The Linear Plan for Insane Asylums in the United States before 1866

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The stately towers of insane asylums were once a common sight at the edge of American cities and towns. Nineteenth-century doctors believed that 80 percent of insanity cases were curable, if treated outside the home, in large-scale buildings that seem inhumane to modern viewers.[1] Ironically, these taxpayer-funded buildings, now dilapidated, demolished, or just depressing, once communicated a message of optimism and civic pride. In this article, I look at asylum buildings in the United States in order to demonstrate that psychiatrists considered the architecture of their hospitals, especially the planning, to be one of the most powerful tools for the treatment of the insane. My goal is to contribute to understanding the history of an idea that architectural historians sometimes take for granted: that the environment, including architecture, shapes behavior. In nineteenth-century America, diverse thinkers in a wide range of disciplines (architectural theorists, social reformers, urban planners, and doctors) believed that a person's immediate surroundings influenced his or her conduct. In the case of hospitals for the insane, doctors argued that the careful planning of the asylum might even cure a disease.

In arguing that these imposing structures served to legitimate ideas in psychiatry, I address a larger subject: how architecture manifests scientific knowledge.[2] With notable exceptions, mental hospitals have escaped the notice of architectural historians, who have written about few asylums other than the Buffalo State Hospital for the Insane, designed by H. H. Richardson with grounds by Frederick Law Olmsted.[3] Studies of the Buffalo State Hospital tend to place it not in the context of other nineteenth-century asylums, but in the line of development of Richardson's career. Richardson was not the only important architect who created asylums; indeed, the size, expense, and visibility of these public projects demanded experienced professionals, and therefore accomplished architects including John Notman, Samuel Sloan, Calvert Vaux, Thomas U. Walter, and Frederick Clarke Withers worked on asylum designs. I end the discussion around 1866, when a majority of the members of the Association of Medical Superintendents of American Institutions for the Insane (AMSAII) reneged on one of the group's founding principles. The members had originally agreed that in order for asylums to fulfill their therapeutic role, institutions should house no more than 250 patients, but in 1866 they amended the official regulations, allowing hospitals to house six hundred patients. This decision caused a definitive change in the building type, as did a challenge from within the organization that favored the so-called cottage plan. Rather than offer a complete biography of each hospital mentioned here, I will concentrate on significant alterations to the type, combining medical history with an account of design development. I will discuss "moral treatment" or "moral management"; the emergence of and variations on the linear-plan asylum; and the architectural responses to overcrowded hospitals.[4]

The history of psychiatry is fraught with controversy

and lively, sometimes bitter, debate. Unlike architectural historians, medical historians have written extensively about asylums, asking difficult questions about whether these institutions imprisoned or helped their inhabitants. Among the many detractors of asylum medicine, the French anti-Enlightenment philosopher Michel Foucault casts a particularly long shadow. In his compelling writings from the 1960s and '70s, Foucault proposed that many modern institutions (schools, hospitals, factories, prisons) worked to extend social control over deviant populations. He claimed that the birth and rise of the asylum was evidence of a massive confinement of people who were not sick but merely inconvenient; that the asylum imprisoned people via an all-powerful gaze, disenfranchised patients, falsely categorized them, and thus created the docile population demanded by the capitalism of Europe's emerging centralized states. Historian David Rothman has focused on the way in which asylums served to professionalize psychiatry, thus serving selfish needs of the burgeoning discipline. Sociologist Andrew Scull has closely analyzed class issues in order to better understand the "medicalization" of deviance and state intervention in the control of "problem populations."[5] Historian Gerald Grob's extensive writings on mental institutions in the U.S. take a balanced approach, noting the many faults of these ill-fated institutions while considering the aims of their reformist founders in the historical context of social policy development. In particular, Grob rejects the concept that mental illness exists merely as a social construction, concluding instead that most (although not all) institutionalized people suffered from some serious biological illness.[6]

The issues of class, politics, and social control are necessarily complex, and the introduction of architecture and visual material does nothing to simplify matters. With art historian Lynn Gamwell, historian Nancy Tomes compiled the impressive *Madness in America: Cultural and Medical Perceptions of Mental Illness before 1914* (Ithaca and Binghamton, 1995), which gathers rich visual documents and presents a learned historical interpretation, but does not address architecture. Tomes's earlier work, however, touches on many relevant questions for architectural historians. In her groundbreaking book on Thomas Story Kirkbride's Pennsylvania Hospital for the Insane, she examines patronage issues, provides plans, and queries the usual assumptions about the users of these buildings. Although it may be partly true that asylum keepers subjugated the poor, she also found that during the nineteenth century wealthy families committed disruptive family members, and as a result both private and public hospitals held patients of different social classes.[7]

Figure 1 Illustration from Charles Bell, *Anatomy and Philosophy of Expression as Connected with the Fine Arts,* 7th ed. (London, 1877), originally published as *Madness* (1806), 160

The Causes of Insanity

In the eighteenth century, the insane were faulted for their lack of faith, assumed to be forsaken by God, or accused of possession by the devil (Figure 1). This often-reproduced representation of a madman from a drawing instruction manual shows a manacled, shivering figure braced against a wall, which is, in fact, illustrative of the way many of the mentally ill were housed before the Enlightenment. They were chained to the walls of almshouses, kept in cages or holes in the ground. It was widely believed that they did not feel the cold, so they were not clothed or given blankets. By the early nineteenth century, asylum doctors were more likely to find nonreligious causes for insanity, looking for reasonable explanations for why so many patients were seemingly deprived of reason. The more compassionate outlook of Enlightenment reformers, however imperfect, did improve the lives of many insane patients.

In Daniel Hack Tuke and Charles Bucknill's *Manual of Psychological Medicine* (1858), we see a less beastly depiction of insane persons, categorized by type of illness (Figure 2). The categories used by most nineteenth-century hospitals were broad: patients were grouped roughly into five diagnoses—melancholia, mania, monomania, dementia, and idiocy.

Figure 2 Illustration from Daniel Hack Tuke and Charles Bucknill, *Manual of Psychological Medicine,* 3d ed. (London, 1874; originally published 1858). Although these diagnoses would be rejected by psychiatrists today, the fact that doctors attempted to categorize patients was a post-Enlightenment shift. The woman in the center was said to have "monomania of pride."

Psychiatrists attempted to link diagnoses to causes, but with limited success. In 1848, one doctor listed the causes for cases admitted to his hospital in that year: "Ill health, loss of property, intemperance, death of friends, religious excitement, deafness, abuse of husband, domestic trouble, apoplexy, epilepsy, death of lover, injury of head, insanity of wife, congenital, stroke of sun, Mormonism, meningitis, hard study, lawsuit, . . . false accusation, fright, and unknown."[8] This roster, typical of many nineteenth-century annual reports, defies modern medical logic. Physicians no longer consider epileptics or the hard-of-hearing to be insane, and for doctors to include those conditions as causes shows the common tendency for medical men to conflate sanity with normality. The doctors' concept of normality, of course, was a social construction based on their status in society and religious beliefs, and thus some of them saw "Mormonism" as a mental affliction, not a cultural choice or religious calling. Psychiatrists agreed that physical problems in the brain ("injury of head" and "congenital") caused mental illness, and although they did not conduct neurological research until later in the century, it was clear that head injuries caused erratic behavior.[9] Some theorists claimed that insanity was heritable and worsened with each succeeding generation; this dire interpretation coincides with the development of negative eugenics in the nineteenth century, the discouragement of the propagation of the genetically unfit. Importantly, especially for this study, many doctors believed that a harmful environment could contribute to mental illness. Doctors considered mental illness to be caused by both biological and environmental conditions, in varying degrees and depending on the patient's case history.

