



EASTERN STATE PENITENTIARY

A NATIONAL HISTORIC LANDMARK

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John Haviland

1792-1852

In a cherry orchard on the northern outskirts Philadelphia construction was begun in 1821 on John Haviland's Eastern State Penitentiary. It was to be the first large-scale experiment ever attempted with the newly emerging Pennsylvania System of solitary confinement day and night with work in the cells. Even before it was half completed, the Eastern Penitentiary became a *cause celebre* among reformers and the object of world-wide interest and investigation. For the remainder of the nineteenth century this prison, along with others designed by the same architect, became the model for almost all the newly developing centralised prison systems in Europe and South America, and later in Asia. Much has been written about the Pennsylvania System, which has had a brief and stormy career in America but has enjoyed more prestige on the continent. However, almost nothing is known about the architect of this system, a man who must be ranked as the most important architect of any period in prison building. The object of this article is to bring together some of the previously unavailable information on Haviland's personal life, the historical antecedents of his influential plans, their progressive development out of his early associations with the Philadelphia reformers, and his effect upon penology, particularly during the nineteenth century.

Haviland was born on December 15, 1792, in Somerset, in the south-west of England. After showing some aptitude for mathematics and art, he was sent by his family to London to study under the well-known architect, James Elmes. Although neither Haviland nor Elmes apparently ever was responsible for prisons in England, Elmes published a small pamphlet on prison planning in 1817 in which he revealed a careful reading of John Howard's works and a general interest in prison reform, which he may have passed on to his pupil. Following the pattern of many talented young men of that period, Haviland left England in 1815 to visit St. Petersburg and the court of Alexander I. He had originally intended to enter the Imperial Engineers and had made the trip at the invitation of the Minister of Marine, Count Morduinoff,¹ who was also an uncle by marriage. It is not clear just what made Haviland decide not to remain in Russia. However, while at the court he met Sir George von Sonntag, a former Philadelphian, who was currently both an admiral and a general in the Czar's military establishment, and it may have been he who urged the young architect to embark for the United States. At any rate, Haviland arrived in Philadelphia in 1816, armed with letters of introduction to President Monroe and others, written by von Sonntag and John Quincy Adams, then United States Minister to Russia.

Haviland immediately opened a school of architectural drawing and began to get commissions for churches,



public buildings and private residences. In 1821 the legislature of Pennsylvania authorised a new penitentiary to be built in Philadelphia, and Haviland's plans won the competition. However, there was considerable dissension among the Building Commissioners for the new prison, and it was not until 1823 that he was appointed official architect and his entire plan approved. He continued to supervise construction of the prison which went on intermittently until 1836.

The Eastern State Penitentiary, which came to be known as Cherry Hill, became famous and controversial even as it was being erected, and lifted Haviland from relative obscurity to international renown. During the 1830's he became a veritable commuting architect-contractor. Busy with the large -scale construction at Cherry Hill as well as with many important public and private buildings in the Philadelphia area and a new naval asylum at what is now Portsmouth, Virginia, Haviland soon found himself traveling to Pittsburgh, Trenton, and New York City as well. Almost from the beginning, the unusual circle of cells which composed the Western Penitentiary at Pittsburgh, erected by Haviland's rival, William Strickland, had proved unworkable,² and in the early 1830s Haviland was engaged to tear down the interior of this prison and reconstruct it along the lines of his Eastern Penitentiary. He was at the same time superintending the construction of a court building and detention centre in New York City, which later became known as the "Tombs" because of its heavy Egyptian style-the name persisting even in subsequent structures. On his trips to New York Haviland would stop at Trenton where he was building a new state prison. During the same decade Haviland designed state penitentiaries in Rhode Island and Missouri and a county jail and court house in Newark, New Jersey. He also submitted plans for the District of Columbia prison and state prisons for Arkansas and Louisiana, but these designs were never used.

By 1839 Haviland had no important projects to occupy him, and among his papers we find letters to officials in England, France and Mexico offering his services for various prison-building projects. His dissatisfaction with his adopted homeland seen in these letters was undoubtedly short-lived. By the following year he again found himself busy building prisons. Certain counties in Pennsylvania had been authorised by law to construct their own penitentiaries, and following the lead of Philadelphia County, one after another of the more populous and wealthy counties decided to replace unsafe jails with new county penitentiaries. In 1840 the prison at Harrisburg was begun under Haviland, in 1846 the one at Reading, and his last prison was begun in 1849 in Lancaster and completed just before his death.

Not much is known concerning Haviland's family life. Shortly after his arrival in Philadelphia he had married a sister of General von Sonntag. There were three children, a daughter, Mary, and two sons, John, Jr., and Edward. John studied law and later emigrated to England. Edward, also, was admitted to the Bar but later turned to architecture, designing several county prisons in the style made famous by his father.³

On March 28, 1852, Haviland died suddenly of apoplexy at his home in Philadelphia and was buried in the family vault at St. Andrew's Church in that city.

Haviland's Task

This bare recital of the facts of Haviland's life contributes little to an understanding of the reasons for his influence and fame during this period. For this we must turn back to a more detailed consideration of the circumstances surrounding the building of the Eastern Penitentiary and the influence it had on subsequent prison construction.

