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ENGLISH ECOLOGY AND CRIMINOLOGY OF THE PAST CENTURY

YALE LEVIN¹ and ALFRED LINDESMITH^{1a}

The emphasis that has been placed in recent years upon what is known as the "ecological approach" to the study of crime makes it appropriate to pay attention to a period in English history when ecological studies of this subject appear to have been as much in fashion as they are today. Roughly between the years 1830 and 1860, a considerable interest in territorial or regional studies of crime was manifested in England. Over a period of several decades there were accumulated a mass of data and a body of knowledge which were never really discredited or displaced by work of superior scientific merit along the same lines, but were simply relegated to the background in favor of the psychiatric, biological and other types of theories of the later 19th century, and eventually forgotten or disregarded. Although present day criminologists who adopt the ecological approach do not refer to their English predecessors for guidance and corroboration, it is surprising to find that the emphasis which is being placed upon social factors in the causation of crime is closely paralleled in these earlier studies of what might be called the Pre-Lombrosian era. The recent revival of some of these old points of view and techniques suggests the comparison of the older studies with contemporary ones in order to evaluate more precisely the progress criminology has made in the last hundred years. The enthusiasm of social scientists often leads them to attribute greater originality to contemporary studies and less value to the old than is actually warranted by the facts in the case. In the descriptions of some of these older studies which follow, we have attempted to keep in mind contemporary work along the same lines so as to facilitate comparison. Limitations of space prevent more than passing reference to many maps, tables, or discussion which deserve far more extended treatment than we shall attempt in the present article.

Before analyzing the statistical data in these earlier studies, it should be noticed that numerous general observations regarding

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the concentration of crime in 'low' neighborhoods were made by writers and officials dealing with criminals. Thus, on the basis of his observations, and not with the aid of statistics, Walter Buchanan, one of Her Majesty's Justices of the Peace for the County of Middlesex, writing in 1846, noted that

"The great recesses of juvenile crime in the metropolitan districts to the north of the Thames are Spitalfields, Bethnal-Green, Shoreditch, Hoxton, Wapping, Ratcliffe, White Chapel, Shaffron-Hill, Almonry, Tottenham Fields, Gray's Inn Lane, St. Giles, Seven Dials, Drury Lane, Field Lane, and Lisson Grove; and although in some parts of Maryle-Bone, St. Pancras, Chelsea, Islington, Clerkenwell, Limehouse, Paddington, Kensington and elsewhere in and about the metropolis, young thieves resort, they are not to be compared in number to those who are to be found issuing from the above named places. In the densely crowded lanes and alleys of these areas, wretched tenements are found, containing in every cellar and on every floor, men and women, children both male and female, all huddled together, sometimes with strangers, and too frequently standing in very doubtful consanguinity to each other. In these abodes decency and shame have fled; depravity reigns in all its horrors."²

That juvenile delinquents and adult criminals were concentrated in the deteriorated areas of the large towns and cities was a matter of common observation. Not only those whose work brought them in direct contact with criminals and youthful delinquents, but others, notably writers on social and political economy, observed the effects of deteriorated housing conditions. Allison observes that

"If any person will walk thru St. Giles, the crowded alleys of Dublin, or the poorer quarters of Glasgow at night, he will no longer worry at the disorderly habits and profligate enjoyments of the lower order; his astonishment will be, that there is so little crime in the world. . . . The great cause of human corruption in these crowded situations is the contagious nature of bad example. . . . A family is compelled by circumstances or induced by interest to leave the country. The extravagant price of lodgings compels them to take refuge in one of the crowded districts of the town, in the midst of thousands in similar necessitous circumstances with themselves. Under the same roof they probably find a nest of prostitutes, in the next door a den of thieves. In the room which they occupy they hear incessantly the revel of intoxication or are compelled to witness the riot of licentiousness."³

The author relates of this family that one of the sons becomes

² Buchanan, Walter, *Remarks on the Causes and State of Juvenile Crime in the Metropolis With Hints for Preventing Its Increase* (1846) pp. 6-7.

³ Allison, A., *Principles of Population* (1840) p. 76.

a member of one of the numerous bands of thieves, commits a housebreaking, and is sentenced to be transported. The daughters become prostitutes and the children of a once happy and virtuous family are thrown upon the streets to pick up a precarious subsistence. He concludes that this unhappy history of a family proceeds not from any extraordinary depravity in their character, but from the almost irresistible nature of the temptations to which the poor are exposed.