The Earliest American Lunatic Asylums

The Pennsylvania Hospital in center city Philadelphia was founded in 1752 primarily as a medical facility, but it maintained a separate custodial ward for insane patients. This was a mere row of cells in the basement, and the hospital staff did not base their care on reformist principles. They attempted to deplete the patients' bodily systems by causing them to bleed, blister, and vomit. Such harsh medical treatments were common. The first purpose-built, freestanding hospital for the insane in the U.S. was built in 1773 in Williamsburg, Virginia. Designed by leading Philadelphia builder-architect Robert Smith, the structure, known as the Public Hospital, did not have a specialized plan as later asylums did (Figure 3). Upon entering the building, visitors encountered a center hall, containing a stair and the keeper's one-room apartment. Double-loaded corridors with single cells flanked the hall. The second and third stories resembled the first, although above the keeper's apartment was a meeting room for the hospital's directors. To either side of the thin building were airing courts with high walls. The unpretentious structure could easily be mistaken for a college, a town hall, or an orphan asylum. Indeed, the Williamsburg asylum resembles two of Smith's other edifices: Nassau Hall at Princeton University and the Walnut Street Jail in Philadelphia.[10] (This lack of specificity concerning function is typical of the time, and does not suggest any meaningful associations between the three buildings' inhabitants.) The Williamsburg Public Hospital was not therapeutic but rather made provisions, in the language of the day, for the "maintenance and support of ideots [sic], lunatics, and other persons of unsound mind."[11] It was primarily a custodial institution.

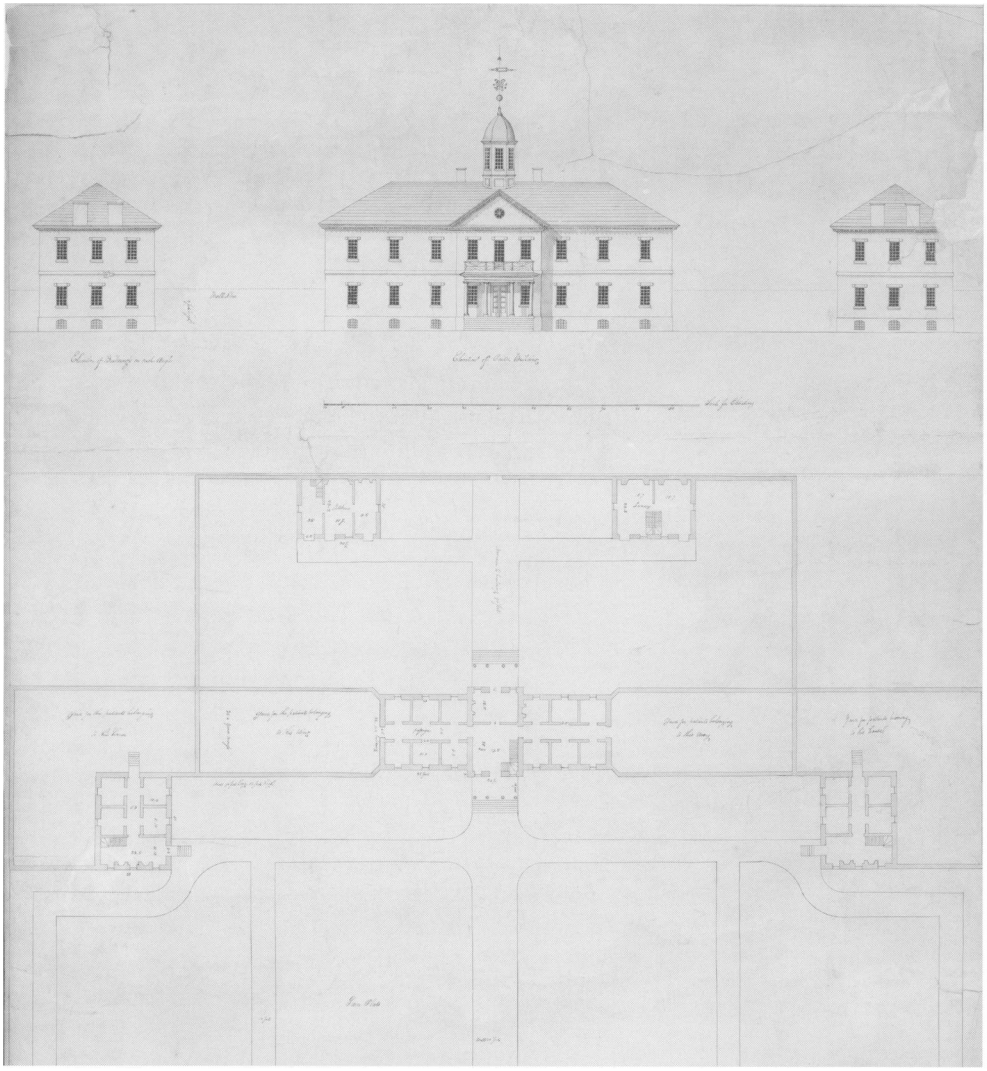

Figure 3 Robert Smith, Public Hospital, Williamsburg, Virginia, 1771–73. Plan and elevation, probably drawn by A. Dickie Galt, superintendent of Eastern State Hospital for the Insane (formerly Public Hospital)

The Moral Treatment

In the middle of the eighteenth century, the head physician at newly opened St. Luke's Hospital in London, William Battie, published his *Treatise on Madness*, which, according to one historian, contained the first statement that the asylum itself could be therapeutic.[12] Battie claimed that insanity was as curable as "many other distempers." He remarked in 1758: "Repeated experience has convinced me that confinement alone is often times sufficient, but always so necessary, that without it every method hitherto devised for the cure of Madness would be ineffectual."[13] By the time of the Enlightenment in Europe and Britain, reformers had already linked architectural space to psychiatry. One hundred years later, many doctors accepted without question the principle that patients needed a change of environment, and psychiatrists continued to hone the idea by adding specific details about the proper sites and plans for therapeutic asylums.

Moral treatment, or moral management, was the name given to supposedly curative techniques that emphasized a change of environment and attitude toward patients. The moral treatment required that patients, first of all, move to the asylum. The treatment also required that they change their daily habits—regular schedules were intended to make patients internalize self-control. Not surprisingly, the spaces within hospitals and the circulation patterns reflected and reinforced this control. Patients would live a regimented life, eat healthy food, get exercise, avoid the vice-ridden city, and visit daily with the superintendent or his wife, the official matron of the institution. Additional principles were that patients should be unchained, granted respect, encouraged to perform occupational tasks (such as farming, car-

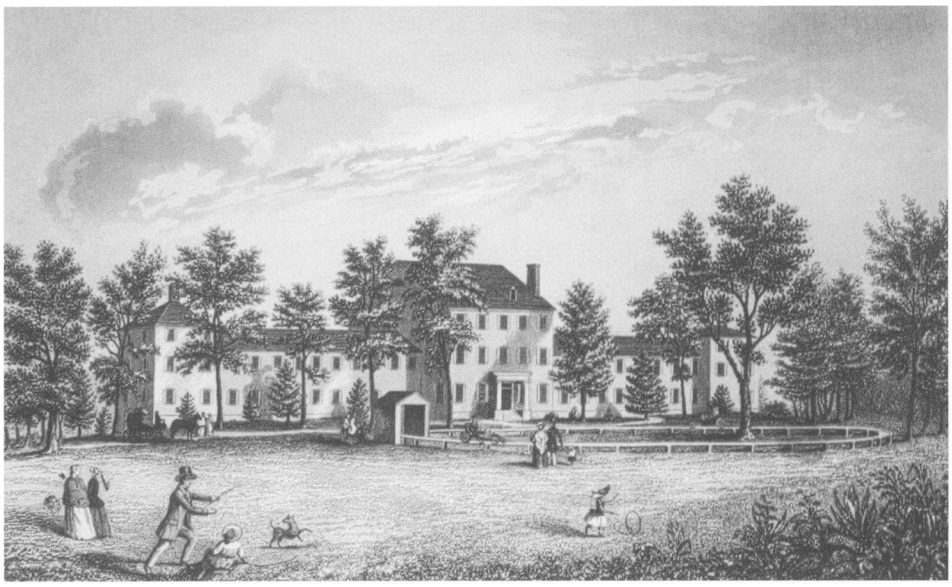

Figure 4 Friends Asylum, Frankford, outside Philadelphia. From Robert Waln, *An Account of the Asylum for the Insane Established by the Society of Friends near Frankford in the Vicinity of Philadelphia* (Philadelphia, 1825). This private asylum for Quakers was the first institution in the U.S. to emphasize the moral treatment of the insane.

