudence, imagination, etc. The question is simplified more often when the effects vary in validity with regard to strength, but are presented nevertheless under their different modifications in proportions pretty nearly the same. One can then set aside strength and have regard only to frequency. Thus, in comparing what man is at 25 and at 45 years for his propensity to theft, we can without too much error have regard only to the frequency of thefts which take place at these ages, because the different degrees of gravity of these crimes should be supposed the same at both places. In this sort of evaluation the values obtained have so much more probability of approaching the true value that one is searching for, all things being equal, as the observations are more numerous — as when two individuals are put on trial, to discern their knowledge, their veracity, their memory, etc., and one notes the number of times they are mistaken. Moreover, as I have already remarked concerning them, these methods of evaluation are pretty nearly impracticable when it is a question of two individuals, because the facts are not sufficiently frequent for one to be able to conclude something satisfactory from them, and because, in addition to which, individuals are able to change in the course of observations. It is no longer the same concerning the average man. One can, in effect, obtain a large number of observations in a very limited

time. It would be impossible in comparing two men, the one from 21 to 25 years, the other from 35 to 40, to determine what is, all things being equal, their greater or lesser propensity for theft or even for crime in general, because this propensity will perhaps not reveal itself by even a single act in the course of observations — that which is no longer the case when one takes collectively all men of the same age. The number of acts or effects in that case is sufficiently great so that one could without perceptible error neglect the different degrees of strength of these acts. If it happens, moreover, that the number of crimes remains almost exactly the same from one year to the other, a very great probability exists that the result obtained deviates very little from the truth.

I think that all the qualities of man which are only perceptible by their effects can be reported in the three categories which I have established previously. I think also that one will perceive that the impossibility for the moment of employing numbers in these evaluations is related rather to the insufficiency of data than the inexactitude of methods.

If the law determined for the average man suffers some exceptions, as all the laws of nature, at least it will be that which will best express what takes place in society, and that which is especially important for us to know. Man carries at birth the germs of all the qualities which develop successively and in greater or lesser proportions. Prudence predominates in one, avarice in another, imagination in a third. We find elsewhere an excess in proportion by reason of age, or a precocious imagination, or an active and vigorous old age. The fact alone that we remark on these deviations when they exist proves already that we have the feeling of a general law of development, and that we even make use of it in our judgments. I undertake thus nothing new, unless to give a little more precision to those evaluations ordinarily very vague (because they rest on incomplete or defective observations) and almost always not very numerous.

According to all that has just been said, I believe not only that it is not absurd but even that it is possible to determine the average man of a nation or of the human species. The specious absurdity of such research originates only from the lack of observations made with precision and in a sufficiently great number in order that the results present the greatest probability possible that they are conformable to the truth. Already, I have tried to determine the law of the development of the average man in physique, at least with regard to stature. I hope to be able to do it soon with regard to weight and strength.⁴

The determination of the average man as regards moral faculties presents more difficulties. I have in mind in this *Mémoire* to give a first example of such a determination. I would try to expand the circle of these researches further, but I believe it necessary to have this second *Mémoire* take place first — an essay which will have for its objective to show applications which can introduce into the arts and sciences man considered from the double point of view where I have placed him. It is then only, if I am not mistaken, that one can form an idea of the fruitfulness of the results to which one can be led. The necessity to be true, to represent faithfully the physiognomy, the habits and morals of people of different epochs must have sustained at all times artists and writers to practice at their best a course similar to ours and to grasp among individuals whom they observe traits characteristic of the period in which they live — or, in other terms, to deviate the least possible from the average man. It is in the right proportion of parts that they succeeded in finding the becoming type; and the greater or lesser deviations from the average have constituted ugliness in the

⁴ Out of the impossibility of bringing together unaided the necessary observations for determining all the laws of development of man, even while limiting myself to physical qualities, I entreated Professors Pleateau, Guiette and Van Esschen to be willing to aid me in my research so that the results on weights and strengths have been obtained only through their active intervention.

physique, like vice in the moral character, and the state of sickness in regard to the constitution. But these ideas, as I have said, would need to be developed. I intend to make it the special object of another work in which I shall try to show that the average man in society is in possession of particular properties like the center of gravity in matter.

III. CONCERNING THE POSSIBILITY OF DETERMINING THE AVERAGE MAN WITH REGARD TO HIS PROPENSITY FOR CRIME

Supposing men placed in like circumstances, I call the *propensity for crime* the greater or lesser probability of committing a crime. My goal is especially to research the influence which the seasons, the climate, sex, and age exercise on this propensity.

I have said that the circumstances in which men find themselves ought to be similar, that is to say, especially favorable, whether through the existence of objects suitable to excite *temptation* or through the *ease* of committing crime. It is not sufficient, in fact, that man has the intention to do evil. It is necessary, besides, that he have the opportunity and the means for it. Thus, the propensity for crime could be the same in France and in England without morality being the same. I believe that this distinction is important.⁵

⁵ It has been very well established by M. Alphonse deCandolle in an article on *the statistics of crimes* published in the *Bibliothèque universelle* of Geneva, February 1830. The author regards the propensity for crime of individuals as depending on their morality, the temptation to which they are exposed, and the greater or lesser ease which they find to commit crimes. Of these three causes, the first relates more especially to man; the two others are, so to speak, outside of him. As it was with man that I was occupied, I tried, in the course of my research, to make the causes outside of him be constantly pretty nearly equal, so they could be disregarded. I necessarily had to bear in mind the influential causes of nature, such as the climate, the seasons, sex, and age.

There is still another distinction which is important to establish. It is that two individuals could have the same propensity for crime without being equally criminal, if one, for example, were inclined to theft and the other to murder. This distinction which I have not sufficiently borne in mind in my previous research is nonetheless essential.⁶

Finally, it is here again the place to examine a difficulty of another kind which has not escaped M. Alph. De Candolle, in his *Considérations sur la statistique des délits*.⁷ It is that our observations can only correspond to a certain number of crimes known and judged out of an unknown sum total of crimes committed. As this sum total of crimes committed will probably remain unknown forever, all the arguments for which they will serve as a basis will be more or less defective. I do not even hesitate to say that all we are conversant with on the statistics of crimes and offense would not be of any use unless it were admitted tacitly that there exists a relationship pretty nearly invariable between offenses known and judged and the unknown sum total of offenses committed. This relationship is necessary, and if it did not exist in reality, all that one would have expressed up to this day from statistical documents of crimes would be false and absurd. It is felt of course of what importance it is to justify such a relationship, and one can be surprised b

⁶ In an article in *Hygiène morale*, M. Villermé has shown very well how the regime of prisons is able to become fatal to the unfortunate who often finds himself confined for a slight mistake and thrown into a milieu of a troop of villains who pervert him. "I have it," he said, "from a person who accompanied Napoleon to the island of Elba, that in private and thus very philosophical conversations of the ex-emperor, I heard him say several times that in some respects as man is seen, he is as much the product of physical and moral atmosphere as of his structure. Certainly, the idea already expressed by many others that the sentence presents is the most general as well as the most justified of those which one can have on our subject." *Ann. d'hygiène publique* October 1830.

⁷ *Bibliothèque universelle*, February 1830.

what one had not troubled himself to do until now. The relationship of which we speak varies according to the nature and gravity of the crimes. In a well organized society where the police are active and where justice is well administered, this relationship for manslaughters and murders will be pretty equal to unity — that is to say that an individual will not disappear from society at all by manslaughter or murder without its being known. It might not be the same for poisonings. When it is a question of thefts and offenses of less importance, the relationship can become very weak. And a great number of offenses will remain unknown whether because those who suffer from them overlook them or do not wish to pursue their authors or because justice itself does not have enough clues to act. Thus, the size of this relationship, which will be in general different for the different crimes and offenses, will depend above all on the activity of justice in reaching the guilty, on the care which these latter will take in hiding themselves, and on the repugnance which wronged individuals will feel in complaining, or on the ignorance in which they perhaps will be concerning the wrong which has been done to them. But, if all the causes which influence the size of the relationship remain the same, it can also be said that the effects will remain invariable. This result is confirmed again in a curious manner by induction and by observing the astonishing constancy with which the numbers which correspond to the statistics of crimes are reproduced annually — a constancy which without doubt would be reproduced even in the numbers of which it is impossible for us to obtain knowledge. Thus, although we do not know the criminals who escape justice, we know very well that every year 7,000 to 7,300 individuals are brought before the criminal tribunals, and that 61 are regularly condemned out of 100; that about 170,000 appear before the correctional tribunals, and that 85 out of 100 are condemned; and that if one goes into details one does not find a regularity less frightening. Thus one counts annually nearly 100

to 150 condemned to death,⁸ 280 condemned to forced labor in perpetuity, 1,050 to forced labor for a term, 1,220 in confinement, etc. — so that this kind of budget for the scaffold, the hulks, and the prisons is paid by the French nation with a regularity doubtless much greater than is the financial budget. And one could say that that which escapes the minister of justice forms sums more regular than those which are lacking in the revenues of the treasurer.

IV. CONCERNING THE PROPENSITY FOR CRIME IN GENERAL

I shall begin by considering in a general way the propensity for crime in France by availing myself of the excellent documents which comprise the *Comptes généraux de l'administration de la justice* of that country. I shall then try to establish some comparisons with other countries, but with all the caution which such delicate comparisons require.

During the four years which preceded 1830, one counted in France 28,686 defendants before the assize courts, that is to say, about 7,171 individuals annually, which gives one accused for 4,463 inhabitants, taking the population at 32,000,000 souls. Moreover, out of 100 defendants, 61 were condemned to penalties more or less serious. According to remarks made already in regard to crimes which remain unknown or unpunished, and of errors which justice can commit, one imagines that these numbers, altogether furnishing us with particular data for the past, teach us nothing very exact on the propensity for crime. However, if we consider that the two relationships which we have calculated have not varied perceptibly from one year to the other, we will be

⁸ The number of condemnations to death has diminished however from year to year. Would this be owing to the growing repugnance which judges feel in applying this penalty for the abolition of which there has been such a demand in these times just past?

inclined to believe that they will not have varied any more in a perceptible way for the following years; and the probability that this variation ought not to take place is so much stronger, just as the theory indicates it, if, all things being equal otherwise, the average results of each year have deviated less than the general average, and if the results have been taken over a very great number of years. According to these remarks, it becomes very probable that for a Frenchman the odds are one against 4,462 that, in general, he will be indicted during the course of one year; moreover, the odds are pretty nearly exactly 61 against 39 that he will be condemned as soon as he finds himself indicted. These conclusions are supported by the numbers which the following table shows.

Table I

YEARS	ACCUSED present*	CON- DEMNED	INHABI- TANTS for one accused	CON- DEMNED from 100 accused	ACCUSED OF CRIMES against		RELATION SHIP between the numbers of both types of accused
					persons	property	
1826	6988	4348	4557	62	1907	5081	2,7
1827	6929	4236	4593	61	1911	5018	2,6
1828	7396	4551	4307	61	1844	5552	3,0
1829	7373	4475	4321	61	1791	5582	3,1
totals	28686	17610	4463	61	7453	21233	2,8

* The number of accused absent was:

in 1826	1827	1828	1829
603	845	776	746

I have taken the documents from 1826, 27, 28, and 29 only, because the mass for 1825 contains neither the distinction of ages nor sexes, of which I make use further on. Moreover, in 1825 one counted one accused out of 4,211 inhabitants, and 61 condemned out of 100 accused.

Thus, although we are not yet acquainted with the statistical documents for 1830, it is very probable that one will

count again for that year about one accused out of 4,463 inhabitants and 61 condemned out of 100 defendants. This probability becomes less strong for 1831 and less strong still for the years following. We are thus in a position to estimate from the results of the past that which we shall see come true for the future. This possibility of assigning in advance the number of accused and condemned which a country is obliged to offer up is fitted to give rise to serious reflection since it is a question of the fate of several thousand men who are driven, so to speak, toward the tribunals and the condemnation which awaits them there.

These conclusions are inferred directly from the principle so often invoked before in this *Mémoire*: that effects are proportional to causes, and that effects remain the same if the causes which produce them have not varied. If, thus, France in 1830 had not undergone any apparent change, and if, contrary to my expectation, I found a perceptible difference between the two evaluations calculated in advance for that year and the corresponding evaluations actually observed, I would conclude from it that there has occurred unexpectedly a change in the causes which could have escaped my attention. Conversely, if the state of France has changed, and if, in consequence, the causes which have an influence on the propensity for crime have equally undergone a variation, I must expect to find a change in the two evaluations which until then had remained nearly the same.