Contemporary observers of what we now call the Industrial Revolution carefully noted the growth of large towns, which was one of the marked features of the transformation of England from an agricultural country to an industrial one. In the early decades of the nineteenth century, students of political economy began to assess the growth of the factory towns, a growth which was apparent to every one. In a volume published in 1843, a writer discusses the growth of manufacturing in England and its attendant good effects on the population, such as the growth of large and princely fortunes, the encouragement given to the arts, the enterprise and energy created by the establishment of factories. At the same time he declares that

“Among the numerous causes which appear inseparable from manufactories, producing crime and immorality, the following deserve particular notice. The crowding together of the working classes in narrow streets, filthy lanes, alleys and yards, is a serious evil and one which has hitherto increased in all manufacturing towns. The poor are not resident in these places from choice, but from necessity. Families are not huddled together into dark ill-ventilated rooms from any peculiar pleasure it affords. They may indeed have become insensible of the inconvenience and wretchedness of such situations, but slender and uncertain means do not enable them to command more comfortable abodes. They are fixed there by circumstances.”⁴

In his evidence before a Select Committee of Crime in 1830, the Governor of Coldbath Prison stated that:

“In my opinion the crowning cause of crime in the metropolis is to be found in the shocking state of the habitations of the poor, their confined and fetid localities, the consequent necessity for consigning children to the streets for requisite air and exercise. These causes combine to product a state of frightful demoralization. The absence of cleanliness, of decency, and of all decorum; the disregard of any heedful separation

⁴Holland, G. C., *Vital Statistics of Sheffield* (1843) p. 138.

between the sexes; the polluting language; and the scenes of profligacy, hourly occurring, all tend to foster idleness and vicious abandonment."⁵

When the reformatories were established in the 1850 decade, the Chief Inspector, Sydney Turner, noted in his annual report for 1856 that the juvenile delinquents committed from the deteriorated districts of London, presented a special problem because of their association in gangs. He advocated that these delinquents be committed to various reformatories instead of being permitted to concentrate in any one reformatory.⁶

The following quotation from M. D. Hill, Recorder of Birmingham, will serve to illustrate how the effects of city life upon personal conduct were analyzed in the middle of the nineteenth century:

"A century and a half ago, as far as I have been able to ascertain, there was scarcely a large town in the island except London. When I use the term 'large town' I mean where an inhabitant of the humbler classes is unknown to the majority of the inhabitants of that town. By a small town, I mean a town where, 'a converso' every inhabitant is more or less known to the mass of people of that town. I think it will not require any long train of reflection to show that in small towns there must be a sort of natural police, of a very wholesome kind, operating upon the conduct of every individual, who lives, as it were, under the public eye. But in a large town, he lives, as it were, in absolute obscurity; and we know that large towns are sought by way of refuge, because of that obscurity, which, to a certain extent, gives impunity. Again, there is another cause which I have never seen much noticed, but which, having observed its operation for many years, I am disposed to consider it very important, and that is the gradual separation of classes which takes place in towns by a custom which has gradually grown up, that every person who can afford it lives out of town, and at a spot distant from his place of business. Now this was not formerly so; it is a habit which has, practically speaking, grown up within the last half century. The result of the old habit was that rich and poor lived in proximity; and the

⁵ Quoted in "The Causes of Crime in the Metropolis," *Tait's Edinburgh Magazine*, Vol. 17 (1830) p. 332.

⁶ On the formation and habits of juvenile gangs and the prevention of juvenile delinquency, see *Report of the Select Committee on Criminal and Destitute Juveniles* (1852); "The Garrett, The Cabin, and the Goal," *Irish Quarterly Review*, Vol. 3 (1853) pp. 229-381; "Reformatory Schools in France and England," *ibid.* Vol. 4 (1854) pp. 691-792; "Our Juvenile Criminals—The Schoolmaster or the Gaoler," *ibid.* Vol. 4 (1854) pp. 1-71; "Juvenile Delinquents and Their Management," *ibid.* Vol. 5 (1855) pp. 773-822. *Report of the Special Committee Appointed by the National Assembly of France to Consider the Treatment of Juvenile Offenders*, Dec. 14th, 1849. (Trans. 1850.) Mary Carpenter, *Juvenile Delinquents: Their Condition and Treatment* (1853); "Juvenile Criminals," *North British Review*, Vol. 10 (1848) pp. 1-38. *First Report of the Commissioners Appointed to Inquire as to the Best Means of Establishing an Efficient Constabulary Force in the Counties of England and Wales* (1839).