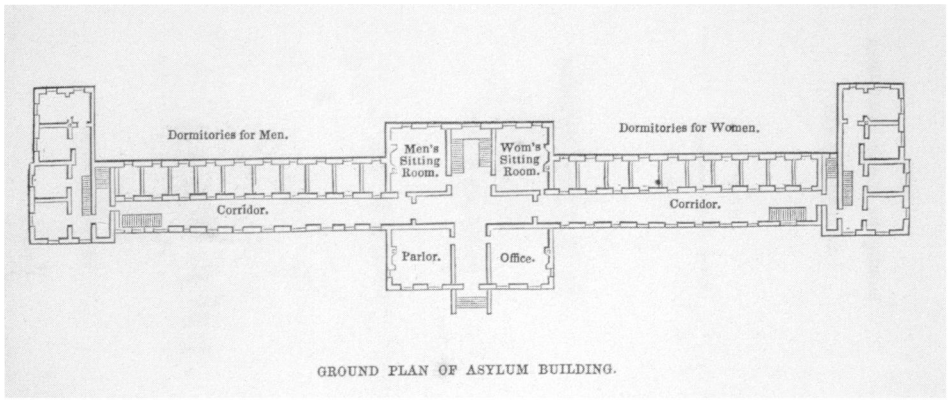

Figure 5 Friends Asylum, plan. From Waln, *An Account of the Asylum for the Insane Established by the Society of Friends near Frankford in the Vicinity of Philadelphia*

pentry, or laundry), and allowed to stroll the grounds with an attendant. Early-nineteenth-century American doctors, many of them Quakers, believed patients were inherently good, despite their outward behavior, and they offered the mentally ill the promise of return to society after a stay in the purpose-built asylum. Historians Tomes and Gamwell define the term by explaining that "moral," meaning emotional or spiritual, should be contrasted with "material."[14] Despite the powerful shift toward moral treatment in nineteenth-century America, all the doctors mentioned in this article used medical treatments as well. They typically gave opiates, warm baths, cold baths, and an arsenal of laxatives.

Scholars usually credit the transatlantic community of Quakers with bringing the moral treatment to the United States.[15] British Quaker merchant and doctor William Tuke, famous for rejecting mechanical restraints (chains and straitjackets), founded the York Retreat in England in 1792; he set it up in a building that resembled a modest family farm. In 1811, Samuel Tuke (William's grandson) corresponded with some "American Friends" about starting an asylum based on the York Retreat, and a lengthier description of benevolent moral management appeared in Tuke's *Description of the Retreat at York* in 1813. The Friends' Asylum in Frankford, outside Philadelphia, brought to the U.S. the supposed promise of the new system based on ease of movement and limited use of harsh medical treatments like bleeding and blistering. Founded in 1817, the Friends' Asylum was a linear-plan structure with a central houselike building and two ranges of rooms to either side along single-loaded corridors. It accommodated about sixty patients (Figures 4, 5). Men lived on one side of the central building; women on the other. The central building housed male and female parlors, a reception room, and an office. The keepers were particularly proud of the light, airy atmosphere, since proper ventilation was considered absolutely critical for both psychological and bodily care: "The free admis-

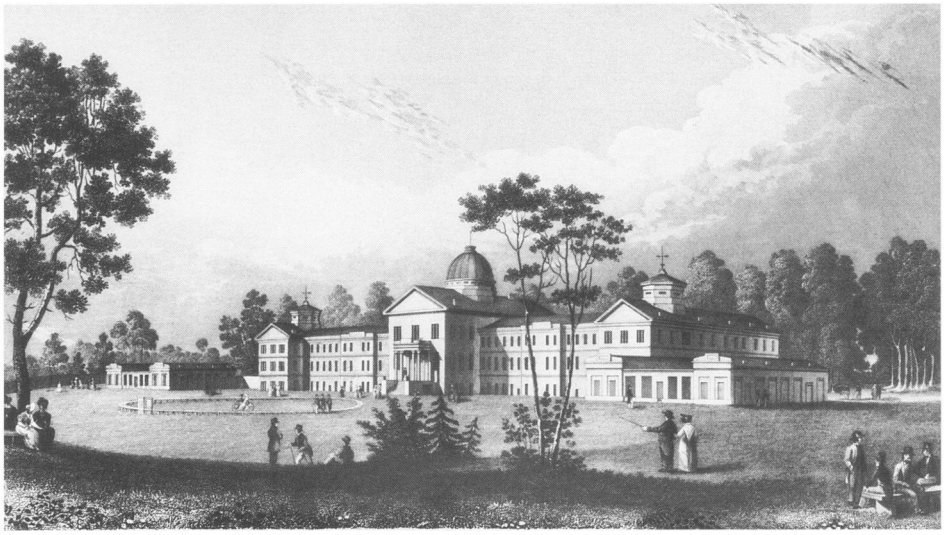

Figure 6 Isaac Holden and Samuel Sloan, Pennsylvania Hospital for the Insane, first hospital on West Philadelphia site, 1841. Kirkbride's first institutional home, this hospital was built on a narrow site. When a second, similar hospital was constructed facing this one, women were housed here and men in the new building.

sion of light and air . . . , [and] their influence on organic and inorganic bodies, requires no elucidation. The free circulation of air, the great supporter of life, is of primary importance;—without proper ventilation, the resources of medicine may be developed in vain; the miserable sufferers are suffocated in the effluvia of their own bodies, and [a] long train of physical evils are added to their mental miseries."[16] This near-obsession with ventilation may be found in almost all written works about hospital construction, reflecting the widely held miasma theory of contagion, the medical assumption that noxious exhalations from other humans polluted the air and caused disease.

While moral management could, with difficulty, be employed in an old mansion or adapted almshouse, this scenario was considered a sad compromise. Old buildings had neither proper ventilation nor the orderly arrangement of rooms that were expected of new asylums. A few doctors employed the moral treatment in preexisting buildings, but as they refined their needs, the professional society of superintendents began to argue for purpose-built structures that would serve the patients and staff. Once Americans had new asylums to work in, they rejected European asylums for being eccentric old structures. The American doctor Pliny Earle visited many European asylums in 1839, and condemned all the old buildings he visited. He particularly disliked former almshouses and old hospitals, such as the Salpêtrière[17] and Charenton in France, but he also objected to the palazzi and monasteries of Italy. And he wrote of the asylum at Malta: "The building is old, and as an almost necessary consequence, very incommodious for the present method of treatment."[18]

Dr. Thomas S. Kirkbride

If old buildings could not be adaptively reused, then new ones had to be built. Dr. Thomas S. Kirkbride (1809–1883), a physician and member of the Society of Friends, believed fervently that establishing a new building type was essential for the moral treatment and thus for the new cure. According to him, institutionalization, separating the patient from his or her family, was an unfortunate demand of the cure. Insanity simply could not be treated anywhere other than in an institution:

> Most other diseases may be managed at home. Even with the most indigent, when laboring under ordinary sickness, the aid of the benevolent may supply all their wants, and furnish everything requisite for their comfort and recovery at their own humble abodes. It is not so, however, with insanity; for the universal experience is that a large majority of all such cases can be treated most successfully among strangers, and . . . only in institutions specially provided for the management of this class of diseases. It is among the most painful features of insanity, that in its treatment, so many are compelled to leave their families.[19]

One of Kirkbride's like-minded colleagues, Dr. Horace Buttolph (1806–1898), also assumed that the home contributed to the patient's illness, evidence of his belief that the environment influenced behavior. He wrote: "The removal of a person from home and the associations with which their excited, depressed or perverted feelings have arisen, is often nearly all that is required to restore the healthy balance of the faculties."[20] Nineteenth-century asylums must be understood in light of the supposedly high rate of curability. The cure could not exist outside its architectural framework.