It is well to observe that the preceding numbers only make known in a strict sense the probability of being indicted and that of being condemned afterwards, without our being able to conclude anything very precise concerning the degree of the propensity for crime, unless one concedes (that which is very likely) that justice maintains the same activ-

ity, and the number of the guilty who escape it each year remains proportionately the same.⁹

In the last columns which compose the table cited previously, a principal distinction is made between crimes against the person and crimes against property. It will be noted without doubt that the number of the first crimes has diminished, while that of the second has grown. However, these variations are so slight that the annual evaluation has not changed very perceptibly, and it is seen that one ought to count nearly three accused of crimes against property for one accused of crimes against the person.

I shall compare with the preceding numbers those which correspond to them in the Low Countries, where the French code is still used.

Table 2

YEARS	ACCUSED present	CON- DEMNED	INHABI- TANTS for one accused	CON- DEMNED from 100 accused	ACCUSED OF CRIMES against		RELATION- SHIP
					persons	property	
1826	1389	1166	4392	84	304	1085	3,6
1827	1488	1264	4100	85	314	1174	3,7

Thus there was nearly the same probability for the French and for the inhabitants of the Low Countries to

⁹ If the letters a, a', a'', etc., represent the numbers of individuals who commit crimes annually, and a, a', a'', etc., the corresponding number of individuals who find themselves annually condemned; if one supposes, moreover, that the relationships a/a, a'/a', a''/a'', etc., are perceptibly equal, that is to say, if one has a/a = a'/a', one will have also a/a' = a/a'. So that if the number of the condemned a and a' is annually pretty nearly the same, it will be likewise with the number of the accused, that is to say, that the propensity for crime will keep the same value. It is thus that the near invariability of the annual relationship of accused to condemned permits us to substitute for the relationship of the condemned for any two years the relationship for the accused for the same years.

be brought to trial. However, the number of crimes against persons was less in the latter; but the repression there was much stronger, since one condemned up to 85 individuals out of 100, that which could hold in the absence of a jury whose functions the judges themselves fulfill. This modification made in the French code must be taken into consideration. It gives rise in fact to a very notable difference in repression because, once indicted, the Belgian had no more than 16 against 84, or 1 against 5 to bet that he would be acquitted, while the Frenchman in the same circumstances was able to further wager 39 against 61, or about 3 against 5, that is to say more than triple. This unfavorable position in which the accused found himself among us was related to the fact that the judges before whom he appeared were in fact more severe than the jury, or else to the fact that in the Low Countries one employed more caution in accusations. I would not express an opinion in this regard. I would limit myself to making the observation that before the correctional tribunals, French judges are even more severe than ours, and it is the same before the police courts.

Thus, during the four years which preceded 1830, one counted in France 679,413 defendants, that is to say, annually 1 defendant for 188 inhabitants. Moreover, of this number, only 103,032 individuals have been acquitted, that is to say, 15 out of 100 accused. The odds were thus 1 against 187 that the Frenchman would be brought before the correctional tribunal and 85 against 15 that from that moment he would be condemned.

During the years 1826 and 1827, one counted in the Low Countries 61,670 accused before the correctional tribunals of which 13,499 have been acquitted. Repression has thus been at 78 out of 100 accused, and 1 accused was counted for 198 inhabitants. The probability for a Frenchman to be brought before the correctional tribunals is thus a little stronger than for an inhabitant of the Low Countries, as also that of being condemned afterwards.

V. CONCERNING THE INFLUENCE OF THE INTELLECTUAL STATE AND OF CLIMATE ON THE PROPENSITY FOR CRIME

It can be interesting to research the influence that the intellectual state of the defendant exercises relevant to the nature of crimes. The documents from France include a distinction in this regard which has permitted forming the following table for the years 1828 and 1829:¹⁰

Table 3

INTELLECTUAL STATE of the accused	ACCUSED OF CRIMES against		CRIMES against property for one crime against persons
	persons	property	
Not knowing how to read nor write	2072	6617	3,2
Knowing how to read or write imperfectly	1001	2804	2,8
Knowing how to read and write well	400	1109	2,8
Having received instruction superior to this 1st degree	80	206	2,6
Totals	3553	10736	3,0 average

Thus, all things being equal, the number of crimes against persons relative to the number of crimes against property during the years 1828 and 1829 was greater according to the more developed intellectual state of the defendant; and this difference would be particularly so in man-

¹⁰ The intellectual state of 474 defendants has not been established for the year 1828, and of 4 for the year 1829.

slaughters, rapes, murders, assaults and batteries, and other very grave crimes. Must one conclude from that that knowledge has been harmful to society? I am far from believing it. To establish such an assertion, it would be necessary to begin by knowing how the French nation reckons individuals in the four divisions which we have acknowledged previously, and to research if, proportions retained, individuals of one of the divisions commit as many crimes as those of the others. If that were indeed so, then I would not hesitate to say that, since the most knowledgeable individuals commit as many crimes as those with less instruction, and besides as their crimes are more serious, they are necessarily more criminal; but according to the little that we know of the distribution of knowledge in France, we can decide nothing in this regard. It is possible, in fact, that individuals of the knowledgeable class of society, while committing fewer manslaughters, murders, and other serious crimes than those individuals who have not received any instruction, nevertheless commit even a great deal fewer crimes against property — that which could be precisely the case which we noted in the preceding numbers. This conjecture likewise becomes probable if one considers that the knowledgeable class implies more affluence and, consequently, less need to resort to the different varieties of theft which make up a great part of crimes against property; while affluence and knowledge do not succeed as easily in restraining the fire of the passions and sentiments of hate and vengeance. It is necessary to note, on the other hand, that the results contained in the preceding table are only relative to two years, and that that way they present a probability less great of expressing that which is indeed so, especially for those who belong to the most knowledgeable class, and which are based on numbers less strong. It thus seems to me that one can say, at the most, that the relationship of the number of crimes against persons to the number of crimes against property varies with the state of knowledge; and that, in general, for a hundred crimes

against the person, one counts in the same proportion fewer crimes against property as the individuals belong to a more enlightened class.

The following details, which I have extracted from the *Rapport au Roi* for the year 1829,¹¹ can serve to expand on what I assert:

The new table which indicates the profession of the accused, divides them into nine principal classes, comprising:

The first, individuals associated with the exploitation of the earth: vineyards, forests, mines, etc., 2,453;

The second, laborers who work with wood, leather, iron, cotton, etc., 1,932;

The third, bakers, butchers, brewers, millers, etc., 253;

The fourth, hatters, wig-makers, tailors, upholsterers, etc., 327;

The fifth, bankers, stockbrokers, wholesale and retail merchants, peddlers, etc., 467;

The sixth, labor merchants, stevedores, mariners, carriers, etc., 289;

The seventh, innkeepers, lemonade sellers, domestics, etc., 373;

The eighth, artists, students, clerks, ushers, notaries, lawyers, priests, physicians, soldiers, land-lords, etc., 449;

The ninth, beggars, smugglers, prostitutes, etc., 373;

Women who had no profession at all have been classed according to that of their husbands.

In comparing to the totality of the accused, those who are contained in each class, one sees that the first furnishes 33 accused out of 100; the second, 26; the third, 4; the fourth, 5; the fifth, 6; the sixth, 4; the seventh, 11; the eighth, 6; and the ninth, 5.

If one then distinguishes in each class defendants according to the nature of crimes which have been imputed to them, and which are compared among them, one finds the following proportions:

In the first class, 32 defendants out of 100 were prosecuted for crimes against persons, and 68 for crimes against property. These numbers are 21 and 79 for the second class, 22 and 78 for the third, 15 and 85 for the fourth and the fifth, 26 and 74 for the sixth, 16 and 84 for the seventh, 37 and 63 for the eighth, 13 and 87 for the ninth.

Thus the accused of the eighth class, who all exercised independent professions, or performed at a risk which supposes some education, are those who, relatively, have committed the most crimes against the person; while the eighty-seven hundredths of the accused of the ninth class, composed of vagabonds, only have committed offenses against property.

These results which confirm the remark made previously, merit being taken into consideration. I would not only that when one separates individuals into two classes the ones of independent profession, and the other journeymen, laborers, unskilled workmen or domestics, the difference is still very pronounced in another way.

The following table can aid in making known the influence of climate on the propensity for crime. It is fashioned from the documents which introduce the *Comptes généraux de l'administration de la justice* in France for the five years which preceded 1830. The second and the third column indicate the numbers of the condemned for crimes against persons and against property. The two columns following make known the relationships of the same numbers with the respective population of each department in 1827. A sixth column indicates the relationship of crimes against property to crimes against persons. Finally, the last column makes known how many defendants out of 100 did not know ho

¹¹ See the *Comptes généraux*, p. IX, 1830.

Table 4

DEPARTMENTS	CONDEMNED for crimes against		INHABITANTS out of 1 condemned for crime against		CRIMES against pro- perty for 1 crime against persons	ACCUSED who know neither how to read nor write out of 100 accused
	persons	property	persons	property		
Corsica	287	107	3224	8649	0,36	50
Haut-Rhin	144	295	14192	6928	2,05	33
Lot	98	110	14312	12751	1,12	80
Ariège	82	78	15118	15893	0,95	83
Ardèche	108	99	15205	16587	0,92	67
Aveyron	99	160	17677	10938	1,62	69
Pyrénées-Orientales	41	55	18460	13761	1,34	76
Seine et Oise	112	377	20034	5953	3,36	56
Vaucluse	58	118	20090	9875	2,03	65
Moselle	95	274	21534	7466	2,88	49
Lozère	31	53	22384	13092	1,71	47
Var	67	117	23216	13295	1,75	71
Bas-Rhin	111	341	24120	7851	3,07	31
Seine	197	2496	25720	2030	12,67	34
Bouches-du-Rhône ..	63	208	25897	7844	3,25	56
Eure	80	296	26354	7123	3,70	63
Doubs	48	146	26491	8909	3,04	35
Marne	61	244	26643	6661	4,00	54
Tarn	59	169	27767	9694	2,86	75
Seine-Inférieure	123	850	27980	4049	6,91	59
Drôme	49	133	29163	10744	2,71	71
Calvados	84	394	29819	6357	4,69	53
Hautes-Alpes	21	47	29840	13333	2,24	42
Landes	44	153	30149	8690	3,48	86
Basses-Alpes	25	62	30613	12344	2,48	66
Vosges	62	132	30632	14388	2,13	45
Gard	53	129	32788	13471	2,43	67
Loiret	46	215	33068	7075	4,67	70
Vienne	40	170	33459	7873	4,25	81
Ille et Vilaine	82	318	33747	8702	3,88	66
Hérault	50	92	33956	18454	1,84	62
Aude	39	75	34102	17733	2,42	72
Rhône	61	302	34146	6895	4,95	51
LA FRANCE	4662	17543	34168	9080	3,76	60
Puy-de-Dôme	82	157	34547	18044	1,91	75
Loire-Inférieure	66	160	34628	14284	2,42	76
Aube	34	206	35553	5868	6,06	54
Isère	73	220	36026	11954	3,01	62
Dordogne	64	149	36256	15573	2,33	76
Jura	33	123	37344	12613	2,96	50
Haute-Marne	32	94	38254	13023	2,93	46
Indre et Loire	37	131	39211	11075	3,54	79
Charente	45	92	39295	19220	2,05	60
Haute-Loire	36	25	39677	40810	0,97	75

Tabel 4, cont.