superior classes exercised that species of silent but very efficient control over their neighbors, to which I have already referred. They are now gone, and the consequence is, that large masses of the population are gathered together without those wholesome influences which operated upon them when their congregation was more mixed, when they were divided, so to speak, by having persons of a different class of life, better educated, amongst them. These two causes, namely, the magnitude of towns and the separation of classes, have acted so concurrently, and the effect has been that we find in very large towns, which I am acquainted with, that in some quarters there is a public opinion and a public standard of morals very different from what we should desire to see. Then the children who are born amongst these masses grow up under that opinion, and make that standard of morals their very own; and with them the best lad, or the best man, is he who can obtain subsistence, or satisfy the wants of life, with the least labour, by begging or by stealing, and who shows the greatest dexterity in accomplishing his object, and the greatest wariness in escaping the penalties of the law; and lastly the greatest power of endurance and defiance, when he comes under the lash of the law."⁷

II

We have selected for examination the works of two authors, Henry Mayhew⁸ and Joseph Fletcher, who utilized official statistics

⁷ Evidence before Select Committee on Criminal and Destitute Juveniles, *op. cit.*, p. 33. Nearly a century later, another student of urban life observed: "The mobility of the city has broken down the isolation of the local community, admitting divergent elements of experience, divergent standards and values, divergent definitions of social situations. At the same time it has resulted in a rate of movement that makes strangers of neighbors. A large part of the city's population lives much as do people in a great hotel, meeting but not knowing one another. The result is a dissolution of social solidarity and public opinion. Face to face and intimate relationships in local areas are replaced by casual, transitory, disinterested contacts. There arises an extreme individuation of personal behavior that makes of the local area within the city something vastly different from the town or village community. There is no common body of experience and tradition, no unanimity of interest, sentiment and attitude which can serve as a basis of collective action." See H. W. Zorbaugh, *The Gold Coast and the Slum* (1929) pp. 250-251.

⁸ The careers of Henry Mayhew (1812-1887) and two of six brothers, Horace and Augustus, are separately recorded in the *Dictionary of National Biography*. All three brothers devoted themselves to literature, drama and journalism, at early ages. Abandoning the study of law, Henry Mayhew's first venture was the publication, with Gilbert a Beckett of 'Figaro in London,' a weekly periodical 1831-1839; later he wrote several dramas. He is best known, however, as one of the originators, and for a short time, one of the editors of 'Punch,' and as the first one to mark out a new path in philanthropic journalism which takes the poor of London as its theme. His principal work, in which he was assisted by John Binny and others, was *London Labour and the London Poor*, a series of articles, anecdotic and statistical, on the petty trades of London, originally appearing in the 'Morning Chronicle.' Two volumes were published in 1851; but their circulation was interrupted by litigation in Chancery. In 1856 a continuation of it appeared in monthly parts as the "The Great World of London" which was ultimately completed and published as the *Criminal Prisons of London and Scenes*

in investigating the problems of crime in their wider aspects. Mayhew's volume, *The Criminal Prisons of London*, in addition to containing a detailed description of the prisons of London, as the title indicates, includes also a wealth of statistics and illuminating observations on such subjects as: juvenile delinquency, the evolution of the juvenile offender into the habitual criminal, recidivism, female crime, the concentration of various types of crime in certain localities within London and in certain counties of England and Wales, classifications of crime and criminals, the evaluation of police statistics, the history of the 'delinquency areas' of London, methods of prison administration and prison discipline, and the role of early family and community conditions in producing criminals. Many of the statistical tables cover all of England and Wales by counties; some give data by police districts within London, other tables compare cities and other territorial divisions. It is interesting in connection with the general problem of the relation of crime to the social life of the period that Mayhew introduces his study with a general topographical description of London and London streets, giving population and other general descriptive data for the city as a whole. He has a section entitled "Some Idea of the Size and Population of London" and a "Table Showing the Area, Number of Houses, and proportion of Houses to Each Acre in London, 1851" by districts—36 of them. In a similar manner he notes the "Distribution and Density of the Population of London in 1851" in terms of the same 36 districts and, on the page facing this table, represents the same data on a shaded ecological map of the city. He does the same for the average income tax assessments and poor rate assessments per house in these districts, and gives us an idea of "mobility" by listing the number of vehicles passing through each of the principal London streets in 24 hours.