Beginning with the advanced Quaker penal code instituted by William Penn in 1682 which declared the



reform of the offender to be more important than his punishment, the colony of Pennsylvania had always shown an interest in the problem of the lawbreaker. Although Penn's code was repealed after his death, humanitarian thought and advanced European ideas combined to make Philadelphia in Revolutionary times the centre of prison reform agitation. Imprisonment became the penalty for more and more offences instead of death or mutilation. In 1790 the famous Walnut Street Jail came under joint county and state control and a decade of advanced penal administration was launched. A "Penitentiary House" was constructed in the yard of the prison to house sixteen prisoners in solitary confinement, presumably the worst offenders among the prisoners. The Philadelphia Society for Alleviating the Miseries of Public Prisons, as well as many prominent citizens such as Benjamin Rush and Benjamin Franklin, constantly urged the state legislature to relieve the overcrowding at Walnut Street by the construction of state penitentiaries. As the result of these efforts and complaints from the western counties who had to bear the expense of transporting prisoners to Philadelphia, the Western Penitentiary was authorised and in 1818, near Pittsburgh, construction began on a prison to provide solitary confinement day and night without labour. In March of 1821 Cherry Hill was authorised by the legislature for housing prisoners from the eastern half of the state.

What sort of prison did the reformers want to be built in Philadelphia? As the result of experience at Walnut Street and early trials at Pittsburgh, the religious beliefs of the Quakers, and the new humanitarian philosophy so much in the air in Europe and America, the idea of reformation was coming to be regarded as more important than punishment. Men and women, convicts and detainees had been separated at Walnut Street. But for the new prisons each man was to have a separate cell. Every effort was to be made to avoid contacts among the prisoners because the Quaker reformers were well aware of the ill effects of such mingling among inmates and their continuing friendships once released. For the criminal already imprisoned, isolation from his fellow men was to prevent harmful corruption, protect his good resolutions, and give him ample opportunity to ponder on his mistakes and make his peace with God. If this were not effective, once the man was released the memory of this complete and awful isolation would be sufficiently terrifying to deter from further crime. Likewise, the prospect of solitary confinement plus the grim and forbidding appearance of the prison itself would serve as a powerful deterrent to the potential offender on the outside. Solitary confinement day and night became, then, the Quaker solution to the problem of rehabilitation as well as the deterrence of potential law-breakers.

Whether or not the prisoners should be compelled or allowed to work during their confinement was still a disputed point when the first Western Penitentiary was opened, and prisoners were not provided with work. But increasing difficulties with inmates who became physically or mentally ill, as well as the high costs of maintenance which resulted from complete solitary confinement without work, eventually forced a change of policy. By the time the first prisoners were admitted to the Eastern Penitentiary in 1829, legislation had provided that prisoners must work in their cells. The Pennsylvania System, as it came to be known, was becoming fully articulated at this point.

The Eastern Penitentiary Act of 1821 authorised construction of a prison to house 250 in solitary confinement. (Later supplementary legislation provided for more cells, more than doubling this initial capacity.) It was to be constructed on the Pittsburgh plan "subject to such alterations and improvements as the said commissioners... with the approbation of the Governor, approve and direct, *provided always, that the principle of the solitary confinement of the prisoners be preserved and maintained.*"⁴

The new state prison at Pittsburgh had been operating too short a time to provide any valuable experience upon which Haviland could draw when he designed Cherry Hill. As an architect his task therefore was to plan a building for the first large-scale experiment in a new kind of penal treatment. Some of the problems



could be anticipated with ease, others could not. The main job was to create cell blocks where prisoners could be kept completely isolated from one another in surroundings which could not be injurious to their health but would prove secure from escape, the whole of which would have to be easily accessible to constant inspection by guards.

Haviland chose a peculiar radial type of layout for the prison, consisting of a central hub with seven wings converging on it and connecting to the center building by covered passage ways. It is this most obvious and perhaps spectacular aspect of Haviland's plan, easily recognizable in later prisons modelled after Cherry Hill, which is usually regarded as his great and original contribution to prison construction. This is not quite accurate, as we shall see in a closer examination of prison design before and after Haviland.

Evolution of the radial plan

Within the limits of this paper it is not possible to trace the gradual development of the radial plan on the continent prior to its introduction into the United States by Haviland. However, a few details must be given here for purposes of perspective. The fifty years from about 1775 to 1825, particularly in England, saw a great many local prisons constructed for pre-trial detention and short-sentence offenders. At first these local jails were simply strong buildings with a series of large rooms. However, the appalling conditions of filth, suffering, and promiscuous mingling of all types of prisoners without proper supervision, which were common in most of these institutions, were made known to the public through the writings of John Howard and later reformers, and forced a reexamination of the whole process of penal treatment. The actual prison structure itself, for the first time, was considered important, not only in preserving the health of the prisoners but also in affording opportunities for their effective supervision.