DEPARTMENTS	CONDEMNED for crimes against		INHABITANTS out of 1 condemned for crime against		CRIMES against pro- perty for 1 crime against persons	ACCUSED who know neither how to read nor write out of 100 accused
	persons	property	persons	property		
Allier	35	124	40757	11504	3,54	91
Pas-de-Calais	76	568	41751	5660	7,38	65
Basses-Pyrénées	47	112	43880	14524	3,02	73
Gers	35	91	43943	16901	2,60	70
Corrèze	32	56	44513	25430	1,75	77
Orne	48	183	45248	11868	3,81	66
Seine et Marne	35	167	45459	9527	4,77	58
Maine et Loire	50	197	45867	11641	3,94	81
Haute-Vienne	30	120	46058	11515	4,00	79
Haute-Pyrénées	24	64	46263	17349	2,87	71
Eure et Loire	30	231	46592	6013	7,70	63
Ain	36	84	47448	20335	2,33	60
Deux-Sèvres	30	124	48043	11623	4,13	61
Charente-Inférieure ..	44	257	48199	8252	5,84	66
Meurthe	52	249	48788	10189	4,79	42
Sarthe	45	177	49613	12614	3,93	87
Haute-Garonne	41	190	49636	10711	4,63	71
Haute-Saône	33	134	49643	12225	4,06	43
Mayenne	35	146	50591	12128	4,17	82
Morbihan	41	183	52129	11679	4,46	78
Cantal	25	75	52403	17468	3,00	61
Loire et Cher	22	142	52424	8122	6,45	68
Nord	91	548	52893	8783	6,02	71
Loire	34	104	55252	18063	3,06	54
Côte-d'Or	35	160	55992	11592	4,57	48
Nièvre	24	109	56620	12467	4,54	65
Saône et Loire	45	168	57308	15350	3,73	74
Vendée	28	106	57648	15228	3,62	77
Lot et Garonne	29	111	58084	15181	3,83	68
Meuse	26	105	58911	14588	4,04	39
Yonne	29	140	58986	12219	4,83	45
Cher	21	98	59188	12683	4,67	86
Finistère	42	252	59863	9977	6,00	79
Manche	51	247	59922	12373	4,84	62
Tarn et Garonne	20	89	60397	13572	4,45	88
Côtes du Nord	47	292	61881	9960	6,21	90
Gironde	41	207	65628	12999	5,05	67
Aisne	36	259	67995	9451	7,20	62
Oise	23	163	83723	11814	7,09	52
Somme	31	257	84884	10239	8,29	64
Ardennes	15	92	93875	15306	6,13	37
Indre	12	96	99012	12377	8,00	77
Creuze	6	40	210777	31617	6,67	80

to read or write. The numbers which are entered there relate only to the years 1828 and 1829.¹²

To the preceding documents I will join those which concern the former kingdom of the Low Countries¹³ and the

¹² It appeared to me that these numbers were able to give a sufficiently satisfactory idea of the state of knowledge in each department and especially for the inferior classes where most crimes are committed. This method, which amounts to taking for each department a few hundred individuals whose intellectual states are ascertained, appears to me to be more certain than that which was followed by M. Dupin, and which consists in judging the education of the province by the number of children sent to school. It can happen, in fact, that there is generally very little enlightenment where one has recently established schools which have not yet been able to produce appreciable effects. In order to render the results obtained by this method more perceptible, I have constructed a small map of France, *Plate I* [following this section], which, by its darker or lighter shades, indicates the intellectual state of different parts of this kingdom. Although this map differs a little from that which M. Dupin has given, one will recognize with ease, on both sides, that the France of the north and especially that which borders on the Rhine and Belgium, is the most enlightened, while one finds the least knowledge on all the band which traverses France diagonally from Cape Finistère to the department of the Var. To this dark band is attached a second which leaves from the center of France and is directed toward the foot of the Pyrenees. Thus the results obtained by two different means are in accord however between them in a sufficiently satisfactory manner. It could be said that one finds more knowledge where there exists more communication and where the great rivers flow, as the Rhine, the Seine, the Meuse, etc. In southern France, the seacoasts frequented by commerce and the borders of the Rhône are also less dark while the lack of knowledge makes itself felt in directions of France which are not at all those of great commercial routes. One naturally seeks for instruction in the places where the need of it makes itself most manifest.

¹³ The numbers for the Low Countries comprise the two years 1826 and 1827, and for the duchy of the Lower Rhine, the years from 1822 to 1826, according to the *Revue encyclopédique* for the month of August 1830. As this collection made known the number of crimes and not the number of the condemned, I believed it necessary to give also the number of crimes for France and the Low Countries in order to render the results comparable.

duchy of the Lower Rhine where the French code is still followed and allows establishing comparisons.

Table 5

PROVINCES	CONDEMNED for crimes against		INHABI TANTS out of 1 condemned for crimes against		CRIMES against pro- perty for 1 crime against persons	INHABI TANTS for one pupil sent to the schools
	persons	property	persons	property		
Southern Brabant	61	168	16336	5982	2,75	13
Eastern Flanders .	82	154	17100	9104	1,88	14
Limbourg	32	120	20384	5436	3,75	15
Overyssel	16	42	20385	7766	2,62	7
Northern Brabant	30	66	22031	10014	2,20	9
Anvers	29	113	22562	5800	3,90	12
Groningen and Drenthe	18	98	23611	4296	5,44	7
Liege	26	82	25107	7961	3,15	15
Western Flanders .	46	142	25222	8171	3,09	15
Namur	14	66	27433	5819	4,71	9
Guelders	21	114	27633	5090	2,20	9
Southern Holland	28	216	32000	4148	7,71	11
Northern Holland and Utrecht	28	263	37560	4000	9,42	10
Luxembourg	14	47	42208	12572	3,34	8
Hainaut	21	76	52712	14565	3,62	10
Zeeland	5	86	53450	3108	17,20	10
Friesland	3	103	132248	3852	34,33	8
LOW COUNTRIES	474	1956	25747	6239	4,13	10
(crimes)	424	1691	28783	7217	4,00	10
DUTCHY OF THE LOWER RHINE	296	994	33784	10060	3,36	13
FRANCE	7160	20308	21648	7632	2,84	27

As it would be very difficult to form an idea of the mass of results contained in the preceding tables and as it would be even impossible to encompass them in one glance, I have sought to render them perceptible by darker or lighter shades applied on a map of France and the Low Countries according to the greater or smaller number of crimes against persons or against property relative to the population. (See

Plate II.) The first figurative map relates to crimes against the person. It shows us at first by the darkness of the shades that the greatest number of crimes is committed in Corsica, in the south of France, particularly in Languedoc and Provence, at the same time in Alsace and in the basin of the Seine. The southern part of the Low Countries, with the exception of Hainaut and Luxembourg, also present shades as dark. It is appropriate, however, to observe that these shades are perhaps darker than they should be if one considers that they represent the number of condemned; and that in general repression has been much stronger in the Low Countries than in France since in the latter country only 61 individuals out of 100 accused were condemned while 85 of them were condemned in the first. On the contrary, central France, Brittany, Marne, Picardy, in the same way as Zeeland and Friesland, present shades much more satisfactory. If one compares this map with that which indicates the state of instruction, one will be disposed to believe at first that crimes are in inverse proportion to enlightenment. The figurative map of crimes against persons compared to that of crimes against property presents more of an analogy. Thus, departments which are shown from both sides in an advantageous or disadvantageous way can be arranged in the following manner by adopting three principal classes:

First class. *Departments where the number of the condemned for crimes against persons and against property has exceeded the average of France.*

Corsica, Landes, Rhone, Bouches-du-Rhône, Doubs, Haut-Rhin, Bas-Rhin, Moselle, Seine-Inférieure, Calvados, Eure, Seine et Oise, Seine, Marne, Loiret, Vienne, Ille et Vilaine — 17 departments.

Second class. *Departments where the number of the condemned for crimes against property and persons has been less than the average in France.*

Creuse, Indre, Cher, Nièvre, Saône et Loire, Jura, Ain, Is-

ère, Loire, Haute-Loire, Cantal, Puy-de-Dôme, Allier, Corrèze, Haute-Vienne, Basses-Pyrénées, Hautes-Pyrénées, Haute-Garonne, Gers, Tarn et Garonne, Lot et Garonne, Gironde, Dordogne, Charente, Deux-Sèvres, Vendée, Loire-Inférieure, Maine et Loire, Sarthe, Orne, Mayenne, Manche, Finistère, Morbihan, Côtes du Nord, Somme, Oise, Aisne, Ardennes, Meuse, Meurthe, Haute-Saône, Haute-Marne, Côte-d'Or, Yonne, Seine and Marne — 47 departments.

Third class. *Departments where the number of the condemned for crimes against persons only, or against property only, has been less than the average for France.*

Var, Hautes-Alpes, Basses-Alpes, Drôme, Vaucluse, Gard, Ardèche, Lozère, Aveyron, Lot, Tarn, Hérault, Aude, Pyrénées-Orientales, Ariège, Charente-Inférieure, Loire et Cher, Eure et Loire, Nord, Pas-de-Calais, Aube, Vosges — 22 departments.

In making the same distinction in regard to the provinces of the Low Countries, we find:

First class. Southern Brabant, Anvers, Limbourg, Groningen and Drenthe — five provinces.

Second class. Hainaut, Luxembourg — two provinces.

Third class. Namur, Liège, Western Flanders, Eastern Flanders, Zeeland, Northern Brabant, Southern Holland, Northern Holland, Utrecht, Guelders, Overijssel, Friesland — 12 provinces.

Before seeking to infer some conclusions from the preceding results, I will remark that certain relationships could not be strictly comparable because of incorrect evaluation of the population or an unequal repression in the courts of justice. It would be sufficiently difficult to recognize the errors originating from the first cause, since we have for elements of verification only numbers relative to births and deaths. As to unequal repression, it is not quite the same, for besides being led to believe that the activity of justice in seeking

out the authors of crimes is not equal throughout, we see that acquittals do not have a regular course any longer. Thus, according to the documents from 1825 to 1829, in all France, 61 individuals out of 100 accused have been condemned; however, the repression has been generally stronger in the northern part of the kingdom than in the south. Thus the court of justice of Rouen is the one which has pronounced the most condemnations and it has condemned, in average terms, 71 individuals out of 100 accused. The courts of Dijon, Angers, Douai, Nancy, Orléans, Caen, Paris, Rennes have equally exceeded the average. The courts of Metz, Colmar, Amiens, Bordeaux, Bourges, Besançon, Grenoble, Lyon and Corsica have presented pretty nearly the same average as that of France, while the acquittals have been more numerous in the southern courts, such as Toulouse, Poitiers, Nîmes, Aix, Riom, Pau, Agen, Limoges and Montpellier. The last two courts have condemned, in average terms, only 52 individuals out of 100 accused. It would be left to examine if these well-pronounced inequalities in acquittals in the north and south of France are connected to a greater facility to indict or to more indulgence toward the accused. They could be connected again, that which seems to me more probable, to the fact that, all things being equal, crimes against persons are more common in the south and crimes against property in the north. We know, moreover, that the first species of crime gives rise to more acquittals than the second. Be that as it may, I think that it will be well not to lose sight of this double cause of error which I have just pointed out.

If now we cast our eyes on the departments of France which have exceeded the average for crimes against property, we find at first Corsica and Landes, which are by their morals and habits in a position quite special that scarcely permits comparison with the rest of France.

Corsica, in fact, provoked by cruel prejudices and inflamed with the heat from sentiments of vengeance which

are often transmitted from generation to generation, makes almost a virtue of homicide; also, it commits this crime in excess. Offenses against property are less frequent; however, their number still surpasses the average of France. One could not attribute this state of things to lack of education, since the number of defendants which knew neither how to read nor write was comparatively smaller than in France. It is not the same in Landes, where almost nine-tenths of the defendants were in a state of complete ignorance. This department, where a poor and weak population is found scattered through the heaths, is one of those where civilization has made the least progress. Although Landes is found ranked in the least favorable class as far as crimes, it is fair to say, however, that it does not deviate very much from the average for France. One can make the same observation in regard to the departments of the Vienne and Ille et Vilaine. As for other departments, it will be noted without doubt that they are the most heavily populated in France; that one finds there four of the most important cities, Paris, Lyon, Marseille, and Rouen; and that they are also the most industrial — those that offer the most movement and contact with strangers. One could perhaps be astonished at not finding there the departments of the Gironde and of Loire-Inférieure, which appear pretty nearly in the same circumstances as the departments of Bouches-du-Rhône and of Seine-Inférieure, especially if one considers that, in the evaluation of knowledge, they seem less strongly divided than the latter, and that repression has been generally strong. This remark is particularly applicable to the department of Gironde, because the department of Loire-Inférieure does not constitute a large deviation from the average for France. I would raise no objection at all to attributing these differences to a greater morality in one place than in the other. And this conjecture acquires greater likelihood if one observes that all the departments of southern France which border on the ocean from Basses-Pyrénées to the English Channel, except Landes

and Ille et Vilaine, which were in question before, fall below the average of France for crimes against persons; and that, on the contrary, all the departments without exception which border on the Mediterranean, even with those adjacent to them, exceed this average. One will note that the sea-coast from Basses-Alpes to the English Channel falls in general below the average for crimes against property.

The third class presents to us, first of all, 15 departments which form the edge of the Mediterranean, and which all surpass the average of crimes against persons and are lower than the average of crimes against property. The shores of the Mediterranean seem thus to offer a well-ascertained propensity for the first type of crimes. Of the seven other departments in the same class, one alone exceeds the average for crimes against persons. It is that of Vosges which is related to Alsace. The others exceed the average in crimes against property.

The departments of the second class, where the fewest condemnations for crimes against property have taken place, are situated in general in the center of France, on the ocean side from Basses-Alpes to the English Channel and in the basins watered by the Somme, the Oise, and the Meuse.

One can summarize the preceding in the following way:

First. The greatest number of crimes against persons and against property takes place in the departments which span or adjoin the Rhône, the Rhin, the Seine, at least in their navigable parts.

Second. Fewer crimes against persons and property are committed in the departments in the center of France, in those which are situated in the west toward the ocean, from Basses-Alpes to the English Channel and in those which toward the north span the Somme, the Oise and the Meuse.