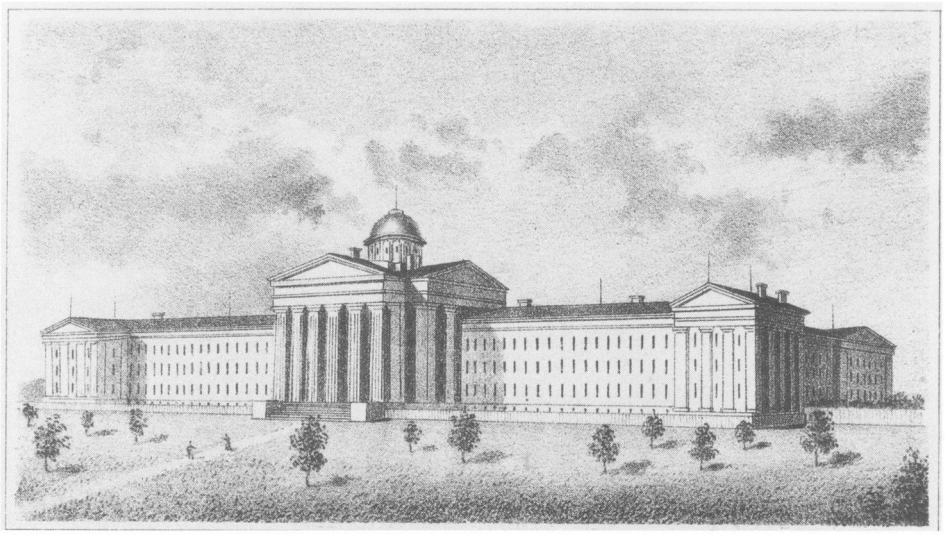

Figure 7 William Clarke, New York State Lunatic Asylum, Utica, 1844

Kirkbride presided over the private Pennsylvania Hospital for the Insane, a long thin structure sited at 49th and Haverford Streets in West Philadelphia, then a mixed rural and industrial area (Figure 6). While historians have tended to regard this edifice as illustrative of Kirkbride's theories, the exemplification is erroneous—Tomes clearly explains that the first hospital for the insane on the West Philadelphia site was put up before Kirkbride was hired.[21] The English architect Isaac Holden began construction, but the building was completed by Samuel Sloan (1815–1884). Young and opportunistic, Sloan worked as journeyman carpenter on the Eastern State Penitentiary and the Blockley Almshouse, both in Philadelphia, in the 1830s, and he was employed by Holden in 1838 when the Englishman returned to his native country. At the time, the new asylum was only half done. Sloan finished the structure in 1841, topping the central administrative building with a lantern, flanking it with three-story pavilions, and marking each pavilion with its own smaller lantern.

The New York State Lunatic Asylum in Utica

Kirkbride was one of the thirteen founding members of the AMSAII, as was Amariah Brigham, the superintendent of the New York State Lunatic Asylum in Utica, another of the early asylums built to accommodate the moral treatment. While Kirkbride's Pennsylvania Hospital was private, with patients who paid a range of fees, the Utica asylum was state funded. Indigent patients were moved there from almshouses and prisons, and they did not pay. Some upper-class patients might also have been housed there, and they would have been charged a nominal fee for their medical care. The asylum was designed by William Clarke, apparently not an architect but rather the chairman of the board of trustees, and its imposing façade captured architectural historian Henry-Russell Hitchcock's patriotic eye: "No European edifice has a grander Greek Doric portico than that which dominates the tremendous four-storey front block of the Lunatic Asylum in Utica"[22] (Figures 7, 8). The façade, parallel to the street, presented unrelenting ranks of windows. The portico was placed in front of the director's offices and the parlors for families. At the rear of the main building were porches that looked into the courtyard, which formed the center of the quadrangular plan. Here, too, the main pavilion separated the two sexes. Patient rooms lined the double-loaded front halls and the single-loaded side halls; dining rooms halfway down the corridors broke up the rows of rooms. Attendants had to walk through the dining rooms to get to the patients on the far side. Commonly, there were chapels in asylums, usually located on an upper level of the main building—the fourth floor, in this case. As in most asylums, some patients had single rooms, while others shared theirs.[23] The rear wing of the quadrangle contained services such as the laundry, bakery, and shops. The earliest prints of the grounds at Utica show an empty field with a drive that aims straight for the temple-fronted center entrance. In 1842, the asylum's managers asked America's foremost landscape designer, Andrew Jackson Downing, to improve their property, making it "as beautiful as the most cultivated and refined taste could desire."[24] Downing produced two designs, one curvilinear and the other (the choice of the managers) axial, with grand elms lining the driveway (Figure 9). He added plantings around the edges of the site to soften the effect of the tree-lined

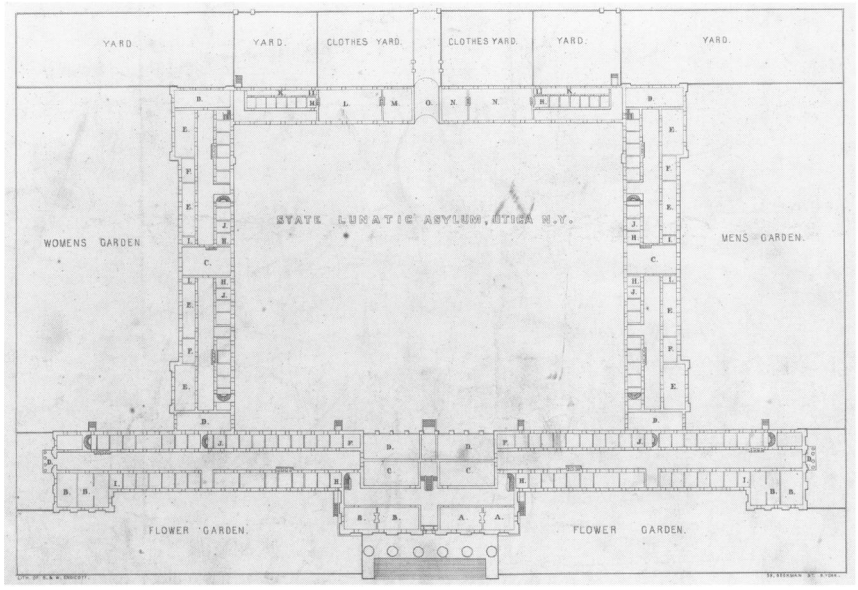

Figure 8 William Clarke, New York State Lunatic Asylum, plan

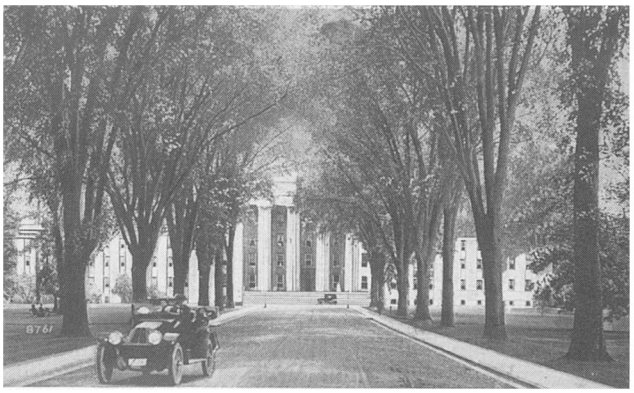

Figure 9 William Clarke, New York State Lunatic Asylum, postcard ca. 1920 showing the allée of elm trees as designed by Downing

drive.[25] The commanding hospital was among the largest buildings in upstate New York. Nonetheless, the Utica hospital did not leave much of a legacy—Kirkbride did not favor this quadrangular plan. From his publications we know he preferred shorter wards, a greater separation of the sexes, and an unfettered view of the landscape.

Given that the Pennsylvania Hospital for the Insane was constructed on a narrow site before Kirkbride arrived, it was not the primary model in his influential 1854 book, *On the Construction, Organization, and General Arrangements of Hospitals for the Insane*, although he did illustrate it.[26] In this important instruction manual, which served medical men and architects for decades, he illustrated his general principles with a sample structure, referred to simply as A Hospital on the Linear Plan (Figures 10, 11). As Harold Cooledge has pointed out, Sloan almost certainly made the drawings.[27] More important, the drawing of the unnamed hospital was modeled on the Alabama Insane Hospital in Tuscaloosa, designed by Sloan in 1852, with only minor variations in fenestration differentiating the two (Figure 12).[28]

Kirkbride's plan was bilaterally symmetrical and consisted of a central building with flanking pavilions set back *en échelon*, like a row of birds in flight. Pavilions were to be no more than three stories and short enough that a breeze would carry fresh air through the wards. The setback scheme would assist in placing the patients according to severity of disease, with the noisiest ones farthest from the center. Kirkbride's book offered much advice on heating, ventilation, and sewage removal, and he strongly advocated the use of stone or brick to prevent fires. Some of his recommendations—short wards for ventilation, fireproof materials, and separation of the sexes—could be found in well-designed contemporary medical hospitals, orphanages, workhouses, schools, and prisons.