The great preoccupation which reformers of this period showed with proper surveillance of prisoners by guards (and guards by their superiors) led to the development of several highly characteristic and original forms of prison layouts, which might be regarded merely as whimsical architectural curiosities were it not for the fact that they became so common and had a direct influence on the more sophisticated prison structures which were to follow. These forms tended to be either circular or semicircular; polygonal; or radial, that is, some variant of a cross, star, or fan shape. The circular prison plan was first proposed systematically by the great English law reformer, Jeremy Bentham, when he published in 1791 his proposals for a *Panopticon House*.⁵ This vast circular structure of cast iron and glass, which Aldous Huxley once termed a "totalitarian housing project," was never erected, but the idea was partially carried out in much altered form in the Edinburgh House of Correction, the Lancaster Female Prison at Kirkdale (which is still in use), and in numerous little crescent-shaped county jails built in both England and Ireland between 1790 and 1830, and in Spain much later.⁶ Although no true *Panopticons* appeared in Britain, three were erected in Holland in the 1880's, several at the Illinois Penitentiary near Joliet and at Cuba's large penal colony on the Isle of Pines, the latter prisons constructed in the twentieth century.

The polygonal plan, first seen in the famous *Maison de force* at Ghent and consisting eventually of eight trapezoidal sections around an octagonal inner structure, was seldom imitated. The disastrous variation of this plan found in the great Millbank Prison, erected in London between 1813 and 1821, was never copied.

Although cross-shaped structures were not new to institutional architecture,⁷ the end of the eighteenth century saw for the first time many little British colony jails erected whose buildings were arranged so that the governor or keeper could visually supervise the prison. Usually his house was located in the centre of the prison so that from his windows he could out on to yards and sometimes into the dayrooms located at the



near ends of the cell wings a few feet away. Probably the first radial jail whose plan permitted visual inspection of corridors from a central vantage point, however, was the Suffolk County Jail at Ipswich, erected by the English architect, William Blackburn, who built a score of radial prisons in varying designs during his brief and promising career.⁸ Mental hospitals also engaged in a vast building programme during this period, and some of these also were built along radial lines, with the wings often joined to the centre building.⁹ A “Lunatic Asylum” plan, published in London in 1814 when Haviland was in that city studying architecture, clearly indicated that the radial plan was almost fully developed at that time, and makes the inspiration for Haviland’s designs quite obvious.¹⁰ Model plans of prisons published in the following several years show the same six- or seven-wing radiating pattern, although usually the wings were separate from the centre building. The centre structure was usually devoted to cells, service facilities, or more often a combination of governor’s quarters and chapel. The opportunities for actual observation of prisoners in such arrangements was extremely limited, in spite of the great importance attached to such visual inspection by the prison reform groups and their formal espousal and promotion of the radial plan.

Haviland builds a prison

In Haviland’s originally submitted designs, the arrangement of the prison then was largely an adaptation of the most approved type of plans which were being publicised by the prison reform groups in his native country during his architectural novitiate. His original plans for the Eastern Penitentiary called for an elaborate front building to house administrative offices and quarters for the staff. This structure was designed in a heavy Gothic style complete with iron portcullis and an eighty-foot bell tower. Originally the central rotunda was to house cells, a laundry, bakehouse, and, below, a series of dungeons each with a private entrance from the floor above and a fireplace.¹¹ Fortunately, by the time construction was begun, the architect decided to make an open inspection hall of this centre building, a nerve centre for the prison from which vantage point guards could view all the corridors of the prison. The first three cellblocks constructed were single storey, each containing about forty large cells. Entry to the cells was not from the cell house corridor but from the outside of the buildings, through twenty-foot-long exercise yards which were attached to each cell. Every cell contained a flush toilet, water tap, a bunk on chains against the wall and equipment for the prisoner’s work activities. The remaining four cellblocks of Haviland’s design were two storeys in height and access to cells was by means of double doors opening into the corridors, the previous arrangement having soon been found too inconvenient.¹²

Although it is the Eastern Penitentiary which became the point of controversy in the struggle of rival penal systems and the prison most mentioned in penological writings, three Haviland prisons have been important in influencing subsequent designs. The reconstructed Western Penitentiary at Pittsburgh and the New Jersey state prison at Trenton were both erected in the 1830s on plans different from Cherry Hill. Pittsburgh was in the form of a “V” with an inspection room in the hub. The Trenton plan, although not all of its wings were built at the time, consisted of five wings radiating from an inspection room in a half-circle radial pattern. It was the Trenton plan, which embodied improvements over the original Cherry Hill buildings such as detached exercise yards, cell doors into the corridors and two-storey wings, which was most widely imitated.¹³

The imitators

What were the consequences of Haviland’s prisons? This question must be answered separately with reference to the United States and the rest of the world. From the beginning, Cherry Hill had become the tangible



symbol of the emergent Pennsylvania System of solitary confinement. This highly controversial method of treatment was inextricably linked with the physical structure which Haviland had created. In the few prisons he had designed outside Pennsylvania brief attempts were made to carry out the system of continual solitary treatment but these experiments were abandoned within a few years. Only in its parent state was the Pennsylvania System retained for any number of years in the United States. It was its arch rival, the Auburn System, consisting of solitary confinement at night and congregate work in silence during the day, which was to be adopted almost universally in North America. And with it, the Auburn cellblock was widely copied—inside cells, back to back on tiers, and only large enough to house a bunk and toilet bucket. It is this lengthy rectangular type of cellblock which has become standard in most United States prison plants. In a few institutions Auburn-type blocks radiate from a central rotunda, as exemplified in the reformatories built in Michigan, Ohio, Pennsylvania, Indiana and New Jersey, and in the more recently constructed United States Disciplinary Barracks at Fort Leavenworth, Kansas, built in the 1930s.