Perhaps of even greater interest in this volume is the ecological study of the residences of the members of the various branches of

of Prison Life (1862). A portion of this volume was written by John Binny. Mayhew's *London Labour and the London Poor* (4 vols.) appeared in its final form in 1864 and again in 1865. The title page of each volume is as follows: *London Labour and the London Poor: a cyclopaedia of the Condition and Earnings of Those That Will Work, Those That Cannot Work, and Those That Will Not Work*. The fourth volume acknowledging the assistance of John Binny and other contributors, is devoted to thieves, swindlers, beggars, and prostitutes. In his preface of *London Labour and the London Poor*, Mayhew writes that his volume is "The first attempt to publish the history of a people, from the lips of the people themselves—giving a literal description of their labour, their earnings, and their sufferings, in their own 'unvarnished' language. It is the first commission of inquiry into the state of the people undertaken by a private individual and the first 'blue book' ever published in twopenny numbers."

the legal profession in London, in which Mayhew shows the concentration in what he calls the "legal capital," Chancery Lane, which he describes in detail. He traces the ramifications radiating out from this legal capital and describes the legal "suburbs" of the city, listing more than a hundred "legal localities." In order to place this material in its proper setting, he precedes it with the statistics showing the proportion of the population included in the professional classes of each of the counties of England and Wales and in London.

The other volume, "Those Who Will Not Work," is remarkable in revealing the full extent and detailed character of Mayhew's ecological description of London crime. In it he classifies London "beggars, thieves, prostitutes, cheats and swindlers" into a total of more than one hundred specific groups. He and his collaborators discuss and describe the habitat and mode of making a living of each of these groups and specify quite exactly the districts in which they commit their depredations as well as the streets and localities where they live. This volume abounds in graphic descriptions of the various crime areas and in personal testimony obtained by interviews with persons in the walks of life and areas under consideration, in the manner of the "participant observer" of contemporary sociology. There are recorded in this volume more than a dozen narratives of professional criminals, written in the first person in the criminal's own words, telling his life history, describing the natural evolution of the professional from the juvenile criminal, and giving vivid descriptions of the modus operandi in the various "rackets," as we would call them.⁹

⁹The importance of a direct personal study of criminals outside of institutions in order to gain understanding of their attitudes and motives and techniques was emphasized by many writers in addition to Mayhew and Binny. A reviewer, commenting on a book by Mary Carpenter, stated: "Miss Carpenter has at last supplied us with the material needed to qualify us so to understand the conditions of a life altogether unlike our own, as to enable us to perceive what sort of minds we have to deal with. . . . The main object of Miss Carpenter's book is to establish the principles on which our treatment of criminals should proceed. . . . She has perhaps rendered a greater service in disclosing to us the entire natural history of the lawless classes. She supplies us with the material essentially necessary as the basis of action on any theory of judgment and punishment of offenders. . . . But the first requisite to action under any of these views is to understand the peculiar character of criminal life, in its origin and progress." *Edinburgh Review*, Vol. 122 (1865) p. 337-371. In an article on "Professional Thieves" another writer remarked, "Thieving, considered as an art, is only just beginning to be understood in this country; it is scarcely thirty years since honest men turned their attention to the subject with a determination to master it. . . . But obviously, crime will never be cured until its origin and career are thoroughly understood. . . . Would that the professional thieves would be induced to come forward and candidly tell us all about it. We will never fully understand them until they explain themselves. Police, prison discipline, fence masters, penal servitude, on each of these subjects a conference of old thieves, earnest and out-

In the appendix of Mayhew's "Those Who Will not Work" there is a series of fifteen maps with accompanying tables showing the distribution (by rates whenever appropriate) of the following, in each of the counties of England and Wales:

- Map No. 1—Density of Population
 2—Intensity of Criminality
 3—Intensity of Ignorance
 4—Number of Illegitimate Children
 5—Number of Early Marriages
 6—Number of Females
 7—Committals for Rape
 8—Committals for Carnally Abusing Girls
 9—Committals for Disorderly Houses
 10—Concealment of Births
 11—Attempts at Miscarriage
 12—Assaults with Intent
 13—Committals for Bigamy
 14—Committals for Abduction
 15—Criminality of Females

The tables usually cover a ten year period (1841-1850). In arriving at correlations without the use of the coefficient, which was not known at that time, Mayhew lists the counties above and below the average according to their respective deviations from the average, and then juxtaposes two such series and analyzes their differences and similarities.¹⁰

Perhaps one of the major points made in recent ecological studies of crime, and one that has received a great deal of attention

spoken, would speedily teach the public more than they can ever learn from associations for the promotion of social science, parliamentary committees, government commissioners, prison inspectors and police reports. Believing that we cannot understand people of any class or character unless we go among them, see them in their open hours of unreserved communication, and hear what they have to say for themselves, I have for some time past made the most of every opportunity of becoming, as a clergyman, acquainted with the origin, character, acts and habits of professional thieves." *Cornhill Magazine*, Vol. 6 (1862) p. 640-653.