Third. The shores of the Mediterranean and the nearby departments show, all things being equal, a propensity more

pronounced for crimes against persons, and the northern part of France for crimes against property.

After having established these facts, if one seeks to go back to the causes which produce them, one finds himself stopped at first by a number of obstacles. And in fact, the causes which influence crimes are so numerous and so diverse, that it becomes almost impossible to assign to each its degree of importance. It often happens, moreover, that causes which appeared very influential give way before others of which one had scarcely dreamed at first. It is that which I have particularly experienced in the present research. I was too preoccupied perhaps, I admit, with the influence which one accords to education to weaken the propensity for crime. It appears to me that the common error originates especially because one expects to find fewer crimes in a country because more children are sent to school there, or because in general more people in the population know how to read and write. Rather, it would be moral instruction which must be kept in mind, because very often the instruction which one receives in schools offers only another means for committing crime. One also quite generally looks at poverty as leading to crime; however, the department of Creuse, one of the poorest in France, is the one which presents the most morality in all of the reports. Likewise in the Low Countries, the most moral province is Luxembourg where the greatest poverty reigns. It is advisable, however, to understand the word "poverty," which is employed here in an acceptation which can be regarded as improper. A province in fact is not at all poor because it contains fewer riches than another if its inhabitants, as in Luxembourg, are sober and active — if, by their work, they succeed in providing in a sure way for their needs and to satisfy tastes so much the more modest, that the inequality of fortunes makes itself felt less there and provokes less temptation. One will say, with more reason, that this province enjoys a modest affluence. Poverty makes itself manifest in the prov-

inces where great riches are amassed, as in Flanders, Holland, and the department of the Seine, etc., and especially in the manufacturing countries where, by the slightest political commotion, by the slightest obstruction in the outlet for commodities, thousands of individuals pass suddenly from a state of well-being to that of misery. These are the rough alternations from one state to another which give birth to crime, especially if those who suffer from them are surrounded by subjects of temptation and find themselves irritated by the continual view of luxury and of an inequality of fortune which disheartens them.

It seems to me that one of the first distinctions to make in the study which occupies us is that of the different races of men inhabiting the countries which we consider. It is, as we shall soon see, of the highest importance although it is not that which is first presented to the mind. "The population of France belongs to three principal races: the *Celtic race*, which forms close to three fifths of its inhabitants; the *Germanic race*, which comprises those of the former provinces of Flanders, Alsace, and one part of Lorraine; the *Pelagian race*, scattered over the Mediterranean watershed and in Corsica. The variations in customs," adds Malte-Brun, "which this division has assumed, the progress of civilization, can alter the character of a people but not change it entirely."¹⁴ If we cast our eyes over the figurative map of crimes against persons, the distinction of people will make itself felt in an extremely remarkable manner. We shall see that the Pelagian race, scattered over the Mediterranean watershed and in Corsica, gives itself up particularly to attacks against persons. In the Germanic race, which is understood as Alsace, the Duchy of the Lower Rhine, a part of Lorraine and of the Low Countries, where the large number of persons and things gives rise to more opportunities to commit crimes and where the frequent use of drink very often gives

¹⁴ *Précis de la géographie universelle*, book 159.

birth to excess, one counts generally many crimes against property and persons. Batavians and Frisians, who also belong to the Germanic race, give themselves up more particularly to crimes against property. Finally, the Celtic race appears the most moral of the three races we have considered, especially in that which concerns crimes against persons. It occupies the greatest part of France and the Walloon part of Belgium. It would appear, moreover, that countries with frontiers where races cross each other more or where more agitation in general reigns, or where customs lines are established are the most exposed to being demoralized.

After having admitted this distinction, based on the difference in races, it remains to examine what the local anomalies are which must have influence on the morality of people and modify their character.

The most remarkable anomaly which seems to show the Celtic race is observed in the departments which are linked to the basin of the Seine especially below Paris. Several causes contribute to giving birth to it. One will note at first that these departments are those which, by reason of their extent, contain the most persons and things and consequently the most opportunity to commit crimes. It is there that there exists the most movement and where the most vagrants happen to come in great numbers, in the same way as the race of primitive men must have degenerated more than anywhere else. Finally, it is again there that more industrial establishments are found; and, as we have had occasion to observe before, these establishments hold together an agglomerated population whose means of existence are more precarious than in other professions. The same remark can be made in regard to the basin which holds the Rhône, and with the more reason since the Pelagian race, in reascending this river, must have penetrated the shores more in depth than anywhere else.

The commercial and industrial provinces of the Low

Countries are equally those where the most crimes are committed.

As to the greater number of crimes against property which is observed in advancing toward the north, it can be attributed, I think, in great part, to the inequality of riches and needs. The great cities and capitals especially are shown in an unfavorable manner because they offer more allurements for passions of all kinds, and because they attract vagabonds who hope to find impunity by losing themselves in the crowd.

It is remarkable that several of the poorest departments of France, and at the same time the least educated, such as those of Creuse, Indre, Cher, Haute-Vienne, Allier, etc., are at the same time the most moral, while the contrary takes place for the most of the departments which have the most wealth and education. These apparent singularities are explained, I believe, by observations which have been made previously. Morality is more in relationship with the state of education in the former kingdom of the Low Countries, that which would lead one to believe that the direction of teaching was better.

The influence of climate is not very perceptible either, as one can see it in comparing Guienne and Gascogne to Provence and Languedoc, and the inhabitants of Hautes and Basses-Pyrénées to the inhabitants of Hautes and Basses-Alpes, which however are placed at the same latitudes. It can be said that the influence of knowledge and of climate disappears, in part, before other more energetic influences, and they are especially far from eclipsing the character of morality which distinguishes the three races of men that inhabit the countries which we will consider. It cannot be ignored, for all that, in comparing the accounts which comprise the sixth column of our table, that the number of crimes against property relative to crimes against persons is considerably augmented in going up toward the north.

It is much to be regretted that the documents of justice which we possess for other countries are not comparable to those of France and the Low Countries. The differences which exist in the laws and in the classification of crimes render direct comparisons impossible. However, the countries which have some extensiveness and which offer the distinction between crimes against persons and crimes against property permit at least in this last relationship the establishment of a comparison between their different provinces. It will perhaps not be without interest to compare among themselves the different parts of Prussia and Austria. The information on criminal justice in Austria are selections from *Bulletin des sciences* of Mr. de Ferussac for November 1829, and are relative to five years from 1818 to 1823. Those which concern Prussia are selections from the *Revue encyclopédique* for August 1830, and are relative to three years from 1824 to 1826 inclusive. I have followed the same form of table as previously. I regret however not having been able to indicate the number of children who attend school in the different parts of Austria. For Prussia, I have taken the number of pupils out of 1000 children of an age to attend schools, as the *Revue encyclopédique* indicates.

It would be rather difficult to indicate the different races of men which have peopled the countries mentioned in the preceding table because they are so confounded in certain parts that the aboriginal character has been pretty nearly erased. The Germanic race predominates in the states of Prussia and has mixed with northern Slavs, particularly along the coast of the Baltic and in the old Prussia, and with the western Slavs in the Grand Duchy of Posen and Silesia. In the Austrian states and especially in the eastern and Northern part, the Slavic race is again mixed with the Germanic race. Malte-Brun even thinks that in Moravia the Slavs are three times more numerous than the Germans.¹⁵

¹⁵ *Précis de la géographie universelle*, book 145.

They are divided into several tribes of which the most remarkable is formed of Wallachs, "they are brave in war, tolerant in their religion, and of a scrupulous probity in their customary relationships." The Tyroleans, formed from the ancient *Rhoeti*, would be, according to Pline,¹⁶ originally from Etruria. The Dalmatians, of slavonic origin, are also mixed with Italians.

Table 6

POLITICAL DIVISION	CRIMES against		INHABITANTS for 1 crime against		CRIMES against property for 1 crime against persons	INHABITANTS for one student
	persons	property	persons	property		
AUSTRIA						
Dalmatia	2986	2540	535	625	0,85	?
Galicja and Bukovina	5234	14105	3955	1470	2,70	?
Tyrol	658	2516	5707	1492	3,82	?
Moravia and Silesia	753	3545	12662	2689	4,71	13
Interior Austria (Graz, Leibach, Trietz)	589	2479*	13311	3188	4,21	10
Lower Austria (the cotes de l'Ens) ...	573	7099	17130	1382	12,37	10
Bohemia	737	7221*	18437	1881	9,80	9
						(Students out of 1000 children)
PRUSSIA						
Prussia	249	8875	22741	639	35,65	451
Saxony	147	5815	27588	697	39,56	491
Posen	97	3481	31440	875	35,88	490
Silesia	228	7077	33714	1086	31,04	584
Westphalia	92	3383	38436	1045	36,77	525
Brandenburg	112	6431	39486	688	57,42	468
Pomerania	27	1622	92131	1533	60,11	940

* The numbers for Bohemia and Interior Austria are only relative to four years, 1819, 1820, 1822, and 1823.

¹⁶ Book III, ch. 19.

It would appear, thus again, from the tables which precede, that crimes are more numerous in Dalmatia where the blood of the south is mixed with the blood of the people from the north. Among the Tyroleans one finds similarly traces of more lively passions than among those other people subject to Austrian domination, except, however, among the inhabitants of Galicja, descendants from the Rousniaques, who originate with the Croats and the Dalmatians from eastern Slavs.¹⁷ In classing these people according to crimes, it would appear that they present themselves in the following order: Etruscans or Italians, Slavs and Germans.¹⁸ It would appear, moreover, that the eastern Slavs have more of a propensity for crime than the northern and western Slavs, who are more mixed with Germans and who enjoy a more advanced civilization. It can be seen according to the preceding table that the state of instruction in Prussia has a very direct relationship with the number of crimes. It appears that it is pretty nearly the same in the countries subject to Austrian domination.

¹⁷ Malte-Brun, *Précis de la géographie universelle*, book 116.

¹⁸ The western Slavs are composed according to Malte-Brun, of Poles, Bohemians or *Tcheches*, of *Slovaques* of Hungary, or Sorbs or Servs in Lusace. (book 116.) "That which distinguishes the Slav from the German is the care that he takes of his property and the constant desire he shows to acquire some. He is less laborious, less susceptible to attachment and faithfulness in his affections, more disposed to seek after society and the occasions for dissipation. He prides himself on great prudence and ordinarily shows himself suspicious, especially in his relationships with the German, whom he always regards as a sort of enemy." (book 144.) Malte-Brun also makes a distinction between Germans of the north and Germans of the south. "The Thüringer Wald separates Germany into two regions, that of the north and that of the south. The German of the north, nourished on potatoes, butter, and cheese, steeped in beer and brandy, is the most robust, the most frugal and the most intelligent. It is also with him that Protestantism counts most proselytes. Fastidious in the way of life, habituated to wine, sometimes even given to drunkenness, the German of the south shows himself gayer but also very superstitious." (book 148.)

VI. CONCERNING THE INFLUENCE OF THE SEASONS ON THE PROPENSITY FOR CRIME

The seasons have a singular influence to augment or diminish the number of crimes. One can form an idea of it from the following table where are written by month and for three years the number of crimes committed in France against persons and against property, at the same time as the relationship of the numbers. In the fourth column is found written the number of lunatics admitted to Charenton in 1826-28.¹⁹

I believe that this comparison would not be useless to our subject, since the most crimes against persons appear to

Table 7

MONTH	CRIMES against		RELATION- SHIP	LUNATICS admitted to Charenton
	persons	property		
January	282	1095	3,89	37
February	272	910	3,35	49
March	335	968	2,89	53
April	314	841	2,68	58
May	381	844	2,22	44
June	414	850	2,05	70
July	379	828	2,18	61
August	382	934	2,44	64
September	355	896	2,52	47
October	285	926	3,25	49
November	301	961	3,20	35
December	347	1152	3,33	52
Totals ...	3847	11205	2,77	619

¹⁹ *Annales d'hygiène publique*, April 1829, p. 101.

be related to certain deviations from reason. However, it must be regretted that the observations made on this important subject are still so few in number.

That which must be noticed first of all is that the period of *maximum* for the number of crimes against persons coincides pretty nearly with the period of *minimum* for the number of crimes against property, and is present in the summer. While, on the contrary, the *minimum* of the number of crimes against persons and the *maximum* of the number of crimes against property are present in winter. In comparing these two types of crimes, one finds in the month of January there is committed pretty nearly four crimes against property for one against persons, and in the month of June two only. These differences are explained rather well by considering that it is during winter that misery and need are especially made to be felt and multiply crimes against property, while during the summer the violence of passions predominates which excite further the more frequent contacts which then exist among men. It is truly notable that the propensity for crimes against persons presents, in the whole course of the year, pretty nearly the same degree of intensity as the disposition to mental derangements — that which would confirm rather well the observation previously made that most homicides and great crimes take place in moments bordering on mental derangement.