Although Haviland's prisons never were a direct major influence on American prison architecture, it is one of those strange tricks of history and cultural diffusion that the radial plan, originally developed in English and Continental prisons, was not widely recognised or accepted for large-scale prisons until it had first been transplanted to America by Haviland and then reintroduced to European reformers by the many observers and commissioners sent here by various governments. Soon after the first three cellblocks were finished at the Eastern Penitentiary, the Governments of Great Britain, France, Prussia, Russia, Belgium and several other nations began sending representatives to evaluate the rival American experiments, and particularly Cherry Hill. Almost without exception their reports favoured the latter, and it seems safe to assume that the high quality of the architecture which Haviland linked with the system was one of the more important factors in its widespread acceptance throughout the rest of the world.

Following Sir William Crawford's visit and elaborate report on the American penitentiaries, which favoured Cherry Hill, Haviland submitted model plans to the British Government which were substantially those of the Trenton prison.¹⁴ On the basis of these plans and with some modifications, the Model Prison, later known as Pentonville, was completed in 1842 and was destined to become the most copied prison in the world. In Britain itself new prisons were built or reconstructed at a rapid rate following the erection of Pentonville, all except the very small being radial in layout, and all adopting the Pentonville cell-house details.¹⁵ At least thirty radial structures were erected during the remaining years of the century, the largest of which were in the characteristic four- or five-wing pattern of Trenton or Pentonville. Similar radial prisons were built in other parts of the Empire such as Egypt, Australia, Malta, Burma and Canada.

This pattern of building was duplicated in other European countries where political instability, inadequate government finances or wars did not interfere with the progress of prison reform. In Germany, following official visits by Dr. Nicolaus Julius to America and Frederick William IV to Pentonville, a new model prison was begun in the Moabit district of Berlin in 1844 on the Pentonville design. Shortly afterwards prisons were erected at Munster and Ratibor on cross plans. The Moabit and Ratibor plans became the two basic patterns for almost all subsequent nineteenth-century prison building in most of the German states.¹⁶ Although a number of prisons, especially for long-term offenders, were located in old fortresses, over forty radial prisons were erected in Germany before 1910.

Belgium, perhaps more than any other European country, completely replaced its old prisons in the last half of the nineteenth century, largely through the untiring efforts of one man, Edouard Ducpetiaux. A devotee of the Pennsylvania System and a student of English prisons, he made certain that most of the establishments erected during his long administration were radial in form. Some like Antwerp, Audenarde and Charleroi



were “V”-shaped like the second Pittsburgh prison, others were in an “X” form, such as the great prison at Forest near Brussels. Still others, like Louvain and St. Giles, consisted of five or six wings radiating from a central rotunda. Only three of the over twenty new prisons erected in this country were not radial in the true sense.

Beginning with Vitoria prison in 1859, Spain began to build new provincial prisons which have, down to the present day, consistently been erected on the radial plan. The great “model prisons” in Madrid (1877) and Valencia (1887) were directly patterned after Pentonville, and Barcelona was built in a six-wing radial form. An eight-wing full-circle radial provincial prison is partially completed at the present time in Carabanchel a suburb of Madrid.¹⁷ Altogether, over forty major prisons have been erected on the radial plan in Spain.

In the smaller countries of Western Europe, where but a few large prisons were erected, these were almost always patterned after Cherry Hill and Pentonville. The large prisons in Holland, Switzerland, the Scandinavian countries and Finland, Portugal, Austria and especially Hungary follow this pattern.¹⁸ In France, Russia and Italy, political unrest, repeated financial problems and available confiscated church properties resulted in few prisons being erected aside from detention or short-term institutions. These, however, were almost invariably faithful to the Pentonville layout as can be seen in the large prisons of Mazas and Sante in Paris and Orleans in the provinces; in Italy at San Vittore in Milan, Regina Coeli in Rome and the detention prisons at Piacenza and Turin; or in Russia in the city prison at Piotrokow (Petrokof) and the great Viborg prison in St. Petersburg. A few long-term institutions were erected in these countries and in the familiar layouts-Civita Vecchia near Rome and Palermo, for example; or the Russian provincial prisons at Grodno, Lomja, Staraja-Roussia, all based on model plans put forth by the prison administration and usually in a two- or three-wing pattern such as is found primarily in Belgium.¹⁹

The various countries of Latin America have, with one or two exceptions, built few large central prisons until recent years. These early structures, usually erected in or near the capital, were almost always radial, reflecting either direct North American or British and Continental influences. Argentina showed the greatest activity in nineteenth-century prison building: the first of the new prisons, located at Buenos Aires (1872), was a classic five-wing radial. Others were erected on variations of this design.