It was the shallow V-shape of Kirkbride's ideal plan, which was first constructed in Trenton, New Jersey, in 1848, that distinguished it from other institutional building types. Contemporary British and American medical hospitals relied on pavilions for better ventilation, but did not adopt the subtle setback Kirkbride preferred. Many British alienists favored short wards over long corridors for insane hospitals, and quite commonly asylums incorporated pavilions in a grid or cross, but did not use the distinctive shallow V.[29] In the United States, the setback linear plan became standard. *On the Construction . . . of Hospitals for the Insane* soon became enormously influential, spawning at least thirty Kirkbride-plan asylums in the U.S. before 1866, and approximately seventy by 1890.[30]

In common parlance, a ward was one floor of one pavil-

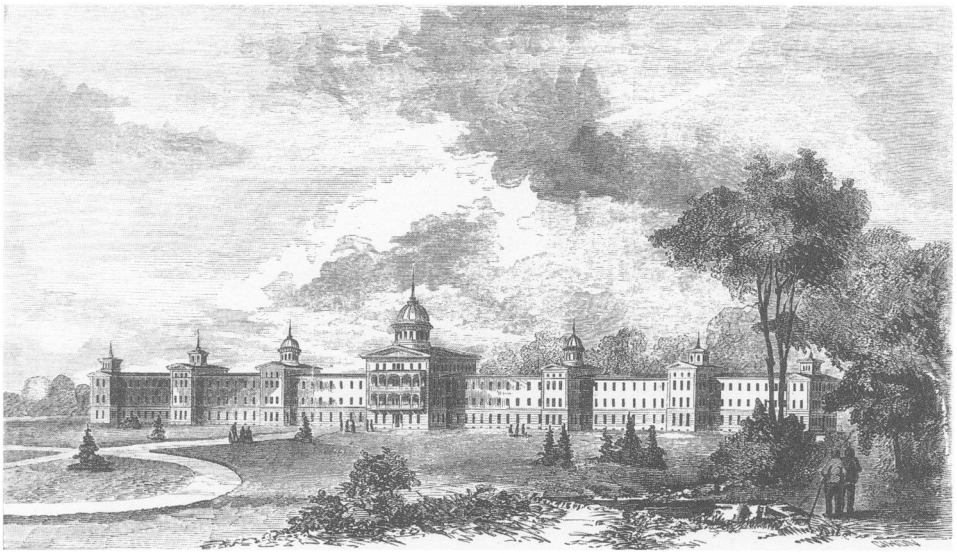

Figure 10 A Hospital on the Linear Plan, from Kirkbride, *On the Construction, Organization, and General Arrangements of Hospitals for the Insane* (Philadelphia, 1854), drawing attributed to Samuel Sloan. This prototype illustrates the main principles of the Kirkbride, or linear, plan, which included short wards for ventilation and patient classification, and a central pavilion, which housed the superintendent's dwelling and other spaces. The ideal hospital was set within a landscape garden and limited to 250 patients.

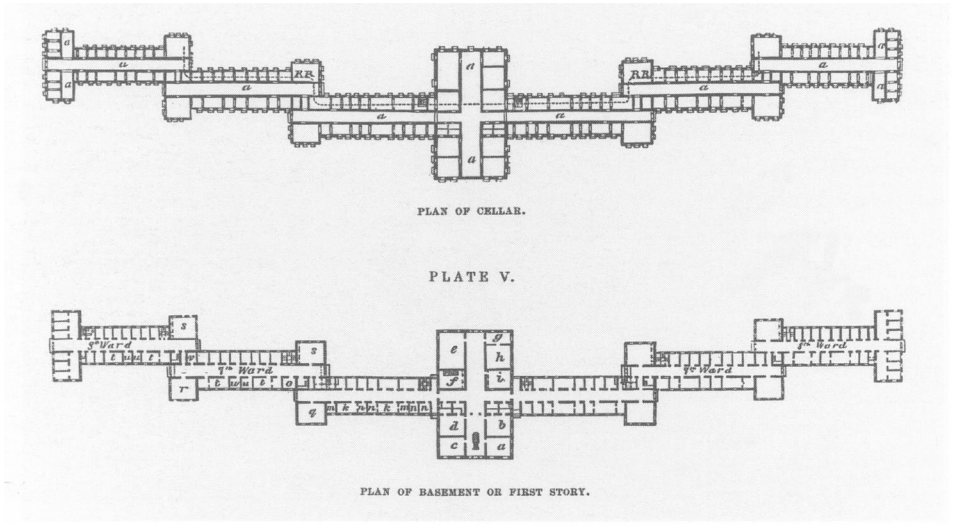

Figure 11 A Hospital on the Linear Plan, from Kirkbride, *On the Construction, Organization, and General Arrangements of Hospitals for the Insane*, plan of cellar (top) and first floor. The drawing is attributed to Samuel Sloan.

ion; a pavilion or wing was usually three stories high and thus housed three wards. A ward included bedrooms, day rooms, parlor, dining room, clothes room, bathtub room, water closet, laundry chute, and rooms for two attendants.[31] The bedrooms, also called dormitories, held between one and eight beds, and were used for sleeping only.[32] Medical treatments took place on the ward, or in the bathing room, which was sometimes called the hydrotherapy room because supposedly medicinal water treatments were performed there. (These buildings did not have operating theaters; operations were not performed on mentally ill patients until the prefrontal lobotomy was introduced in the 1930s.) The patients' daily lives were controlled and simple: early to bed and early to rise was an asylum rule. They awoke around 5 A.M., ate breakfast in the dining room at 6 A.M., and awaited the superintendent's rounds, which began at 8 A.M. In the morning, they spent "a couple of hours" outside.[33] Attendants took patients outside whenever weather allowed. Inside the asylum, patients spent daytime hours in the day rooms or the ward hallways, but never in their bedrooms. One early photograph shows a ward at Tuscaloosa looking rather long and dark in spite of doctors' claims to the contrary (Figure 13). When family visitors came, they did not meet patients on the wards, but rather in parlors in the central hall, called the center main. Thus the experience of the building was very different for patients, who stayed on the wards, except for visits; visitors, who stayed in the center main; and the superintendent and matron, who moved throughout the linear building. After lunch, middle-class patients (lawyers and businessmen) read and played games, while working-class patients worked on the farm or in the print shop.[34] They ate dinner in the early evening, and retired to bed at 9:30 P.M. Medicines and hydrotherapy were administered in the morning after breakfast or at night after

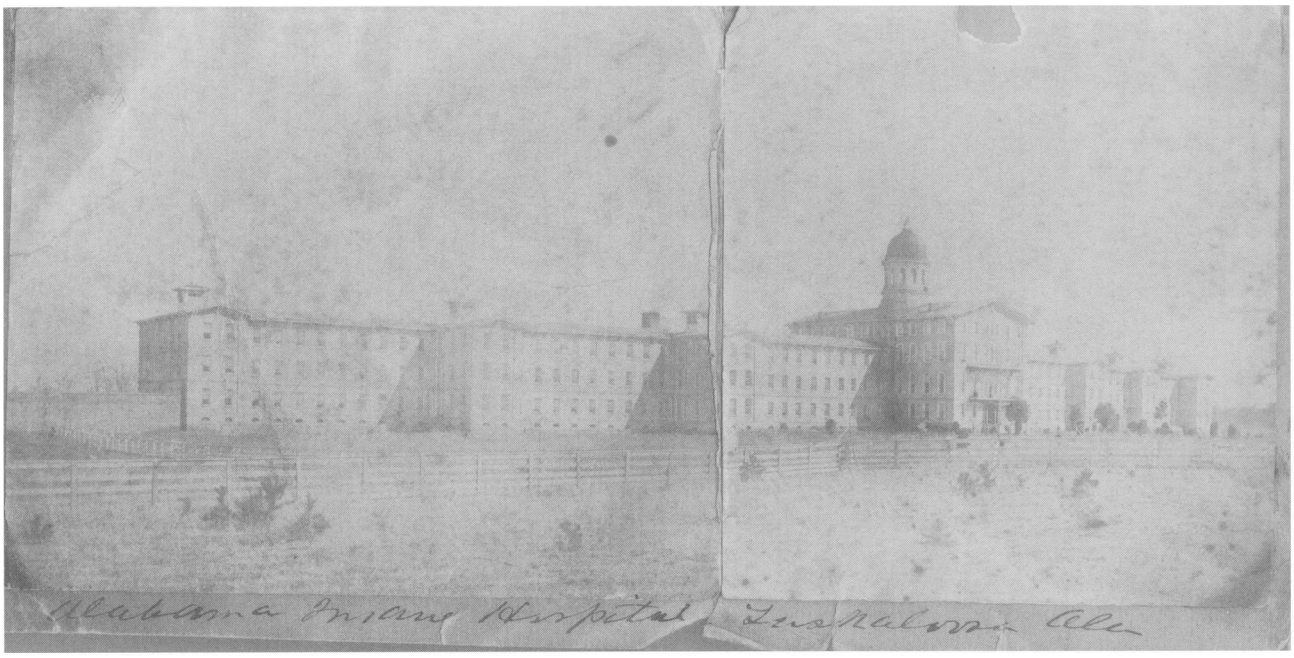

Figure 12 Samuel Sloan, Alabama State Hospital for the Insane (now Bryce's Hospital), Tuscaloosa, 1852–60. The photograph shows the hospital before later alterations were made.