¹⁰ Mayhew points out that the official system of classification of crimes fails to divide criminals into two main types, habitual and casual. "It is impossible to arrive at any accurate knowledge of the subject of crime and criminals generally, without first making this analysis of the several species of offenses according to their causes; or, in other words, without arranging them into distinct groups or classes, according as they arise, either from an habitual indisposition to labour on the part of some of the offenders, or from the temporary pressure of circumstances upon others. The official returns on this subject are as unphilosophic as the generality of such documents, and consist of a crude mass of incongruous facts, being a statistical illustration of the "*rudis indigestaque moles*" in connection with a criminal chaos, and where a murderer is classed in the same category with the bigamist, a sheep-stealer with the embezzler, and the Irish rebel or traitor grouped with the keeper of a disorderly house, and he, again, with the poacher and perjurer." *The Criminal Prisons of London* (1862) p. 87.

and been heralded as a landmark in the scientific study of crime, is that crime rates, juvenile and adult, vary from one community to another within cities; and that crime is concentrated in certain areas and not distributed uniformly. This fact was well known to Mayhew, who, in addition to working out rates by counties and cities; also computed rates for police districts within London, and went a step farther in specifying what particular kinds of crimes were to be found in particular areas within the city. He calls attention to the fact that London's "rookeries" of crime have long histories, some of which extend back more than five hundred years. He made personal investigations of these areas, which have been "nests of London's beggars, prostitutes and thieves" continuously for centuries. His masterly descriptions of such districts as St. Giles, Spitalfields, Westminster, and the Borough are precise delimitations of characteristic areas of London vice and crime. The following excerpt is typical:

"There is no quarter of the Metropolis impressed with such strongly-marked features as the episcopal city of Westminster. We do not speak of that vague and straggling electoral Westminster, which stretches as far as Kensington and Chelsea to the west, and even Temple Bar to the east; but of that Westminster proper—that triangular snip of the Metropolis which is bounded by the Vauxhall Road on one side, St. James Park on another, and by the Thames on the third—that Westminster which can boast of some of the noblest and some of the meanest buildings to be found throughout London (the grand and picturesque old Abbey, and the filthy and squalid Duck Lane—the brand new and orate Houses of Parliament, and the half-dilapidated and dingy old Almonry) which is the seat at once of the great mass of law makers and law-breakers—where there are more almshouses, and more prisons and more schools—more old noblemen's mansions and more costermonger's hovels—more narrow lanes, and courts, and more broad unfinished highways—whose Hall is frequented by more lawyers, and whose purlieus are infested by more thieves—whose public houses are resorted to by more paviors—whose streets are thronged by more soldiers—on whose doorsteps sit more bare-headed wantons—and whose dry arches shelter more vagabond urchins than are to be noted in any other part of the Metropolis—ay, and perhaps in any other part of the world."¹¹

In his analysis of juvenile crime Mayhew compares rates in the various counties and notes that the rates of juvenile delinquency are highest in those counties which have large cities in them. He takes note of the difference in age distribution from one locality to

¹¹ *The Criminal Prisons of London*, p. 353.

another when he makes these comparisons.¹² In the county containing London he shows that 41% of the juvenile offenders came from one of the seven police districts and 24% from another. The other districts contributed an average of between 5% and 8% and the country only 5½% of the total. He further splits up the rural returns to show that most of the rural offenders came from one district—Hammersmith. He lists areas and streets of London which particularly abound in gangs of juvenile delinquents. The following excerpts taken from *Those Who Will Not Work* show clearly an amazing ecological knowledge of London crime of that day:

"In order to find these houses it is necessary to journey eastwards, and leave the artificial glitter of the West-end, where vice is pampered and caressed. Whitechapel, Wapping, Ratcliff Highway, and analogous districts are prolific in the production of these infamies. St. Georges in-the-east abounds with them." . . . "Whitechapel has always been looked upon as a suspicious unhealthy locality. To begin with, its population is a strange amalgamation of Jews, English, French, Germans and other antagonistic elements." . . . "Ship alley is full of foreign lodging houses." . . . "Tiger Bay like Frederick Street is full of brothels and thieves lodging houses." . . . "The most of those engaged in this kind of robbery in Oxford Street come from the neighborhood of St. Giles and Lisson Grove." . . . "The most accomplished pickpockets reside at Islington, Hoxton, Kingsland Road, St. Lukes, The Borough, Camberwell and Lambeth in quiet respectable streets, and occasionally change their lodging if watched by the police." . . . "Some Londoners are in the habit of stealing horses. These often frequent the Old Kent Road, and are dressed as grooms or stablemen." . . . "Dog stealing is very prevalent, particularly in the West-end of the Metropolis, and is a rather profitable class of felony. These thieves reside at the Seven Dials, the neighborhood of Belgravia, Chelsea, Knightsbridge, and low neighborhoods, some of them men of mature age." . . . "There are great numbers of expert cracksmen known to the police in the different parts of the Metropolis. Many of these reside on the Surrey side, about Waterloo Road and Kent Road, the Borough, Hackney and Kingsland Road and other localities."