One of the first effects which accompanied Westernisation of Japan was the advent of prison reform. Shikueya Ohara, a jurist and under-director of the prison administration, visited British colonial prisons and sent officials to America and Europe. The result was the enthusiastic adoption of cellular confinement and the acceptance of the radial prison plan as part of official policy.²⁰ The first of the new prisons, Miyagi (1879), was designed by an English architect and consisted of six wings arranged very much like Louvain prison in Belgium.²¹ Over thirty-three radial prisons were erected in Japan until very recent years, the most common plan being based on Pentonville, as at Tokyo (1879), or occasionally five- or six-wing full-circle radial designs, as at Gifu and Hakodate, opened in 1931. More true radial prisons were erected in Japan than in any other country, and only Belgium has rivaled her in the consistency of its architecture.

Reform came later in China and the first new prison was built in Peking in 1909 by a Japanese architect. Like many new prison structures put up in the following ten years, it consisted of a complicated array of three Trenton-type radial layouts, a three-wing “T” form, and shop buildings.²²

Generally, by the end of the nineteenth century, most prison construction in Europe had ceased and new forms, such as the so-called “telephone pole” plan developed at Fresnes, the great provincial prison outside



Paris, and small open colonies, were superseding the classic radial prison. In spite of this fact, radial forms still persist: the United States Disciplinary Barracks at Fort Leavenworth and the new Madrid prison have been mentioned. A new minimum-security housing unit at Washington State Prison was completed in 1954 and consists of six wings and an observation hub.²³ Two proposed institutions, one in California and the other in Colorado, are variations of the radial plan, as are most of the new provincial prisons now being erected in Spain.

Haviland's contributions

This brief review of prison building before and after Cherry Hill brings out two important facts: first, we must conclude that Haviland, often regarded as the innovator of radial prison design, brought with him from his home country the most recent experiences and ideas for this type of prison arrangement which had been developing in Europe since at least 1780; secondly, that in spite of its origins, it was not until the construction of Cherry Hill that the radial plan received widespread and articulate approval and adoption in large-scale prison construction. What then has been Haviland's contribution?

Perhaps Haviland, more than any other prison architect before or after him, was aware of what functions the prison building was expected to serve and how these could best be accomplished architecturally. Up to that time any architect who had designed successful theatres or state houses was felt competent to design a successful prison as well—an attitude which has not completely disappeared. The dismal failures of some of these efforts and Haviland's notable successes did much to change these notions. For example, the many details which Haviland was careful to incorporate in his prison—such as the floor paving stones being joined at points which were inaccessible to a prisoner and the entire prison and yards visible from a central tower—made it remarkably secure in comparison with structures of that period. In fact after over 130 years, the original buildings, little altered except for additions, are still being used to house maximum security prisoners in Pennsylvania. Haviland also gave much attention to the vexing problem of communication among the prisoners, one which subsequently proved to be insoluble on a large-scale basis. He initiated the first large-scale use of flush toilets in America to obviate the contact which would otherwise have resulted from convicts emptying toilet buckets or being escorted to central privies. The problem of communication through the heating system proved more difficult. After considerable experimentation with hot-air ducts and various arrangements of water pipes, the architect was satisfied before he had completed Cherry Hill that such contacts had been reduced to a minimum.

Because the success of the Pennsylvania System relied more heavily than others on the construction and design of the cell itself, due to the fact that the prisoner spent his entire sentence there, Haviland gave considerable attention to providing adequate light, warmth and ventilation, and sufficient space for exercise and work. Some important innovations in design were made also to facilitate communication among the prison staff, as well as to improve their surveillance of prisoners. This was particularly true of his use of the central rotunda, apparently for the first time, as a sort of communications hub and nerve centre of the prison, an idea which has been carried out in many prisons on the United States as well as in Europe, regardless of their plan.

In Cherry Hill the architect had succeeded in incorporating and combining many technical developments, and in so doing set standards of space, plumbing and ventilation which were seldom equaled in prisons during the ensuing seventy-five years. Compared with the penitentiaries of their day, the prisons of Haviland were overwhelmingly superior, both technically and stylistically. Because of the widespread imitation of the Eastern and New Jersey penitentiaries, particularly in Europe, Haviland's great service to penology would



seem to be not in publicising the radial plan, which might or might not have caught on otherwise, but in establishing high standards of construction, standards which were to have an influence on almost all of the prison construction of the nineteenth century, and even down to the present time in some instances.