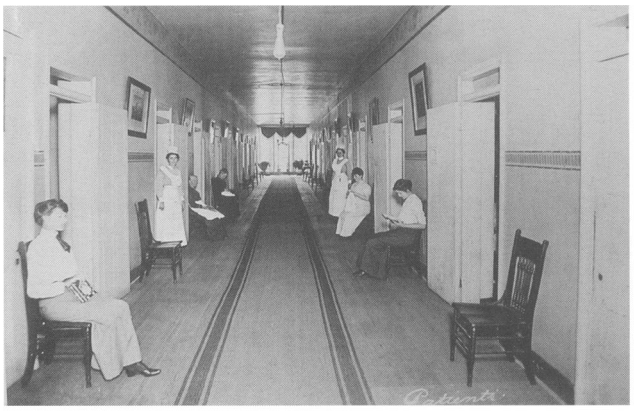

Figure 13 Samuel Sloan, Alabama State Hospital for the Insane, patients' corridor and ward. The photograph shows the length of a typical ward. Patients spent most of their time in common rooms and hallways, not in bedrooms, which were used exclusively for sleeping.

dinner. Doctors moved from one ward to the next, on all three stories. The tight corners and narrow connections between the wards would not have affected anyone other than the doctor and matron, because patients and nurses stayed on the wards.[35]

The center building of a linear-plan asylum marked the division between male and female patients. It is no surprise that this segregation was also common to almshouses and medical hospitals, given cultural inhibitions about the body and the ambition (on the part of the keepers, if not the inmates) to thwart sexual contact. The approach suggests that one particular gender-related concept was built into the plan itself: that insanity afflicts men and women in equal numbers. Many people assume that there were more women than men in asylums, not only because of the widespread Victorian opinion of women's fragile intellect, but also due to a few tragic, attention-grabbing cases in which husbands committed their wives.[36] But as Grob explains, "Commitment rates did not vary by sex; there is little or no evidence to suggest that women were more likely to be committed than males"; Scull concurs.[37] Doctors considered the question, and one typical conclusion was that "there is but little difference in the gross number of the sexes. As classes they seem about equally subject to this malady." This expert explained that more men die of insanity than women, because "epilepsy, palsy, and masturbation are more frequent causes among men, and are among the most incurable cases." He continued:

> Men are more intemperate, which is well known to be one of the most prolific causes of insanity, its victims being in proportion of about four men to one woman. More men are engaged in hazardous enterprises and doubtful business speculations, in gambling and other dissipation, more subject to disappoint-

ment and failure in business operations, more use their brains excessively in study, in scientific investigations and ambitious projects, and more are liable to ordinary accidents and casualties and exposures of war. On the contrary, domestic trials, ill health, loss of relatives, and disappointments in love act more powerfully on women, while a few other causes belonging to peculiarities of the organism affect them only. We must conclude therefore that the liability of the excess to insanity is very nearly equal.[38]

The fact that there were equal numbers of male and female inmates was built into the fabric of every Kirkbride-plan asylum. Scholars of the Victorian period will recognize these categories: failures in the man's sphere ("disappointment in business operations") and the woman's sphere ("domestic trials") shaped the doctor's formulation. Like much else about asylum life, the values of nineteenth-century America were reflected in the lives of the patients and the assumptions of the doctors.

The advantages of the shallow V are best illustrated by comparing it to other plans: the radial, the quadrangle, the U-shaped, and the E-shaped. To begin, the radial plan would have called to mind America's most famous prison, possibly its most famous building—John Haviland's Eastern State Penitentiary in Kirkbride's home city, Philadelphia. Given that Kirkbride maintained that "everything prison-like should be avoided," he may have had an aversion to the radial shape. Kirkbride wrote that walls surrounding a hospital should be "completely out of view from the building" or "sunk in an artificial trench, thus to prevent its being an unpleasant feature or [giving] the idea of a prison enclosure."[39] Radial plans present other more basic problems: they create an awkward constriction toward the center, where the spokes of the wheel collide, making it difficult for light and air to enter every interior space equally. This may seem a minor complaint, but doctors took ventilation very seriously. Although the radial plan was used occasionally in England,[40] it did not allow the most thorough classification of patients—in a pinwheel arrangement, one could not separate the most deranged patients from the quieter ones except by a wedge-shaped airing court. (In a long, thin asylum, the noisiest patients were placed farthest not only from the administrative offices but also from the doctor's apartments.) The quadrangle, U-shaped, and E-shaped also pressed in against the superintendent's home, but at least they offered reasonable chances for ventilation and classification. Unless these types used entirely single loaded corridors with day rooms on the exterior, they would have had many rooms with poor views of the landscape.

Therapy in Nature

To Victorian asylum builders, the countryside was an unquestionable good: God's chosen people lived close to the land, and the insane would benefit from bucolic settings. Each asylum was surrounded by acres of picturesque gardens. What kept patients from wandering off or escaping? Kirkbride had an optimistic answer: "A live wall,—a body of well instructed, judicious attendants."[41] Kirkbride's linear-plan asylums by definition sprawled across their generous sites, thus using a larger amount of land than did quadrangular arrangements. The asylum at Utica and the E-shaped Butler Hospital in Providence, Rhode Island, covered less ground and provided inescapable exterior areas by virtue of their fenced-in courtyards.[42] Similarly, radial plans might occupy less land but resulted in restricted views, especially for the rooms toward the center of the wheel. Patients were meant to look out from the day rooms at soothing vistas, which offered greater psychological benefits than a limited view across a courtyard or triangular airing court, toward another wing of their own asylum, dotted with little windows of other inmates. Kirkbride and his brethren in asylum medicine required that asylums be built on the outskirts of a city, so that they would fade literally into the distance and metaphorically in the patients' memories.

Given the focus on landscape, the site of a hospital for the insane was integral to the success of its project: There was simply no reason to spend state funds on a building that was not in a handsome location, because the natural environment was essential to the cure (Figures 14, 15). Buttolph, the superintendent of the New Jersey State Lunatic Asylum in Trenton, boasted about the facility's site: "Reposing in the midst of the most beautiful scenery in the valley of the Delaware, combining all the influences which human art and skill can command to bless, soothe, and restore the wandering intellects that are gathered in its bosom, the state may proudly point to this asylum, as a noble illustration of that charity, which, borne from above, diffuses itself in blessings of the poor and unfortunate."[43] The natural setting received significant human intervention from Downing, who designed the parklike surroundings for the Trenton asylum in 1848. His national reputation had grown considerably in the years since he worked on the grounds for Utica, where Buttolph had served as assistant physician. In Downing's extensive writings, he promoted the simplicity of rural life. He sympathized with the plight of the insane, assuming that the pressures of capitalism led to their demise. As Downing observed in 1848: "Many a fine intellect, overtasked and wrecked in the too ardent pursuit of power or wealth, is fondly courted back to reason, and more quiet joys, by the dusky, cool walks of the asylum, where peace and rural beauty do not refuse to dwell."[44]