The periods of *maxima* and *minima* coincide again with those of *maxima* and *minima* of births and deaths, as one can see in my *Recherches statistiques*.

The *Comptes généraux* of France also contain data on the hours of crimes, but only for thefts committed in Paris and the vicinity. These data are still too few in number for one to infer satisfactory results.

VII. CONCERNING THE INFLUENCE OF SEX ON THE PROPENSITY FOR CRIME

In the preceding we have had regard for the influence which climate, the degree of education, the difference in the races of men, the seasons, etc., exercise on the propensity for crime. We are now going to occupy ourselves in researching the influence of the sexes.

Let us note first that out of the 28,686 defendants who have appeared before the tribunals of France during the four years which preceded 1830, there were found 5,416 women and 23,270 men, that is to say, 23 women for 100 men. Thus the propensity for crime in general presents the relationship of 23 to 100 for the two sexes. This estimation supposes that the activity of justice reaches men as successfully as women — that which appears probable if one observes, on the other hand, that repression varies within rather narrow limits for both sexes; that is to say, that the severity displayed in regard to women is as great as for men.

We have just seen that in general the propensity for crime is around four times as strong among men as among women, at least in France; but it would be important to examine, besides, if men are four times as criminal, that which would suppose that the crimes committed by both sexes are equally serious. We shall begin by making a distinction between crimes against property and crimes against persons. We shall take at the same time the numbers obtained for each year in order to see the extent of the limits in which they are found.

Although the number of crimes against persons has diminished a little, while that of crimes against property has become greater, one sees that these variations are not very perceptible. They have little affected the relationships between the numbers of defendants of both sexes. We have counted 26 women for 100 men in accusations of crimes

Table 8

YEARS	CRIMES AGAINST PERSONS			CRIMES AGAINST PROPERTY		
	men	women	relation-ship	men	women	relation-ship
1826	1639	268	0,16	4073	1008	0,25
1827	1637	274	0,17	4020	998	0,25
1828	1576	270	0,17	4396	1156	0,26
1829	1552	239	0,15	4379	1203	0,27
Averages	1601	263	0,16	4217	1091	0,26

against property; and for crimes against persons, the relationship has been from 16 to 100 only. In general, crime against persons are of a more serious nature than those against property, so that our distinction would be to the advantage of women; and one can say that in France men are at least four times more criminal than women. It is to be noted that the relationship 16 to 26 is nearly the same on which exists between the strength of man and that of a woman. Besides, it is appropriate to examine things more closely and to have in mind some different, particular crimes, those at least which are committed in a sufficiently great number so that the conclusions which one could deduce from them have some probability. I have to this end brought together in the following table the numbers relative to the four years which preceded 1830, and I have calculated the different relationships. The crimes are arranged according to the size of these relationships. I have also grouped together crimes which are pretty nearly of the same nature, although included under different titles, such as false coinage, counterfeiting, falsehood by forgery or in commercial writing, etc.

Table 9

NATURE OF CRIMES	MEN	WOMEN	WOMEN per hundred men
Infanticide	30	426	1320
Abortion	15	39	260
Poisoning	77	73	91
Domestic theft	2648	1602	60
Parricide	44	22	50
Burning of buildings and other objects	279	94	34
Theft in churches	176	47	27
Injuries to parents	292	63	22
Theft	10677	2249	21
False testimony and subornation	307	51	17
Fraudulent bankruptcy	353	57	16
Murder	947	111	12
False coinage, counterfeiting, falsehood by forgery, in accounts, etc.	1669	177	11
Rebellion	612	60	10
Theft on the public way	648	54	8
Assault and battery	1447	78	5
Manslaughter	1112	44	4
Rape and indecent assault	685	7	1
Rape on children below 15 years	585	5	1

As we have already noted, to commit crimes, it is necessary that one bring together these three essential conditions: the will (which depends on morality), the opportunity, and the ability to act. But, that which causes woman to have much less of a propensity for crime than man is that she is especially restrained by the sentiment of shame and modesty as to moral qualities, by her state of dependence and more retiring habits as to opportunity, and by her physical weakness as to her ability to act. I think one can relate to

these three principal causes the differences which are noted in regard to crimes. Sometimes all three concur at the same time; one must then expect to see their effects very pronounced, as when it is a question of rape or indecent assaults. Consequently we count only one woman for 100 men in accusations of this nature. In poisonings, on the contrary, the number of the accused is pretty nearly the same among both sexes. When, in order to destroy her fellow creature, it is necessary to have recourse to force, the women defendants become less numerous, and their number diminishes so much the more as it is necessary for her to go further in search for her victim and more openly. Therefore these sorts of crimes are produced in the following order: infanticide, abortion, parricide, injuries to parents, murder, assault and battery, and manslaughter.

As to infanticide, not only does a woman have more opportunities to commit it than a man, but she is in some ways often pushed into it by hardship and almost always by the desire to hide a mistake and escape the shame and contempt of society, which spares the man more in similar circumstances. It is not the same for other crimes which have for their aim to bring about the destruction of her fellow creature. It does not appear that it is their gravity which stops women the most since, in the series we have indicated, parricides and injuries to parents precede murder which itself precedes manslaughter in the same way as assault and battery in general. Neither is it weakness only, for then the relationship for parricide and injuries to parents ought to be the same for manslaughter and injuries to strangers. These differences are especially related to the habits and the more sedentary life of woman. She can only conceive and execute culpable projects against individuals with whom she is most in relation. Thus, compared to man, she will murder in the midst of her family more than on the outside; and, in society, she will commit murder sooner than manslaughter

which often rises from the midst of excess in drinking and quarrels to which women are less exposed.

If we consider thefts of different kinds, we shall find that the relationships for the propensity for crime are arranged in an analogous series; thus occur successively domestic thefts, thefts in churches, thefts in general and finally thefts on the public way, for which strength and audacity are necessary. The less pronounced propensity for falsehood in general and fraudulent bankruptcy depends again on the retiring life of women and their remoteness from business affairs, and in certain cases from the fact that they are more unskillful than men, for example in making false coinage and counterfeiting.

If one tries to analyze these facts, it appears to me that the difference in morality of man and woman is less great than one generally thinks it, except with respect to modesty. I am not speaking of timidity which is born of that last sentiment, at the same time as physical weakness and the sedentary habits of woman. As to these habits themselves, I believe that their influence can be measured by the relationships which exist for the two sexes between crimes of different types where strength ought not to be taken into consideration, nor the sentiment of modesty, as in thefts, false testimony, fraudulent bankruptcies, etc. These relationships are in the neighborhood of 100 to 21 or to 17, that is to say, pretty nearly from 5 or 6 to 1. For the other falsehoods, the difference is a little greater from the motives which I have stated before. If one sought to express numerically the intensity of causes which make women act, for example, the influence of strength, one could estimate by taking it proportional to strength itself, or as around 1 to 2. This is the relationship which takes place for parricide. For crimes where it is necessary to have regard at the same time to strength and the more retiring life of woman, as for murder or theft on the public way, while following the same

course in these calculations, it would be necessary to multiply the relationship of strength $1/2$ by that of dependence $1/5$, which gives $1/10$, a quantity which falls in fact between $12/100$ and $8/100$ (relationships given by the table). As to manslaughter and assault and battery, these crimes do not depend only on strength or on more or less sedentary life, but yet on habits of drinking and brawling. One can estimate that the influence of this latter cause is pretty nearly 1 to 3 for both sexes. It is understood that the estimates which I indicate here can have nothing precise about them due to the impossibility which one is in in assigning part of the influence which they have respectively in regard to this or that crime — the sentiment of modesty, greater in woman, her physical weakness, her dependence or rather her more retiring life and her passions less strong and less frequently excited by the use of drink. If, however, such were the characteristics which differentiated the two sexes more particularly, one would be able by analysis, as we have indicated previously, to assign rather well their respective influence, especially if the observations were very numerous. I am not speaking of the forms of justice, of legislation in general, of the state of knowledge, or of the means of providing for physical needs, etc., which can contribute powerfully to increase or diminish the number of crimes, but whose influence is in general less perceptible in the relationship between the accused of the two sexes.

It will perhaps be said that, if it is true that morality in woman is not so great as that in man. household thefts would have to be in the same number for both sexes. This observation would be just, if it were proved that the class of individuals in which household thefts are committed is composed of as many men as women; but there exists no information in this regard. All that can be established is that men and women who live in a state of domestic service commit crimes against property rather than crimes against per-

sons, that which confirms very well the observations made further back on the influence of the secluded life and sedentary habits. The *Compte général de l'administration de la justice* in 1829 shows for the first time a distinction in the profession of the accused, and, in the item *domestiques*, one finds 318 men and 417 women attached as domestics to a working farm and 149 men and 175 women attached as personal servants. The total number of men is greater than that of women; but, according to these numbers, there were 99 accused for crimes against persons and 590 for crimes against property. The relationship of these numbers is about 1 to 6. But we have had opportunity to see that the relationship is 1 to 3 for the society all together, when one sets aside condition; and it would only be 263 to 1,091 or about 1 to 4, if society were only composed of women. Thus, in all cases, it remains sufficiently demonstrated, I think, that men and women in the state of domestic service commit by preference crimes against property.

As to capital crimes, one can arrange them in the following manner:

Table 10

APPARENT MOTIVE	ACCUSED ON ACCOUNT OF				TOTALS
	poisoning	man-slaughter	murder	arson	
Cupidity, theft	20	39	237	66	362
Adultery	48	9	76	—	133
Domestic strife	48	120	131	34	333
Jealousy, debauchery ..	10	58	115	37	220
Hate, vengeance, miscellaneous motives	23	903	460	229	1615
TOTAL	149	1129	1019	366	2663

Adultery, domestic dissensions, and jealousy cause a

number of poisonings nearly the same between the two sexes; but the number of murders and especially the number of manslaughters of women by their husbands is greater than that of husbands by their wives — that which is related to what has been stated previously.

Out of 903 manslaughters which have taken place on account of hate, vengeance, or other motives, 446 were committed as the result of quarrels and brawls in cabarets. Thus, more than a third of the total number of manslaughters has taken place in circumstances with which women are generally unacquainted.

The last two volumes of the *Comptes généraux de l'administration de la justice* include some interesting details on the intellectual state of the accused of both sexes. One can sum them up as follows:

Table 11

INTELLECTUAL STATE	MEN	WOMEN	RELATIONSHIP
Not knowing how to read or write	6537	2152	3,0
Knowing how to read or write imperfectly	3308	497	6,6
Knowing how to read and write well	1399	110	12,7
Having received instruction superior to the 1st degree .	283	5	56,6
Whose intellectual state has not been determined	374	104	3,6
	11901	2868	Average 4,2

These numbers teach us nothing as to the population, since we do not know how knowledge is distributed in France; but we see, at least, that it has a great influence as to sex. I believe that one could interpret these results by saying

that in the inferior classes where instruction is practically nil, the habits of women approach closer to those of men, and the more one rises in the classes of society, and as a consequence in the degrees of education, the more woman acquires a secluded life and the less she has as a consequence opportunity to commit crime, all things being equal in other respects. These relationships are too different for one not to be conscious of how our habits and our social position have influence on crime.

It is to be regretted that the documents of justice for the Low Countries contain nothing on the distinction by sex. One sees only, according to a table of the movement from prisons and houses of correction and detention (*second collection*) that on the first of January, 1827, the number of men was 5,162, and the number of women 1,193, that which gives 100 women for 433 men. By making use of documents which had been entrusted to me by Baron de Keverberg, I have found that in 1825 the relationship was 100 to 314. If one examines what takes place before the correctional tribunals of France, one finds that the relationship between the defendants of the two sexes has been 529,848 to 149,565, that is to say that 28 women were counted for 100 men. Thus, for offenses of less gravity and which are judged before the correctional tribunals, women have been a little more numerous compared to men, etc.