A word should be said concerning the style of Haviland's prisons because some modern criminologists have heaped abuse on Cherry Hill and the other penitentiaries of that period for establishing the "fortress school" of prison architecture, suggested by the heavy and forbidding Gothic which accents security and the punitive nature of imprisonment. It should be kept in mind, however, that far from being oblivious to the effects of such a style, Haviland and his contemporaries found it admirably suited to the atmosphere which the reformers sought to create. Haviland's teacher, James Elmes, in commenting on the design of the newly built Newgate prison in London, wrote: "without doubt the most appropriate and correct design in the metropolis or perhaps in Europe; for no one viewing this edifice can possibly mistake it for anything but a gaol, the openings as small as convenient, and the whole external aspect made as gloomy and melancholy as possible."²⁴ And the building commissioners of Cherry Hill went on record as saying that: "the exterior of a solitary prison should exhibit as much as possible great strength and convey to the mind a cheerless blank indicative of the misery which awaits the unhappy being who enters within its walls."²⁵ In the context of such a philosophy then, Haviland's choice of the heavy and gloomy Gothic and Egyptoid styles used at Philadelphia and at Trenton seems to have been entirely appropriate. Such choices cannot be criticised in the light of a changed, enlightened point of view concerning rehabilitative treatment which developed many years later.

It might be noted parenthetically that the restrained Gothic façade of Haviland's Eastern Penitentiary has come in for much praise from architects and art historians. A present-day critic writes that the prison "comes nearer to being a work of art than any other building of its kind..."²⁶ This simple style became much more elaborate and corrupted in latter-day examples, which found themselves the targets for criticism by those who regarded their appearance as too ornate for a prison and thus inappropriate and anything but a deterrent. It is extremely doubtful if stylistic factors were of much importance in motivating either prisoners or the so-called "criminal classes" from which they were recruited, however.

The prison structure and rehabilitation

Even with this cursory view of early prison construction, particularly John Haviland's, it must be evident that the prison structure admirably fitted the penal philosophy of that day. What kind of building would have been better suited to keep men away from their fellow men during the entire sentence? What style could have been better calculated to deter the potential law-breaker by its forbidding external appearance and make the prisoner think twice before committing new crimes once released? What sort of cell layout would have been better suited to the degree of maximum surveillance of men continually locked in their cells?

Modern penal philosophy rejects some, but not all, of these early Quaker theories of crime control as being naïve, oversimplified and certainly not in keeping with our present knowledge of human nature contributed by the various behaviour sciences. What about our current prison structures? How closely do they reflect modern penal philosophy? With a few notable exceptions, most present-day institutions show little basic deviation from the early patterns of prison construction established at Philadelphia, Pentonville and Auburn over a century ago. This is partly because some of the prison structures were built during an early period and for economic reasons must continue to be used.²⁷ But it is also true that the traditional cellblock and prison layout with minor variations has dominated prison construction right down to the present day, with very few



exceptions. The great gulf between modern penal philosophy, on the one hand, and our prison buildings, on the other, a condition which seems not to have been present in the prison building of the early nineteenth century, can only partly be explained in terms of the inertia of tradition. Certain significant factors then operative no longer are. On the first half of the nineteenth century prison reform was a problem which drew to it the keenest intellects, the most influential leaders in the community. Prison reform was in the air. No effort—financial, legislative or philanthropic—was too great to apply towards a solution of the newly “discovered” problem of the criminal and his reformation. Today prison reform finds itself in the backwaters of society’s problems, receiving little attention from community leaders except for brief periods following riots or scandals.

In addition, the formula of treatment in the 1800s was simple: keep men completely secluded so they can repent their sins and avoid contamination from fellow prisoners; teach them industry by compelling them to work and virtue by supplying them with religious instruction; and make the whole thing so unpleasant that, should all else fail, they will be deterred from further crime out of sheer hedonism. Such a philosophy busy civic leaders, state legislators and practical architects could understand and translate into their own areas of action without much difficulty. But modern penal philosophy is characterised by inconsistencies of an Alice-in-Wonderland magnitude, tortuous by-ways of psycho-analytic theory and sociological statistics and a massive complexity made necessary by our ever-increasing body of knowledge about human behaviour. This has reached the point where all but the highly specialised “expert” find the field almost inaccessible.

If modern prisons are ill adapted to modern penal philosophy, does it really make any difference? How important is the physical structure anyway in limiting or encouraging the type of programme which can be carried out inside its walls? This is a difficult question to answer with empirical evidence. Many prison administrators feel that bars, walls and other maximum-security trappings definitely structure the spirit and determine the attitudes of both guards and inmates. It is obvious that the conventional prison allows little opportunity for classification, graded release using degrees of security, special treatment for certain classes of offenders, education, industrial activities and other measures deemed essential by modern penologists. Above all, the great size of the average American prison, of no great moment under earlier penal philosophies, makes present-day programmes of differentiated treatment almost impossible. There is no doubt that that progressive and intelligent leadership can do much to offset the harmful effects of an outmoded prison plant, and it is certainly true that a well-designed structure is no guarantee of the presence of the more intangible elements of rehabilitation. But it seems safe to assume that a prison system whose architecture is based upon a careful thinking through the aims of modern correction can do much to keep these aims alive and effective. Perhaps it is not too much to ask that modern-day architects make as great an effort as did John Haviland to build prison structures in harmony with a treatment philosophy. One can only hope they will approach his success.

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The following references have been divided into three sections: those which deal with prison construction prior to John Haviland, those which contain material on Haviland or his prisons, and finally those which describe the post-Haviland prison buildings. No attempt has been made to be inclusive, but rather to select a few sources which give a general view of the period under consideration, or in some cases, a more detailed account of one area.