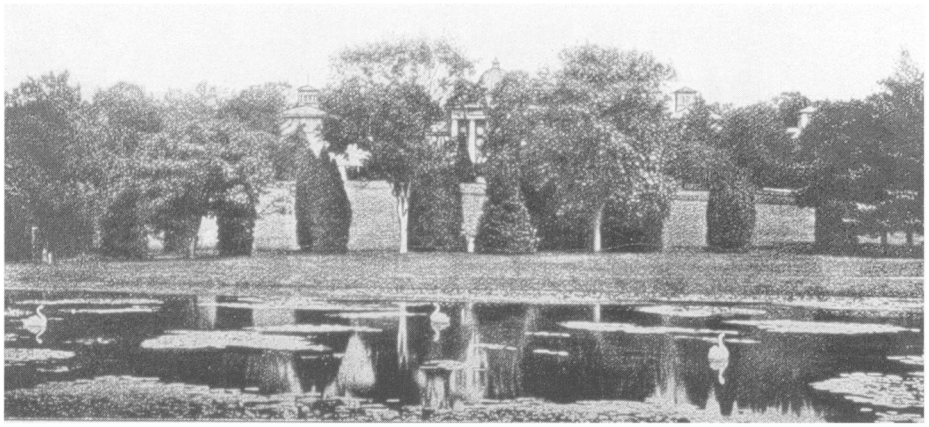

Figure 14 The grounds of the New Jersey State Lunatic Asylum, Trenton, photographed in 1907. View looking past the pond, offering a glimpse of Notman's portico and dome

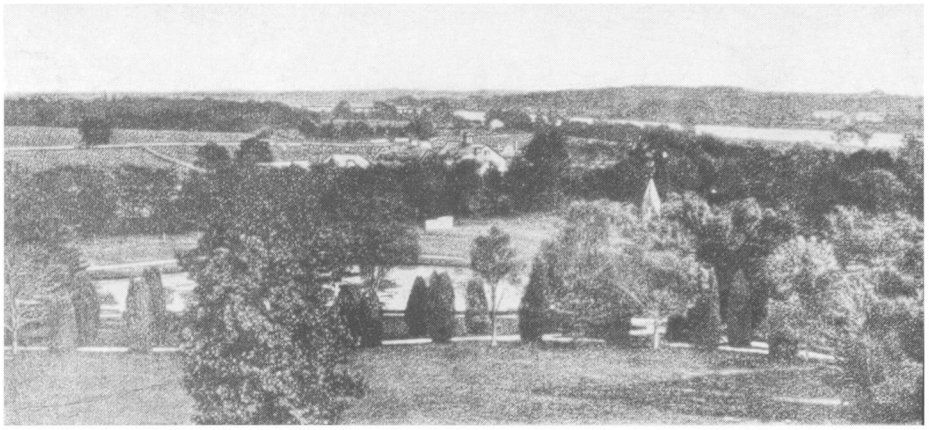

Figure 15 The grounds of the New Jersey State Lunatic Asylum, photographed in 1907. This shot shows the opposite view from that in Figure 14; the photographer stood on the front porch looking down the slope of the lawn to the pond. The Delaware River is visible in the distance.

The difference between asylum life and "the crowded street or lane" was also noted by an Anglican reverend who wrote the sermon "Made Whole: A Parting Address to Convalescents on Leaving an Asylum," in which he tells the recently recovered mental patients: "Let me now suggest a few plain rules for the preservation of your health. . . . Pure water and fresh air are great friends of health. Living, as perhaps you do, in a crowded street or lane, you may not be able to get much of either. Anyhow, let into your house as much air as you can, and use water freely."[45]

Downing's deep love of rural land and distrust of the city perfectly matched the values of asylum personnel. Of course, Downing might have disliked the way the New Jersey hospital's boxy symmetrical building contradicted the curving walkways that meandered through his landscape.[46] But he could at least commend the structure for being made of rough-cut local stone and thus clearly connected to its site. As landscape historian Kenneth Hawkins has noted, the earliest picturesque grounds of insane asylums predate the great public park movement in the United States.[47] Lunacy reformers (as they were called) and park enthusiasts shared many beliefs: that human behavior could be explained by environmental factors, nature was curative, exercise therapeutic, and cities a drain on the psyche.

Downing, and before him, Thomas Jefferson, idealized living close to the land—a mythologizing of country life that dates back to Virgil. The general concept that a change of environment would bring about an improved psychological state has a long history, which encompasses Roman villas, Palladian houses, and Jefferson's reinterpretation of both traditions. Architectural historians hardly need be reminded that villas were seen as antidotes to the harsh, unhygienic city. As James Ackerman has written: "The villa cannot be understood apart from the city; it exists not to fulfill autonomous functions but to provide a counterbalance to urban values and accommodations." He continues, emphasizing the essentially psychological component of a home in the country: "The basic program of the villa has remained unchanged for more than two thousand years since it was first fixed by the patricians of ancient Rome. . . . The villa has remained substantially the same because it fills a need that never alters, a need which . . . is not material but psychological and ideological."[48] Much the same can be said for the nineteenth-century asylum: that it

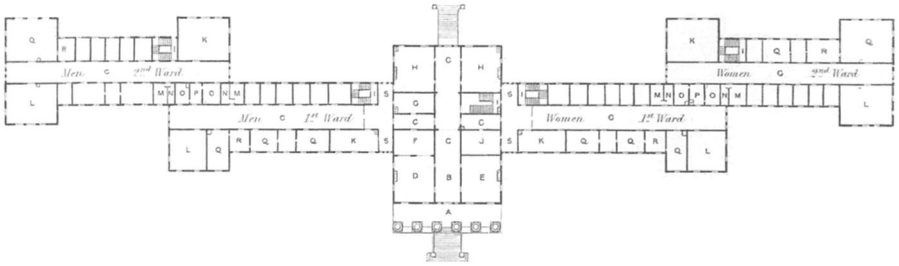

Figure 16 John Notman, New Jersey State Lunatic Asylum, 1848, first plan, showing two wings on either side of the central pavilion

existed in counterbalance to urban values, and that it filled a need that was largely psychological, offering benefits to both the healthy and the sick.

The New Jersey State Lunatic Asylum

The New Jersey State Lunatic Asylum was recognized by other doctors for its charming site and its carefully planned building. Although its superintendent, Buttolph, is underrepresented in the history of asylums, he penned an architectural article, "Modern Asylums," in April 1847, which pronounced, less dogmatically, many of the same theories as Kirkbride's later publications.[49] Far better known, Buttolph's associate Dorothea Dix (1802–1887), a charity reformer who traveled across the United States in order to report on the desperate situation of almshouses and prisons, spearheaded the effort to establish a state mental hospital in New Jersey. She effectively coerced legislators in several states into funding asylums for the mentally ill. Generally, her appeals to state legislatures were full of emotional descriptions of the conditions of dehumanized, pauper lunatics shivering in the cold of foul-smelling dangerous almshouses. Her entreaties on behalf of "those who . . . are incapable of pleading their own cause" convinced many lawmakers. As Dix's biographer David Gollaher writes, "If the New Jersey legislature needed a portent to influence its deliberations, the week after [State Senator Joseph S.] Dodd presented her memorial, a large poorhouse burned to the ground."[50] No one died in the fire, but it served to illustrate that old buildings were unsafe and could not be adapted to this new purpose; since the moral treatment required a changed setting anyway, a new building was the only way to house the nascent reform institution.

Although Kirkbride never worked there, the New Jersey State Lunatic Asylum (now the Trenton Psychiatric Hospital) was the first shallow-V-plan asylum in the U.S. (Figure 16). As architectural historian Constance Greiff has noted, state officials were impressed by the redesign and enlargement of the New Jersey State House by the well-educated Scotsman John Notman (1810–1865), which encouraged them to select him for the state hospital in 1847; therefore, Notman had been hired by the Commission to Build the Lunatic Asylum (in New Jersey) long before Kirkbride's publication of the ideal linear hospital (based on Sloan's building in Tuscaloosa) in 1854.[51] Notman's plan of the Trenton hospital was included in an 1848 issue of the professional publication of asylum doctors, the *American Journal of Insanity*. Thus Kirkbride's debt to Notman's scheme was no secret among American doctors at the time. Kirkbride himself later stated: "The general features of the first linear plan which has been described, were originally prepared by the writer [Kirkbride, referring to himself] at the request of the commissioners for putting up a State Hospital for the Insane in New Jersey, and the designs for that building were made from sketches at that time furnished to its architect."[52]

Notman's dignified neoclassical design for Trenton's central pavilion was more in keeping with high architectural taste than the projecting iron balconies of Sloan's sample asylum (Figure 17). The pavilion originally housed the superintendent and his family, in addition to public parlors and a chapel. The sheer size of the building, the use of stone rather than wood, and the formality of the entrance suggested the stability of a state institution. Notman described the monumental structure's style as Tuscan: "The exterior will be in the simplest style of architecture. A Tuscan portico of six columns marks the centre and entrance. A boldly projecting cornice of the same style will be continued around the whole. . . . its architectur[al] effect will be good, from its great size, the well-arranged advancing and receding disposition of the wings, the variety in height, and the fine proportions of the several masses of the building."[53] The Trenton asylum was intended to house 250 patients, which was considered a small enough population so that the superintendent could visit all the male patients while his wife visited all the female patients daily—a simple version of talk therapy.[54] In plan, the central pavilion stood prominently in advance of two setback three-story wings.