VIII. CONCERNING THE INFLUENCE OF AGE ON THE PROPENSITY FOR CRIME

Among all the causes which have an influence for developing or halting the propensity for crime, the most vigorous is, without contradiction, age. It is, in fact, with age that man's physical strength and passions develop and that their energy afterwards diminishes. It is also with age that reason

develops which still continues to grow when strength and passions have already exceeded their *maximum* intensity. In considering only these three elements, strength, passion, and reason in man,²⁰ it could be said almost *a priori* what must be the degrees of the propensity for crime at different ages. This propensity must be practically nil at both extremes of life since, on the one hand, strength and passions, those two powerful instruments of crime, have scarcely been born, and when, on the other hand, their energy (pretty nearly extinguished) is found weakened by the influence of reason. The propensity for crime, on the contrary, must be at its *maximum* at the age where the strength and passions have attained their *maximum*, and where reason has not acquired sufficient command to dominate their combined influence. In considering, then, only physical causes, the propensity for crime at different ages would depend especially on the three qualities of which we have just spoken, and would be determined by them if they were sufficiently understood. But as these elements are not yet settled, we must limit ourselves to searching for the degrees of the propensity for crime in an experimental manner. We shall find once again the means for it in the *Comptes généraux de la justice*. The following table makes known the number of crimes against persons and of crimes against property which have been committed in France by both sexes and during the years 1826, 27, 28 and 29 with the relationship of the numbers. The fourth column indicates how a population of 10,000 souls is divided up in France according to ages, and the last column indicates the relationship of the total number of crimes to the corresponding number in the preceding column. In this manner there no longer exists any inequality as to the number of individuals of different ages.

²⁰ I am not speaking at all here of the intellectual state, religious sentiments, of the fear of shame and punishments, etc., because these qualities depend more or less directly on man's reason.

Table 12

PERSON'S AGE	CRIMES AGAINST		CRIMES against property out of 100 crimes	POPULATION according to ages	DEGREES of the propensity for crime
	persons	property			
Less than					
16 years	80	440	85	3304	161
16 to 21 years ...	904	3723	80	887	5217
21 to 25	1278	3329	72	673	6846
25 to 30	1575	3702	70	791	6671
30 to 35	1153	2883	71	732	5514
35 to 40	650	2076	76	672	4057
40 to 45	575	1724	75	612	3757
45 to 50	445	1275	74	549	3133
50 to 55	288	811	74	482	2280
55 to 60	168	500	75	410	1629
60 to 65	157	385	71	330	1642
65 to 70	91	184	70	247	1113
70 to 80	64	137	68	255	788
80 and above ...	5	14	74	55	345

This table offers results consistent with those I have given in my *Recherches statistiques* according to the years 1826 and 1827. Since the value obtained for 80 years and upwards rests on such weak numbers, it ought to inspire less confidence. We see besides that man begins to exercise his propensity for crime preferably on property. From 25 to 30 years when his strength has developed, he begins to exercise it more against persons. It is about the age of 25 years when the propensity for crime attains its *maximum*; but before passing to other considerations, let us examine what difference exists in regard to the two sexes. The last columns of the following table make known the degrees of the propensity for crime while having regard to the population, and showing for unity the largest number of each column.

Women, compared to men, enter into the career of crime a little later and leave it earlier. The *maximum* for men takes

Table 13

PERSON'S AGE	ACCUSED		WOMEN for 1000 men	DEGREES OF THE PROPENSITY FOR CRIME			
	men	women		in general	men	women	calculation
Less than							
16 years	438	82	187	0.02	0.02	0.02	0.02
16 to 21	3901	726	186	0.76	0.79	0.64	0.66
21 to 25	3762	845	225	1.00	1.00	0.98	1.00
25 to 30	4260	1017	239	0.97	0.96	1.00	0.92
30 to 35	3254	782	240	0.81	0.80	0.83	0.81
35 to 40	2105	621	295	0.59	0.56	0.75	0.71
40 to 45	1831	468	256	0.55	0.54	0.60	0.60
45 to 50	1357	363	267	0.46	0.44	0.51	0.51
50 to 55	896	203	227	0.33	0.33	0.33	0.42
55 to 60	555	113	204	0.24	0.24	0.22	0.34
60 to 65	445	97	218	0.24	0.24	0.23	0.27
65 to 70	230	45	196	0.16	0.17	0.14	0.21
70 to 80	163	38	233	0.12	0.12	0.12	0.12
80 and above	18	1	56	0.05	0.06	0.01	0.04
All ages	23270	5416	233	0.41			

place around 25 years, and around 30 years for women. The numbers on which our results are based are still not very numerous; however, one sees that the two lines which would represent the values relative to the two sexes would be pretty nearly parallel. The last column offers results calculated by this very simple empirical formula:

$$Y = (1 - \sin X) \frac{1}{1 + m}, \text{ supposing } m = \frac{1}{2^x - 18}$$

In this manner, the degree of the propensity for crime Y is expressed as a function of age X . It is necessary to take, as one sees, for the axis of the abscissas, the quarter of the circumference rectified and divided according to decimal division. The results of this formula are generally in accord better for results obtained for women. I have sought to make them perceptible by the construction of a curve whose

greater or lesser deviations from the axis AB (fig. 4, pl. III) indicate the size of the propensity for crime. The equation becomes that of a *sinusoide*

$$Y = 1 - \sin x$$

for the higher ages to 30 years because *m* appreciably equals unity. We must not rely on finding a mathematical precision here, for different reasons the principal of which are:

First. The numbers obtained for four years are not sufficiently large such that we can adopt their results with complete confidence;

Second. To calculate the propensity for crime it is necessary to combine these numbers with those which make up population tables, and it is generally agreed that the yearly tables no longer represent with sufficient exactitude the state of the population of France;

Third. The propensity for crime can only be calculated according to the mass of individuals which make up the population, and as it is generally individuals of more than 25 years who populate prisons and who, by their state of captivity, are no longer able to contribute to forming data for ages after 25 years, it must necessarily present a lacuna. If, in place of taking crimes collectively, we examined each one of them individually by relationship to age, we will have new proof that it is between 20 and 30 years that the *maximum* number of crimes of different types is shown, and that it is very truly around this period that there takes place the most perverse propensities. Only the period of *maximum* will be advanced or retarded in some years for certain crimes according to the more or less tardy development of some qualities of man which are in relationship with these crimes. These results are too singular not to find a place here. I have presented them in the following tables, according to the documents of France for 1826 to 1829 inclusively, classing them according to periods of *maxima* and having regard to the population at different ages. I have omitted

crimes which are committed in fewer numbers because the results, for that very reason, would have been very doubtful.

Table 14

NATURE OF CRIMES	Less than 16 yrs.	16 to 21 yrs.	21 to 25 yrs.	25 to 30 yrs.	30 to 35 yrs.	35 to 40 yrs.	40 to 45 yrs.	45 to 50 yrs.	50 to 55 yrs.	55 to 60 yrs.	60 to 65 yrs.	65 to 70 yrs.	70 to 80 yrs.	80 and above
	Rape on children below the age of 15 years	4	120	71	96	73	39	34	45	22	18	26	17	21
Domestic theft	54	965	845	766	528	351	249	207	112	56	61	34	14	10
Other thefts	332	2479	2050	2292	1716	1249	1016	707	433	263	190	98	65	
Rape and indecent assault	9	155	156	148	99	38	40	27	9	5	3	1	2	
Parricide	6	13	12	13	6	3	2	1	4	2			1	
Assault and battery	6	180	300	359	219	129	101	95	55	35	23	10	7	1
Manslaughter	15	139	198	275	172	103	84	49	48	30	25	17	9	
Infanticide	1	40	99	134	76	44	30	8	7	1	8	4	2	
Rebellion	5	67	129	156	115	51	51	35	29	16	16	5	5	
Theft on the public way	21	80	111	149	107	60	62	46	22	21	8	6	4	
Murder	10	90	144	203	183	100	104	89	53	32	24	13	15	1
Injuries to parents	2	47	64	73	72	40	30	16	8	2	1	4	1	
Poisoning	5	6	17	30	27	15	20	12	6	2	5			
False testimony and subornation	2	23	46	48	44	42	42	35	23	15	15	11	7	
Miscellaneous falsehoods	8	86	202	276	312	244	207	185	129	78	75	28	28	2

Thus the propensity for theft, which is one of the first to manifest itself, dominates in some way all our existence. One would be tempted to believe it inherent in human weakness which accompanies it as by instinct. It exercises itself at first by means of the confidence which reigns in the interior of families. Then it manifests itself outside and as far as the public ways where it finishes by resorting to violence, when already man had made a sad trial of the plenitude of his forces by giving himself up to all kinds of homicides. That fatal propensity is less precocious however than the one which, toward adolescence, is born with the fire of passions and the disorders which accompany it, and which pushes man to rape and indecent assaults by beginning to seek his victims among beings whose weakness opposes the least resistance. To these first excesses of the passions, of cupidity and strength, is soon joined reflection which organizes crimes; and man having become more dispassionate, prefers to destroy his victim by resorting to murder and poisoning. Finally, his last steps in the career of crime are marked by treachery which in some way takes the place of strength. It is toward his decline that depraved man presents the most hideous spectacle. His cupidity, which nothing is able to appease, is revived with more ardor and puts on the mask of the forger. If he still uses the little strength which nature has left him, it is rather to strike his enemy in the shadow. Finally, if his depraved passions have not been weakened at all by age, it is on weak children that he will seek to satisfy them. Thus his first and his last steps in the career of crime are marked in the same way, at least in this last account; but what a difference! That which was in some way excusable in the young man, because of his inexperience, the violence of his passions, and the similarity of ages, becomes in the old man the result of the most profound immorality and the lowest depths of depravity.

According to the data of the preceding table, it is scarcely possible not to recognize the great influence which age ex-

ercises on the propensity for crime, since even each of the individual results tends to make it conspicuous. Also I would not fear to look at the scale of the different degrees of the propensity for crime at the different ages of man as meriting just as much confidence as those which I gave for height or which I would be able to give afterwards for the weight and strength of man, or those which finally are experienced for mortality.

The ages of defendants who have appeared before the correctional tribunals of France have also to be borne in mind, but while maintaining only the three categories which follow and which are related to the four years which precede 1830.

Table 15

AGES	CRIMINAL TRIBUNALS		CORRECTIONAL TRIBUNALS	
	men	women	men	women
Less than 16 years	2	2	5	6
From 16 to 21 years	17	13	14	16
More than 21 years	81	85	81	78
	100	100	100	100

Thus, correctional matters are, in the first ages, all things being equal, more frequent than criminal affairs.

Table 16

AGES	In 1826	In 1827
Less than 12 years	4	4
From 16 to 21 years	12	11
More than 21 years	84	85
	100	100

They are the first degrees of crime, consequently those which are passed over most easily. These same numbers have existed in the Low Countries, while not making any distinction by sex nor by tribunal.

There would be, thus, fewer criminals of 16 to 21 years than in France.

The development of the propensity for crime, as I have already said, has a very direct relationship with the development of man's passions and physical strength. On the other hand, the development of reason does not have an influence less marked for weakening the propensity for crime. It would be very interesting to be able to bring together and compare the different scales of development of these faculties. They would without doubt present the most striking analogies.

It would be impossible for me, at least for the moment, to give an exact scale for the energy of physical strength in man at different ages and even less for his intellectual strength. But I will offer some approximate results which would appear singular; some are relative to strength in man as regards hands and as regards backs. These data have been obtained in concert with Messrs. Plateau, Guiette, and Van Esschen with Regnier's instrument on a large number of individuals taken in Brussels; but, as the observations still are taken on too few individuals, they do not have all the precision which we will hope to be able to give them later.

Another column makes known, according to M. Esquirol, the number of admissions and recoveries which have taken place at Charenton (*Annales d'hygiène*, April, 1829). To estimate the relative degrees of frequency of mental alienation, I believe it is necessary to have in mind the number of individuals who are 15 to 20 years old, 20 to 25, etc. — that which makes the results of the seventh column deviate a lit-

tle from those of the learned doctor, as far as the frequency of the malady.²¹

Finally, the last two columns contain: in one, the number of masterpieces of the French stage according to the repertory of Piccard, and in the other, the same number transformed by taking account of the deaths of the authors and of the ages at which these deaths took place. To form this last

Table 17

AGES	STRENGTH OF		AT CHARENTON		RELATION- SHIP	LUNATICS taking account of population	MASTER- PIECES of the French stage
			admis- ions	cures			
	hands	backs					
10	25	4	—	—	—	—	—
15	60	9	22	11	2	21	—
20	82	14	67	30	2,2	79	3 3
25	85	14.5	86	40	2,2	109	12 12
30	88	15	98	36	2,7	134	26 26
35	90	15.5	81	25	3,3	125	27 28
40	88	15	79	21	3,8	129	26 28
45	75	14.5	72	14	5,1	131	30 34
50	70	14	52	12	4,3	108	21 29
55	65	13.5	21	6	3,5	51	7 11
60	60	13	21	9	2,3	63	5 10
65	55	12	6	1	6	24	6 14
70 and more			14	4	3,5	45	3 10

²¹ M. Esquirol has since published a new *Memoire* on mental alienation in which he takes account of population tables, but I believe that an error has slipped into the calculations of this distinguished scholar. "The increase in the number of the insane," he says, "is still more marked from 50 to 55 years (than before 50). From 70 to 75 and from 75 to 80 the number of insane relative to the population is enormous. It is the age of senile dementia." *Ann. d'hygiène*, December 1830. According to the numbers M. Esquirol cites and which differ a little from those which he had published, I find, by making use of the population table of *l'Annuaire du bureau des longitudes*, that the *maximum* number of insane still appears between 40 and 50 years. The excess of this number over that of the following ages is less large indeed than according to our table.

column, I have considered that 48 authors had contributed to producing the works mentioned in the preceding tables, and I have supposed that each of them had the same chance to produce at a given age. I then multiplied each number of the first column by the ratio of $48/a$ in which a indicates the number of authors surviving.