Prison Building before Haviland

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NOTE ON THE CONTRIBUTOR

Dr. Norman B. Johnston is Professor and Chairman of the Department of Sociology at Beaver College in Philadelphia. Until 1951 he was a sociologist with the Illinois Penitentiary System, and he has extensively visited European prison systems. For the past several years he has been engaged in research on prison architecture, particularly of the nineteenth century, and has served as architectural consultant in new correctional construction. He is co-editor of *The Sociology of Crime and Delinquency* and *The Sociology of Punishment and Correction*.

Post Script: Dr. Johnston is the author of *Eastern State Penitentiary: Crucible of Good Intentions*, which was published in 1994. This book is the definitive work on the Penitentiary. Currently, Dr. Johnston serves as the Secretary on the Board of Directors for Eastern State Penitentiary Historic Site, Inc. Dr. Johnston is also a Board Member for the Pennsylvania Prison Society.



- ¹ Morduinoff was an intimate of John Howard and was at his bedside when he died of jail fever in the Crimea. Undoubtedly, Haviland heard much of the great reformer during his Russian visit and in his personal papers can be found copied eulogies of Howard and a description of his funeral (*Haviland Papers*, MSS. in the University of Pennsylvania Library).
- ² For details of some of the enormous difficulties incident to running this peculiar institution, see, for example, "Report of the Commissioners of the Western Penitentiary," in *Journal of the House of Representatives* (Pennsylvania, 1829-30), Vol. II, pp.634-641; and Eugene E. Doll, "Trial and Error at Allegheny," *Pennsylvania Magazine of History and Biography*, LXXXI (January 1957), 3-27.
- ³ This similarity has led to considerable confusion and the two prisons completed in 1855 by Edward for York and Cumberland counties have variously been accredited to his father and to a brother of John Haviland living in America. A description of these prisons, as well as a letter written by the architect in which he discusses his debt to his father, can be found in *Pennsylvania Journal of Prison Discipline*, Vol. X, No. 2 (April 1855), pp.57-93.
- ⁴ Thomas B. McElwee, *A Concise History of the Eastern Penitentiary* (Philadelphia: Neall and Massey, 1835), Vol.I, p.144.
- ⁵ See Bentham, *Panopticon or Inspection House* (London: T. Payne, 1791); *Panopticon Postscript*, published the same year; and his Works, edited by Sir John Bowring (Edinburgh: Tait, 1843), especially Vols. IV, X, and XI. See above, p. 63 (Ed.).
- ⁶ See, for example, the 50th and 51st *Report of Inspectors-General of the Prisons of Ireland*, which contain a series of plans of these county institutions.
- ⁷ For example, Joseph Furttenbach in his *Architectura Civilis* (1628) and *Architectura Universalis* (1635) published plans for hospitals, arsenals, schools and lazarettos, all in a cross form.
- ⁸ An idea of the layouts of the early English prisons can be got from several sources: the richest in plans and diagrams is a pamphlet issued by the London Society for the Improvement of Prison Discipline in 1826, entitled *Remarks on the Form and Construction of Prisons With Appropriate Designs* (London: J. & A. Arch). Good prose descriptions of prisons of this period are contained in James Neild, *State of the Prisons in England, Scotland and Wales* (London; John Nichols and Son, 1812). The first-cited work gives considerable evidence, bearing out conclusions from other sources, to indicate the distinctive role of the little-known Blackburn in developing radial prison forms. See especially p. 17.
- ⁹ See, for example, the Glasgow Hospital pictured in William Stark, *Remarks on Public Hospitals for the Cure of Mental Derangement* (Edinburgh: James Ballantyne, 1807); and John Foulston, *Public Buildings Erected in the West of England* (London: J. Williams, 1838), plates 105 and 106, following p. 17.
- ¹⁰ The hospital plan appears in Hans Pfeiffer, "Neuzeitliche Gefangnisbauten und ihre Geschichte," *Blatter fur Gfangniskinde*, LXV (1934), Zweites Sonderheft, p.58, which is taken from a plate appearing in H.A. Adam, *Uber Geisteskrankheit in alter und neuer Zeit* (Ansbach: C. Brugel & Sohn, n.d.), p.29. Its resemblance to the Eastern Penitentiary, and especially to what must have been the initial designs, is quite striking.
- ¹¹ *Haviland Papers*, MSS., University of Pennsylvania Library. This early description appears in a Journal Book kept by the architect (labelled No. 1 in the collection) under an entry dated July 2, 1821.
- ¹² An early version of the plan appears in an engraving in George W. Smith, *A View and Description of the Eastern Penitentiary of Pennsylvania* (Philadelphia, C.G. Childs, Engraver, 1830), frontispiece; and in McElwee, *op. cit.* Frontispiece. A bird's-eye view of this version is in *Description of Haviland's Design for the New Penitentiary now Erecting Near Philadelphia* (Philadelphia: Robert Desilver, 1824), end of pamphlet. Most plans which have been published are idealised, symmetrical versions of Cherry Hill. The one which most closely resembles the actual prison in 1836 is that contained in Frederic Demetz and G. Abel Blouet, *Rapports sur les penitenciers des Etats-Unis* (Paris: Imprimerie Royale, 1837), Part II, plate 23, opposite p. 61.
- ¹³ The style of the prison was a heavy Egyptoid instead of the Gothic of Cherry Hill. This was not imitated elsewhere. The original Haviland plan appears in Demetz and Blouet, *op. cit.* plate 31, p.68, and in Edouard Ducpetiaux, *Du progres de l'etat actuel de la reforme penitentiaire* (Bruxelles: Societe Belge de Librairie, 1838), Vol. III, plate 15. The only known printed plan of Haviland's Pittsburgh institution is in William Crawford, *Report on the Penitentiaries of the United States* (1835; reprinted Montclair, N.J.: Patterson Smith, 1969), plate 4, opposite p.15 of the Appendix.
- ¹⁴ There is some indication that Haviland regarded Trenton as an improvement over Cherry Hill and he once described it as his prison "most worthy of copying," according to a letter written to the French commissioners, Demetz and Blouet (*Haviland Papers*, Journal No. 3).
- ¹⁵ Estimates of the number of prisons and cells patterned after Pentonville vary, depending on the time the estimate was made and the type of institution included. An 1867 source sets the number of prisons at 145, with over 24,000 cells (Great Britain, Colonial