It is no doubt true that many of the facts having to do with the concentration of crime in particular areas were noted long before the time of Mayhew, inasmuch as London's crime areas had acquired histories of several centuries when he wrote. What is particularly noteworthy about Mayhew, as well as the other students of his day was that they used these facts definitely and consciously for the purposes of what was known as "moral" or "social science." Thus Mayhew remarks:

¹² See also Neison, F. G. P., "Statistics of Crime in England and Wales for the Years 1842, 1843, 1844." *Journal of the Statistical Society* vol. 9 (1846) p. 223-276.

"Surely even the weakest-minded must see that our theories of crime, to be other than mere visionary hypotheses, must explain roguery and vagabondage *all over the world*, and not merely be framed with reference to that little clique among human society which we happen to call our State."¹³

Students of today who are in the habit of considering Lombroso the first scientific student of crime will be surprised to find Mayhew anticipating in the middle of the 19th century the criticisms of the early Lombrosian viewpoint which were advanced near the end of the 19th and in the first part of the 20th century. He states:

"But crime, we repeat, is an effect with which the shape of the head and the form of the features appear to have no connection whatever. . . . Again we say that the great mass of crime in this country is committed by those who have been bred and born to the business, and who make a regular trade of it, living as systematically by robbery or cheating as others do by commerce or the exercise of intellectual or manual labour."¹⁴

He thus definitely rejects the view of the criminal as a distinct physical type in favor of what might be called an environmental or sociological view. In fact, if we were to select the main theme of his books we should say that it was the point that habitual crime is the result of a natural evolution of juvenile crime in response to the impact of social factors. He even calculates the number of juvenile offenders who each year must have graduated to the ranks of the adult convicts to have maintained this latter group at a constant figure.¹⁵

¹³ Mayhew, H., *The Criminal Prisons of London*, p. 383.

¹⁴ *ibid.*, p. 413.

¹⁵ His own estimate, compiled from the criminal returns of England, is that about one-third of the gross number of the young criminal population of the country (15,000 to 20,000) are removed from the ranks, through the influences of reformatories, farm schools, and industrial institutions; also that some 2,000 criminals, at least, are required to be added every year to the general stock "in order to maintain that steady ratio of offenders to the population, which has continued in this country for nearly the whole of the present century." Mayhew, *op. cit.*, pp. 394-396. He further states, "Indeed, the only rational conclusion to be arrived at—and it is one to which we have come after testing statistically, we repeat, almost every theory on the subject that has been propounded—is, that the great mass of crime is a trade and a profession among us, and that those forms of dishonesty which make up nearly four-fifths of the delinquency of the country are practiced as a means of living by certain classes, as regularly as honesty is pursued for the same purpose by others" . . . Also, "Crime, in its habitual form, seems to us as radically incurable as lock-jaw. . . . The only hope is to *prevent* juvenile delinquency." Mayhew, H., *op. cit.*, p. 452.

III

In 1847 and 1849 Joseph Fletcher read three papers before the British Association for the Advancement of Science and the Statistical Society of London, which he later incorporated in a book, *Summary of Moral Statistics in England and Wales*, which might, in many respects, be taken as a model ecological work of the period.¹⁶ It is not as encyclopedic as Mayhew's work but it is more minute and specialized. The entire book is centered around a series of 12 ecological maps in the appendix of the volume and an ecological map in the frontispiece colored to represent what we might call "natural areas" in England and Wales. These areas were determined on the basis of the prevailing economic organization, whether agricultural, mining, manufacturing, et cetera, in the various counties, grouping like ones together. He proceeds by means of a complex series of tables, coordinated with these maps to analyze what he calls "indices to moral influences" and "indices to moral results" in the various regions specified, listing 36 conclusions as a result of this analysis. Some 80 pages are then devoted to a more detailed tabular presentation of the data on which the conclusions are based, and this is followed by the series of 12 maps and accompanying tables giving the distribution of the above mentioned "indices of moral influences and results" by counties and by districts in England and Wales. The maps are shaded in seven tints and those relating to crime are in terms of rates adjusted to the ages of the population. The following "indices" are graphically represented on these maps:

1. Dispersion of the population

¹⁶ The only life of Joseph Fletcher (1813-1852) is that in the *Dictionary of National Biography*. "Fletcher was educated as a barrister; from the age of nineteen he was engaged upon works and reports in connection with health, occupations, and well-being of the people. He was secretary to the Hand-loom inquiry Commission, and afterwards to the Children's Employment Commission. His valuable reports of these Commissions formed the basis of useful legislation. In 1844 Fletcher was appointed one of Her Majesty's Inspectors of Schools, and his voluminous reports were among the most serviceable contributions to British educational statistics. For many years Fletcher was one of the honorary Secretaries of the Statistical Society of London, and was also during the same period Editor of the *Statistical Journal* and responsible for the collection and arrangement of the vast collection of documents published in that Journal. In 1850 he published his *Summary of the Moral Statistics of England and Wales*, and in the following year a work on *Education: National, Voluntary and Free*. He paid great attention to foreign educational systems and issued (1851-52) two treatises on *The Farm School of the Continent and Its Applicability to the Present Reformatory Education of Pauper and Criminal Children in England and Wales*. He was an ideal statistician, having in a singular degree the power of grasping facts and realizing their relative significance."

2. Real property in proportion to the population
3. Persons of independent means in proportion to the population
4. Ignorance, as measured by the percentage of signatures by marks in the marriage registers
5. Crime as indicated by criminal commitments of males (allowance made for the ages of the population)
6. Commitments for the more serious offenses against the person and malicious offences against property (allowance made for age distribution)
7. Commitments for all offences against property, excepting the malicious (allowance made for age distribution)
8. Commitments for assaults and miscellaneous offences for males in proportion to the total male population
9. Improvident marriages, or those entered into by males less than 21 years old
10. Bastardy as indicated by the registers of births
11. Pauperism
12. Deposits in savings banks in proportion to the population.

Commenting on his method, Fletcher remarks:

"Rather than rush to one generalization upon aggregate results, it is better to retain the facts in manageable groups, by means of which to compare one class with another, one district with another, and one period with another; and by the alternate use of analytical and synthetical methods, to bring the several elements into every possible combination, and detect the laws of their coincidence and relationship, or obtain new views as to the direction which should be given to more refined observation. . . . In framing the accompanying tables I have throughout adhered to one general division of the Kingdom into distinct industrial provinces, drawn with as much accuracy as was permitted by the large and varying size of the counties; the civil divisions which are the integral ones for nearly all my data. These provinces are portrayed in the accompanying map which will serve as a key to the whole of the following tables. A glance down the vertical columns of these tables will convey all that could be pictured forth by an expensive series of shaded maps showing the relative intensity of each element; at the same time that their horizontal lines will convey the collective results in a manner far more compendious than could be obtained by any pictorial means."¹⁷

His attempt to obtain an index to the crime of the various counties and districts of England and Wales which would not be affected by the migration of the "depraved" is interesting. He tries to make allowances for the "influence of the denser populations rather to *assemble* the demoralized than to *breed* an excess of demoralization." He is led by his reasoning along these lines to accept the rate of "more serious offences against the person and

¹⁷ Fletcher, J., *Summary of Moral Statistics of England and Wales* (1850) p. 3.

malicious offences against property" as a truer index of the moral state of a community less affected by mere migrations, than other forms. He finds this form of crime to be highly correlated with ignorance, speaking of "its universal excess wherever ignorance is in excess." His principal concern is with the importance of education. Mayhew, however, refuted this view by contending that all education did was to increase the proportion of educated criminals without reducing the total number of them at all; but he, unlike Fletcher, regarded the habitual offences or professional crime, as constituting the heart of the problem.¹⁸

IV

In conclusion, we wish to call attention again to the fact that the scientific study of crime is usually said to have begun in the last quarter of the nineteenth century with the founding of the "Italian School" by Lombroso. Thus, George W. Kirchwey remarks, "It is incredible, but it is a fact, that, prior to the publication of Lombroso's *L'uomo delinquente* (The Criminal) which was given to the world in 1876, there had never been offered a serious, scientific approach to the study of the criminal."¹⁹ Of Lombroso, Harry Elmer Barnes stated: "By taking the discussion of crime out of the realm of theology and metaphysics, and putting it on the positivistic basis of a consideration of the characteristics of the criminal, he may be said to have founded modern criminology."²⁰ All of the English studies to which we have referred were published at least a decade before the appearance of *L'uomo delinquente*. Although this early regional and sociological approach suffered an eclipse in the later decades of the nineteenth century (particularly in England), due perhaps to the philosophic pre-occupations of sociologists under the influence of Spencer and Comte, it has been resumed by American sociologists in the past two decades. In the

¹⁸ See also Rawson, R. W., "An Inquiry Into the Statistics of Crime in England and Wales" *Journal of the Statistical Society*, vol. 2 (1839) p. 316-344. Rawson, R. W., "Police of the Metropolis in 1836-37" *Ibid.* vol. 1 (1839) pp. 96-103. Redgrave, S. "Abstract of Criminal Tables for England and Wales With Remarks Thereupon," *Ibid.* Vol. 1 (1838) p. 231-245. Rev. Whitworth Russell, "Abstract of the Statistics of Crime in England and Wales from 1839 to 1843," *Ibid.* Vol. 10 (1847) p. 38-61.