Thus, it would be between the ages of 45 and 50, all things being equal, that most of the dramatic masterpieces would have been produced in France. It is then that imagination and reason produce the most; and, by a singular contrast, it is around this age also that mental alienation has the most influence and causes maladies whose cure offers the most obstacles. The intellectual life of man and the maladies of his mind develop especially around 25 years, an age where animal development has almost ceased. Man, in fact, at that age, is nearly entirely developed as to height, weight and physical strength; and it is at this extremity that the *maximum* of the propensity for crime appears. It is again notable by another comparison that it is between the ages of 25 and 30 that the limit of the average life falls. Thus the average man between the ages of 25 and 30 has ended his physical development, and it is also at this age that his intellectual life develops with the most energy. I believe that these relationships will furnish a new example of utility whose general effect would be laws relative to the principal qualities of man.

CONCLUSIONS

In summing up the principal observations which comprise our work, we are led to these conclusions:

1. *Age* is without contradiction the cause which acts with the most energy to develop or moderate the propensity for crime.

2. This fatal propensity seems to develop in proportion to the intensity of physical strength and passions in man. I attains its maximum around 25 years, a period where physical development is pretty nearly ended. Intellectual and moral development, which takes place with more slowness then moderates the propensity for crime which diminishes still more slowly by the weakening of man's physical strength and passions.

3. Although it is around the age of 25 that the *maximum* number of crimes of different types appears, this *maximum* is found advanced or retarded by some years, however, for certain crimes according to more or less tardy development of some qualities which are in relationship with these crimes. Thus, man pushed by violence and his passions at first yields to rape and indecent assaults. He enters almost at the same time into a career of theft which he seems to follow as by instinct until his last breath. The development of his strength carries him finally to all the acts of violence, to homicide, rebellion, thefts on the public ways. Later, reflection turns manslaughter into murder and poisoning. Finally man, advancing in his career of crime, substitutes more cunning for strength and becomes a forger more than at any other period of his life.

4. *The difference of the sexes* has also a great influence on the propensity for crime. One counts, in general, before the tribunals only one woman accused for four men.

5. The propensity for crime grows and diminishes pretty nearly by the same degrees in the two sexes; however, the period of *maximum* arrives a little later in women and takes place around the age of 30.

6. Woman, without doubt out of a sense of weakness commits crimes against property rather than against persons; and when she seeks to destroy her fellow creature, she employs of preference poison. Moreover, in yielding to homicide, it does not appear that she is stopped by the enormity

of the crimes which, for frequency, are presented in the following order: infanticide, abortion, parricide, injuries to parents, murder, assault and battery, manslaughter — so that one can say that the number of the guilty diminishes the further and more openly they have to go searching for their victims. These differences depend, without doubt, on the habits and the more sedentary life of woman. She is able to conceive and execute guilty schemes only toward individuals with whom she is more related.

7. *The seasons* exercise in their turn a very marked influence on the propensity for crime. Thus, it is during summer that the most crimes against persons and the fewest crimes against property are committed. The contrary takes place during winter.

8. It is to be noted that age and the seasons exercise nearly the same influence in causing mental alienation and crimes against persons to grow or diminish.

9. *The climate* appears to have influence especially on the propensity for crime against persons. This observation is confirmed at least among the races of men of southern climates, like the Pelagian race spread out on the slope of the Mediterranean and Corsica, on the one hand, and the Italians mixed with Dalmatians and Tyroleans, on the other hand. Rigorous climates which give birth to the most needs also give birth to the most crimes against property.

10. The countries where frequent mixtures of people have taken place, those where industry and commerce join together many people and things and offer the most activity, those finally where inequality of fortunes makes itself most felt, give, all things being equal, birth to a greater number of crimes.

11. *The professions* have great influence on the nature of crimes. Individuals of an independent profession indulge rather in crimes against persons, and the working class and servants in crimes against property. Habits of dependence at

the same time as the sedentary life and physical weakness produce the same results in women.

12. *Education* is far from having on the propensity for crime an influence as energetic as one commonly supposes. We confuse, moreover, too often moral education with instruction which consists only of reading and writing, and which becomes most of the time a new instrument of crime.

13. It is the same with *poverty*. Several of the departments of France reputed the most poor are at the same time the most moral. Man is not pushed into crime because he has less, but more generally because he passes in an abrupt way from a state of ease to misery and to insufficiency in satisfying all the needs which he had created.

14. The more one rises in the orders of society, and by consequence in the degrees of education, the less one finds women criminal compared to men. As we draw nearer to the lowest classes of people, the habits of both sexes tend, in fact, to resemble one another more and more.

15. Out of 1,129 manslaughters which were committed in France during the space of four years, 446 were because of quarrels and brawls in a bar — that which tends to show the fatal influence of *the use of drink*.

16. In France, as in the Low Countries, we have counted annually around 1 accused out of 4,300 inhabitants. But in the first country, 39 accused out of 100 are acquitted; and in the second, 15 only. However, on both sides the same code was used; but in the Low Countries, judges perform the functions of the jury. Before correctional tribunals and police courts, where the accused have to deal only with judges, repression has been pretty nearly the same in both kingdoms.

17. In France, crimes against persons made up around a third of the number of crimes against property; and in the Low Countries, a quarter only. It is to be noted that the first type of crime gives rise comparatively to fewer convictions than the second, perhaps because one is so much the more

loath to apply penalties insofar as they are more serious.

I will not finish this *Mémoire* without expressing anew my astonishment at the constancy which is observed in results present each year in the documents which are related to the administration of justice. Nothing, at first, would seem to have to be less regular than the progress of crime. Nothing would seem should escape more from all human prevision than the number of manslaughters, for example, since they are committed in general following brawls which arise without motive and in encounters the most fortuitous in appearance. However, experience proves that, not only are manslaughters annually pretty nearly in the same number, but even that the instruments which serve to commit them are used in the same proportions.²² What can one say, then, about crimes that are reflected on!

²² Table 18

	1826	1827	1828	1829
Manslaughters in general	241	234	227	231
Rifle	47	52	54	54
Pistol	9	12	6	7
Sabre, sword, and other permitted arms	8	2	6	6
Stiletto, poignard, and other prohibited arms	7	5	2	1
Knife	39	40	34	46
Stick, cane, etc.	23	28	31	24
Stones	20	20	21	21
Axe, pitchfork, and other cutting or piercing instruments	13	20	16	14
Hammer and other body bruising not otherwise specified	22	20	26	31
Strangulations	2	5	2	2
Thrown down or drowned	6	16	6	1
Kicks and punches	28	12	21	23
Fire	—	1	—	1
Unknown	17	1	2	—

So, as I have had occasion to repeat several times before, one passes from one year to the other with the sad perspective of seeing the same crimes reproduced in the same order and bringing with them the same penalties in the same proportions. Sad condition of the human species! The share of prisons, chains, and the scaffold appears fixed with as much probability as the revenues of the state. 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. It seems to me that *that which is connected to the human species, considered in a body, is of the order of physical facts*. The greater the number of individuals, the more the individual is effaced and allows to predominate the series of general facts which depend on general causes according to which society exists and is maintained. It is these causes that it is a question of grasping; and as soon as one is familiar with them, one will determine from them the effects for society as one determines the effects by causes in the physical sciences.

It is necessary to acknowledge (however disturbing this truth may appear at first), by referring to an ongoing experiment with brute matter and social masses, that one would not be able to say in what way causes act in their effects with greater regularity. I am far from concluding from it, however, that man can do nothing for his amelioration. I believe, as I said at the beginning of this *Mémoire*, that he possesses a moral strength capable of modifying the laws which concern him. But this force acts only in the slowest way, so that the causes which influence the social system cannot sustain any abrupt alteration. Just as they have acted during a series of years, so they will still act during the years which are going to follow, unless one succeeds in modifying them. Also, I would not know how to repeat it too much to all men

who have at heart the welfare and honor of their fellow creatures, and who would be ashamed to place in the same rank a few francs, more or less paid to the treasury and a few heads, more or less, cut down under the sword of the executioner. It is a budget which one pays with frightening regularity; it is one of prisons, hulks and scaffolds; it is that one above all which it would be necessary to strive to reduce!

END

NOTE

The printing of the preceding *Mémoire* was pretty nearly complete when I received the following letter from the lawyer, M. Guerry, whose name is favorably known by different works on statistics and, in particular, by the research on statistics of crimes which he has published with M. Adriano Balbi. One will appreciate, without doubt, the motives which have inclined me to present here the extract which M. Guerry was willing to communicate to me concerning the new work which occupies him and which will be able to be published only after mine.

Paris, 11 September 1831

Sir,

I learned with great pleasure a few days ago by Doctor Villermé that your research relative to the influence of education on the number of crimes has led you to results which confirm those which I have obtained for France. I have studied anew the question, and I think that it is now resolved. As my work, which embraces in other respects several subjects of moral statistics, will without doubt be published only after yours, I believe I had to communicate to you right away a few extracts. It would be of great interest to examine up to what point we agree in research for which we have not at all been in concert.

The first writings on criminal statistics presented posi-

tive results which were so well in accord with generally accepted theories that they were received with extreme favor. Minds were tired of seeing the same doctrines in turn attacked and defended by reasoning. We believed finally to have found an instrument which was sufficient in application to obtain instantly the solution to the most difficult questions, but soon figures overturned that which figures had established. Criminal statistics prompted distrust. It was accused of being a conjectural science whose help ought to be rejected. Criminal statistics becomes as positive as other sciences of observation, when we know how to remain with proven facts and to group them so as to disengage them from that which is presented accidentally. The general results present, then, so great a regularity that it becomes impossible to attribute them to chance. Each year reproduces the same number of crimes in the same order and in the same regions.²³ Each class of crimes has its peculiar distribution by sex, by age, by season. All are accompanied in equal proportions by accessory facts, not differing in appearance, and whose return nothing explains.

If we represent by 100 the number of crimes committed in France, and if we distribute them in the five natural regions, of North, South, East, West, and center, they reappear there constantly in the same proportion.

Out of 100 crimes against property, we counted in the region of the North, in 1825, 41; in 1826, 42; in 1827, 42; in 1828, 43; in 1829, 44; the average of four years, 42. In the central region, we counted successively during the same years: 12, 12, 11, 12, 13; the average 12. The variations more or less have not exceeded 3 hundredths. ... Not only are

²³ This is also the idea which I already expressed in my *Recherche statistiques*, and which I was interested in developing in my *Mémoire* "thus one passes from one year to another," I said then, "with the sad perspective of seeing the same crimes reproduced in the same order and attracting the same penalties in the same proportions."

crimes committed in a known proportion, in one place determined by individuals whose sex and age are foreseen, one season is more earmarked for each of them. Thus, indecent assaults are more frequent in summer. We would easily suppose it, but that which is more difficult to imagine is that they reappear there in the same proportion each year. In 1827 we counted more than a third of them or 36 out of 100 during that season; in 1828, 35; in 1829, again 35; average 35. The difference was only one hundredth.

If we will consider now the infinite number of circumstances, seemingly fortuitous, which cause a crime to be committed, exterior or personal influences which determine its character, we will know how to conceive only that their concurrence is brought about by effects so constant that acts of a free will come to develop themselves in a fixed order and to contract themselves into such narrow limits; and we will be forced to recognize that in several regards judicial statistics present a complete certainty.

Ignorance, it is said, is the principal cause of crimes. ... [T]his opinion has been approved before parliament and the royal society of prisons. It has been generally adopted in France since the publication of the criminal justice report especially. It has been reproduced with such assurance and in forms so various that it has become today a common truth, a commonplace which no longer requires proof. On what have we principally relied to establish this opinion? On this observation, that *the departments where education is the most distributed are those where there is committed the fewest crimes*. Is it the case? There is the whole question. To resolve it, it is enough to determine exactly the distribution of education and that of crimes in the various parts of the kingdom. We believe we have been successful here.