Office, *Prison Discipline in the Colonies. Digest and Summary of Information Respecting Prisons in the Colonies*, p. 65). An idea of the pace of construction can be derived from the statement of an early chairman of the Prison Commissioners that, within six years after the model prison was erected, fifty-four new prisons, with a total of 11,000 cells, were constructed after its general design (Edmund F. DuCane, *The Punishment and Prevention of Crime* (London: Macmillan & Co., 1885), p. 56).

¹⁶ Plans for most of these prisons can be found in Karl Krohne and R. Uber, *Die Strafenstalten und Gefangnisse in Preussen* (Berlin: Carl Heymann, 1901), Atlas, and a supplemental Atlas brought out in 1909.

¹⁷ Photographs of the construction of this modern example of the Cherry Hill plan appear in the annual reports of the Direccion General de Prisiones. See, for example, *La obra penitenciaria durante el ano 1950*, p. 272; the *Memoria* for 1952, pp. 153 and 163 *et seq.*; and also in the 1955 *Memoria*, pp. 199-201.

¹⁸ An excellent picture of Hungarian prisons can be obtained from a single source, which contains many plans and photographs; Etienne de Megyery, *Les institutions penitentiaires de la Hongrie* (Budapest: Ministere Royal Hongrois de la Justice, 1905).

¹⁹ These model plans were published by the government about 1860: Administration Generale des Prisons, *Recueil des projets de batiments penitentiaires* (n.d.). Many model plans were published during this period in Russia but few ever eventuated in prisons.

²⁰ In 1883 a disastrous fire at Hiroshima prison caused a temporary shift of policy to isolated parallel blocks, but after five years this was abandoned as too inconvenient, and radial plans were again used.

²¹ The writer is indebted to the Japanese Ministry of Justice, and especially Mr. Fujitaro Kusunoki, architect of the Bureau of Correction, for these details as well as a series of plans and data on other Japanese prisons. Details of only a few of these prisons have appeared in European language sources. Some material can be found, however, in Carl Krauss, "Das Straf- und Gefangniswesen in Japan," *Blatter fur Gefangniskunde*, XXX (1893), 165-204; and Georg Crusen, *Das heutige japanische Gefangniswesen* (Tokio: Druck der Hobunsha, 1902); and in Christophe Eckenstein, "Regard sur le systeme penitentiaire japonais," *Revue internationale de criminologie et police technique*, IX (January-March 1955), 28-40.

²² The plans for this and many other Chinese prisons can be found in *Chinese Prisons*, published by the Commission on Extraterritoriality, Peking, 1925. Further details on the Peking prison appear in China, Ministry of Justice, *The First Peking Prison*, translated by Chen chi, Chou tsuei chi, Lin shu ning and Woo tsing yu, Peking, 1916.

²³ Photographs appear in Bob Karolevitz, "New Thinking in Prison Construction," *Pacific Architect and Builder*, LXIII (June 1957), 21-22.

²⁴ James Elmes, *Hints for the Improvement of Prisons* (London: W. Bulmer & Co., 1817), pp. 14-15.

²⁵ *Book of Minutes of the Building Commissioners*, bound MSS. volume in archives of Eastern Penitentiary, Philadelphia, p. 115.

²⁶ Albert Gardner, "A Philadelphia Masterpiece, Haviland's Prison," *Metropolitan Museum of Art Bulletin* (December 1955), p.103.

²⁷ James V. Bennett has stated that only twelve of the 152 state penal establishments in the United States are less than fifty years old. (*Annals, American Academy of Political and Social Science*, Vol. 293 (May 1954), p.13). Only two have been built in England since the turn of the century and other national prison systems show similar patterns, with the exception of Spain and South American states.