¹⁹ *Encyclopedia Britannica*, 14th ed., article on Criminology.

²⁰ *Encyclopedia of the Social Sciences*, Vol. 4, article on Criminology. Some European students have taken a different view. Thus, J. Lottin in his volume *A. Quetelet: Statisticien et Sociologue* (1912) speaks of Guerry and Quetelet as the founders of the scientific sociological study of crime and refers to several other European students who held similar views. See also W. Bonger *Criminality and Economic Conditions* for references to the early English and Continental writers on crime.

evolution of criminological theory, it would appear that the work of Lombroso was in the nature of an interlude and interruption.

Contrary to widely circulated assertions which speak of the "ecological approach" to the study of crime as a twentieth century development, we believe that it has been amply demonstrated that this approach was systematically employed in the early part of the nineteenth century by scholars in different countries who were aware of each other's work. The first systematic work in this field was apparently done in France by A. M. Guerry and in Belgium by A. Quetelet in the 1830's. The English writers to whom we have referred were influenced by both of these men and frequent references to their publications are found in their works. The work of Comte²¹ did not directly affect this movement at all. It was, in fact, too philosophical to have interested these students who were concerned with empirical research and were not interested in the broad speculative problems with which the Comtean tradition dealt. Mayhew, for example, heaped scorn upon the classical political economists of his day, speaking of them as a "sect of social philosophers" who "sat beside a snug sea-coal fire and tried to think out the several matters affecting the working classes, or else they have retired to some obscure corner, and there remained, like big-bottomed spiders, spinning their cobweb theories among heaps of rubbish."²²

The "moral statistics" of the eighteenth century were too defective to have made possible any such significant widespread development as occurred in the nineteenth century. When accurate governmental statistics became available, English and French students (and those in other countries) zealously employed these statistics in making regional studies of crime, suicide, insanity, illegitimacy, vagrancy, pauperism, and other social problems which interest the sociologist today.²³ Individualistic theories which sought

²¹ His *Cours de Philosophie Positive*, 6 vols., appeared from 1830 to 1842, and his *Système de Philosophie Positive*, 4 vols., from 1851 to 1854.

²² Mayhew, H., *Low Wages: Their Causes, Consequences and Remedies*, London, (1851) p. 126. "That the assumptions of Political Economy, however, should be true is beyond the bounds of probability, for it is well known that Adam Smith, the founder of the *pseudo* science, when about to develop the laws of capital and labour, retired to an obscure Scotch village, and there sat dreaming in his arm-chair for fifteen years about the circumstances affecting production and the producers. As well might we suppose a person capable of excogitating in a back parlour the laws of chemistry, or natural history, or any other of those systematic aggregation of facts which we term science." *Ibid*, p. 126.

²³ According to Joseph Lottin in his volume *A. Quetelet: Statisticien et Sociologue* (1912) p. 128-139, shaded ecological maps to represent crime rates were

causal explanations of crime in terms of the characteristics of the criminal had not yet come into vogue, and in the works of these earlier writers there were elaborated many viewpoints which attributed primary causal significance to external environmental or social factors in much the same manner as do present day sociological theories.

first used in 1829 by A. M. Guerry and Balbi in a work on education and crime. Others who employed shaded maps on crime and related subjects, in the 1830's are W. R. Greg, *Social Statistics of the Netherlands* (1835) in which there are five such maps; Comte A. D'Angeville. *Essai Sur la Statistique de la Population Francaise* (1836) wherein will be found sixteen ecological maps of the condition of the people. Similar maps will be found in Parent-Duchatelet *La Prostitution dans la Ville de Paris* (1837); A. M. Guerry *Essai Sur la Statistique Moral de la France* (1833) and in his *Statistique Moral de l'Angleterre Comparee Avec la Statistique Moral de la France* (1860). Quetelet is also reported to have employed them at an early date. See *Westminster Review* vol. 18 (1833) p. 353, wherein it is stated "A peculiarity in recent works of this kind is the addition of pictorial illustrations. Maps showing the distribution of crime and education have been used by the author, by his coadjutor Balbi, by Quetelet, Dupin, and others."