It is evident that the coincidence of which we have spoken does not exist. The *maximum* of crimes against persons,

Table 19

<i>Relationship of the number of young people knowing how to read and write with those young people recorded in the census tables</i>					
<u>1827</u> (out of 100)		<u>1828</u>		<u>1829</u>	
East	51	E.	56	E.	58
North	48	N.	53	N.	55
South	32	S.	33	S.	34
West	26	W.	27	W.	27
Center	24	C.	25	C.	25

<i>Relationship of the number of accused knowing at least how to read, with the total number of accused arraigned before the assize court</i>			<i>Relationship of the number of pupils to the population in 1829</i>		
<u>1828</u> (out of 100)		<u>1828</u>	(1 pupil out of 4)		
East	52	E.	52	E.	14
North	49	N.	47	N.	16
South	31	S.	28	S.	43
Center	29	W.	25	C.	45
West	25	C.	23	W.	48

<i>Crimes against persons.</i>														
Crimes against persons, distributed in the five regions, are presented in the following order:														
1825		1826		1827		1828		1829						
(1 crime out of ... inhabitants)														
South	9	072	S.	9	972	S.	11	830	S.	11	743	S.	11	277
East	17	972	E.	15	535	E.	16	980	E.	16	361	E.	18	661
North	17	983	N.	19	995	W.	17	880	N.	18	476	N.	20	414
West	20	140	C.	22	485	C.	19	475	C.	21	471	C.	22	388
Center	22	293	W.	24	168	N.	20	852	W.	22	756	W.	23	759

instead of falling in the central and western regions where there is the least education, is encountered invariably in the south.

In attributing to the lack of education crimes against persons committed in the South, it was necessary to be consistent, to admit at the same time that individuals who become guilty of them are more ignorant than those who only commit an offense against property. This of course has not been doubted. Now that the justice report makes known for two years the state of education of the accused, do we note that there is in effect ignorance among individuals prosecuted for crimes against persons than among others? Very far from it, it is precisely the contrary.

In violations against property, 38 accused out of 100 have received some education; there are 42 violations against persons. It is, besides, a fact that I cannot pass over in silence; it is that among these last crimes, those which suppose the most depravity, perversity, appear in general to be committed preferably by educated culprits. Thus, assault and battery against strangers gives the proportion of 43 educated defendants out of 100; assault and battery against parents 0.44; indecent assaults on adults 0.45, on children 0.47; manslaughter 0.47; murder 0.49; finally, poisoning 0.49, or two times more than theft on a public way.

One would perhaps be tempted to conclude that culture of the mind, far from enfeebling criminal tendencies, tends rather to fortify them; that would be without doubt a new error.

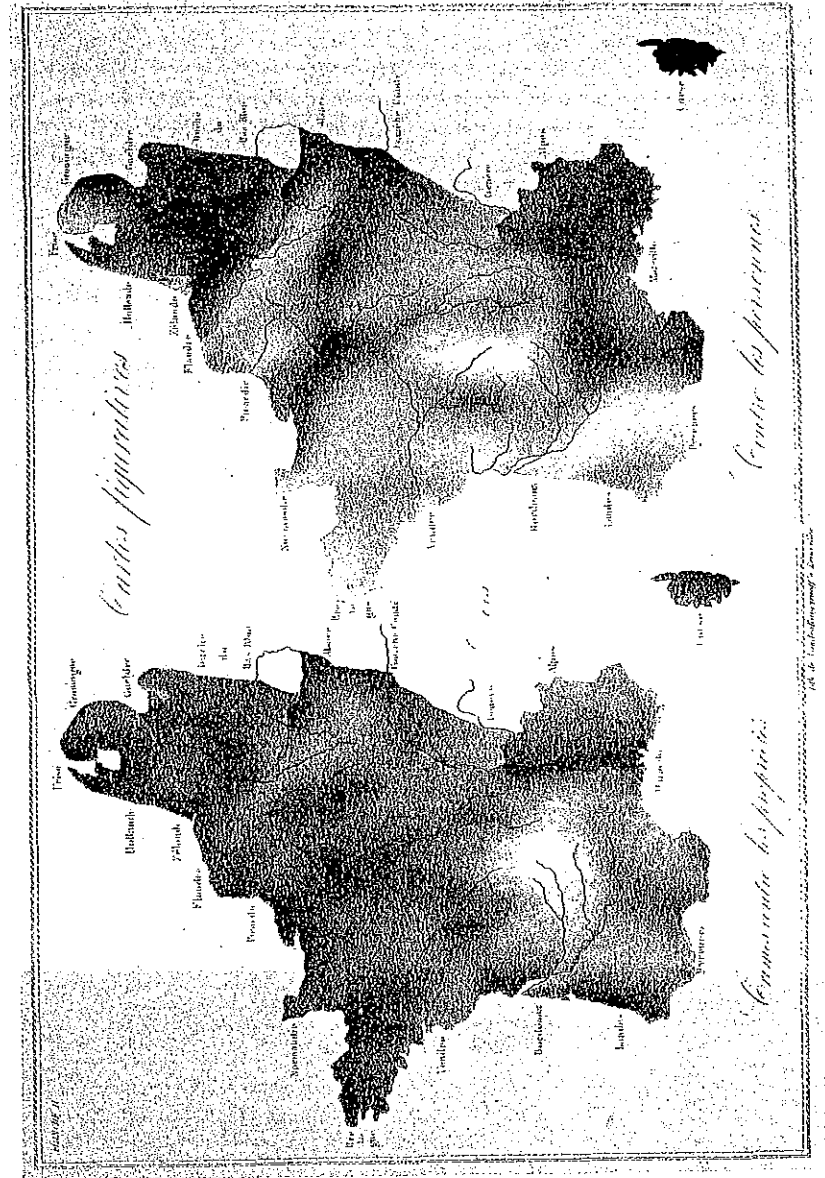
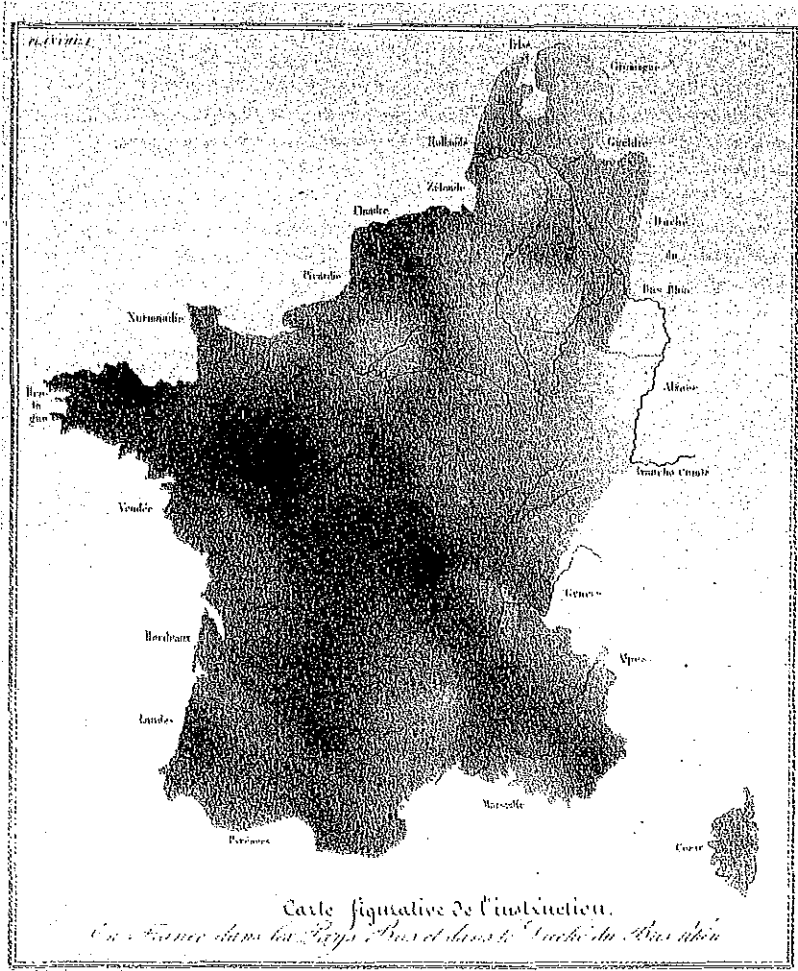
Education is an instrument of which one can make good or bad use. That which one goes to draw from our schools and which consists only of knowing, in a rather imperfect way, to read, to write, and to count, cannot supply the lack of education and cannot exercise a great influence on morality. . . . It represents neither the more depraved nor the best. I would have trouble understanding how it would be sufficient

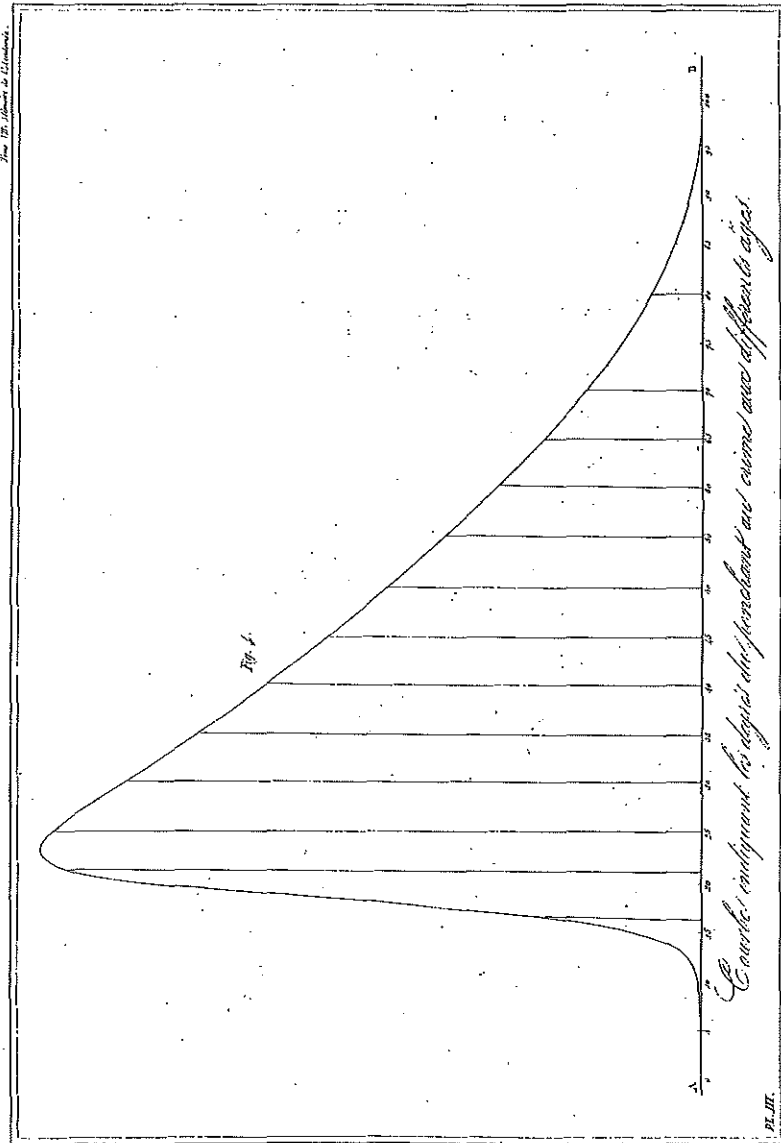
to train a man in certain almost material operations in order to give him regular morals and to develop in him sentiments of honor and probity.

Crime against property, as with illegitimate births and suicides, does not coincide with the agglomeration of population, as one repeats it every day, but with education, wealth, and manufacturing industry. Crime against persons appears to me owed to local morals and some influence of race. But all this is still obscure; one scarcely knows of it from the natural history of man. You know without doubt, Sir, that the celebrated distinction of *France obscure* and *France éclairée*, which one generally attributes to M. Charles Dupin, has been pointed out since 1822 in the *Journal des débats* by M. Malte-Brun: *Suum cuique*.

I am now occupied, with Doctor Esquirol and Doctor Leuret, in the statistics of lunatics. We are measuring in every way the head of people confined to Charenton, Bicêtre, and Salpêtrière. We are also measuring the brain and cerebellum of those among them who die. I have been led thus to undertake the *Histoire du développement de la tête humaine moyenne*. I have been resolved in it entirely by the reading of your excellent *Mémoire* on the height of man. For two weeks, we have been noting at Salpêtrière the state of the pulse of ninety furious lunatics, at five o'clock in the morning until seven and while they are still fasting. We find already in the number of pulsations certain periodic regularities. These observations will be continued until the end of the month. If it were possible to make a match of it for Brussels, precisely at the same hour, it would be interesting to compare the results obtained for the two cities.

I hope to be able to measure the angles of the head sufficiently exactly to have the proportions and the shape of an average maniac, hallucinatory, idiot, imbecile, epileptic head, etc. Who knows what we will encounter?





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