Figure 17 John Notman, New Jersey State Lunatic Asylum, central pavilion (dome and temple front), now demolished; the wings remain standing

Within two years of the completion of the building, Buttolph asked the legislators for additional support. A few years later he succeeded in his efforts, and the state contributed funds to extend the hospital by adding a pavilion to each end. Sloan managed the job. Kirkbride valued the fact that the plan, with its discrete wards, made expansion obvious and construction easy. There was no question about where to place the new wings—they were anticipated by the principles of the linear plan. And entire wings could be built without disrupting life in the existing building. But the ominous fact that it was already overcrowded after just two years prefigured the decline of these buildings in the late nineteenth century, the failure of the cure, and, by extension, the collapse of the entire profession of asylum medicine.

Notman's Tuscan temple, with its massive stone walls, was decidedly undomestic. I argue that in the first half of the nineteenth century this anti-homelike quality was intentional, because it was widely believed that a marked change of environment was good for patients. As one doctor put it: "All persons who have managed lunatics advise removal from the home."[55] Many of the patients would have come from small, cramped, dark urban row houses; others from old farmhouses; even the upper-class patients lived in Victorian houses comprised of many small rooms. These home environments would have contrasted with the long corridors and large day rooms of the asylums. Even for paupers moving to a hospital from an almshouse or prison, the clarity of the linear plan was unlike any space they had known.

The difference between home and institution was most obvious in the planning and spatial arrangements, but the language, furniture, and activities in the asylum told a slightly different story. First, the superintendent and his wife lived in the center main as if they were substitute parents, and doctors often referred to the institution as "the house." The furnishings in some hospitals recalled the parlors of upper-class homes; occasionally, local philanthropists would donate pianos, for example. The pastimes, too, inclined toward the supposedly refined—playing and listening to music, watching magic lantern shows, reading, and even going to museums. (At Trenton, a wealthy New Yorker donated funds for a collection of natural history artifacts and a freestanding museum and library on the grounds.) Psychiatrists argued for a balance between work and play, and many asylums—both private and public—offered recreational activities like billiards, golf, and croquet. One prudent state official complained that these luxuries outstripped the modest tastes of the inmates: "Billiards, bagatelle, battle-doors, and the like, are well enough for some, but most of the patients never saw such things before they came to the hospital, and will not be likely to get a taste for them any more than they will for olives or for the fine arts."[56]

Patients were expected to labor as much as they were able, especially the women, who tended to have skills like cooking, cleaning, and sewing that were useful to the asylum and that men lacked. One doctor explained: "We regard voluntary useful labor for the insane, where the state of their physical health will permit, as among the best curative means, though there is often a difficulty . . . in furnishing employment to insane men adapted to their taste, capacity and previous habits. With women it is different, for in addition to their being naturally more industrious than men, as appears to be the fact, there are a greater variety of pursuits in which they can engage within doors, at all seasons of the year."[57]

Working and fraternizing with other patients was encouraged. Dances at the hospitals were well known in their day. Both *Harper's Weekly* and *Frank Leslie's Illustrated Newspaper* (Figure 18) reported on a dance at Blackwell's Island. Titled "A Lunatic's Ball," the article in *Frank Leslie's* explained that it was held in "honor of the completion of the first of a series of four frame buildings, recently commenced, in consequence of the overcrowded state of the institution. The structure being but slightly furnished afforded fine opportunity for the free exercise of 'many tinkling feet.' Not a few visitors were present to enjoy the novel spectacle of a dance, in which nearly all the participants were among the most justly comiserated [sic] of the

Figure 18 "A Lunatic's Ball," *Frank Leslie's Illustrated Newspaper,* 9 Dec. 1865

human species. Their delusions forgotten, many of the patients whirled about in glee, which, though wild, did not exceed the bounds of common-sense propriety."[58]

In general, the newspaper coverage of the ball combined paternalism, self-congratulation, and distancing humor, which was typical of the period. Victorian social dances consisted of either couples dances, such as the polka or the waltz, or a cotillion, which was more like a square dance. Either way, there were formal steps and expectations of decorum, so it is not surprising that one journalist took delight in noting how the dancers broke the rules yet remained within socially acceptable behavior.[59] The reporters may not have known that attendance at the dances was used as a reward for good behavior. One doctor explained that dancing "is a favorite amusement among the patients wherever it is allowed; and we have been told by some of the Superintendents that patients will often control themselves for a whole week with a promise that they will be allowed the privilege of going to the next dance."[60] Allegedly, the dance was held to "honor" an architectural event (the "completion of four frame buildings"), but the municipal government was dishonorably cutting corners by erecting frame or wooden structures, especially for dormitories.[61] Kirkbride wrote that such combustible materials were unacceptable except in times of war or pestilence, and the *American Journal of Insanity* recommended that these particular buildings be abandoned and the institution moved to a different location, so it could be based on "a better plan." Its island location next to an almshouse and prison "must ever be an insuperable objection."[62] Blackwell's Island, like most city-run asylums, was not considered exemplary by the standards of the medical superintendents.

St. Elizabeth's, a Model Asylum

In contrast, St. Elizabeth's Hospital in Washington, D.C., the first and only federally funded asylum, was intended to be a model hospital. It was a pet project for Dix, and thus the institution was particularly important in communicating the cause of lunacy reform (Figures 19, 20). Most medical hospitals were private and charged for services. Upper-class people avoided hospitals altogether, unless they had no family and were on the verge of death. Poor people without family went to almshouses, which were filthier and more crowded than the hospitals, and they, too, went there only to die. Largely because of Dix, however, the trend in psychiatry from 1841 to the present has been for state governments to pay for the care of the mentally ill. (This is the historic reason why the American colloquial term "state hospital" still refers to a psychiatric care facility.) Dix proposed a national system of charitable institutions for the mentally ill, funded by the sale of federal land, and if she made progress with Millard Fillmore, she was stopped by the presidential veto of his successor, Franklin Pierce. Some historians have suggested that President Pierce offered Dix the funds for this exemplary national asylum as a kind of condolence prize. Dr. Charles H. Nichols,[63] who was appointed St. Elizabeth's first superintendent, wrote to Dix in 1852: "You, I have no doubt, think with me that a Hosp. For the Insane in or near the District of Columbia should by all means be a *model* institution & that it may be so, it seems to me of paramount importance that the permanent *director* or med. Sup't be appointed before the site is selected (unless *you* choose it) who shall take the lead in choosing it, in selecting the most suitable material for building, in devising all plans & in superintending all the details of their execution."[64] Another doctor said it should be "a model in *regime* and detail, after which the hundreds of institutions to come may be wisely conformed."[65] Kirkbride approved the choice of Nichols as superintendent, saying in a letter to Dix that Nichols possessed "a taste for architectural arrangements and a practical knowledge of what is required in the planning, construction and general arrangements of a Hospital."[66]

Dix procured a spectacular site overlooking the Anacostia and Potomac Rivers, with a clear view to the Mall. Initially, Dix had trouble persuading the owner of the site (a tract of land historically known as St. Elizabeth's) to part with his beloved farm, but eventually she succeeded. He agreed to sell the land because God chose her, and she chose the site. He regarded her as an "instrument in the hands of God to secure this very spot for the unfortunates whose best earthly friend you are."[67] Sloan was not given this key commission because he was already occupied by his work at the Alabama State Hospital for the Insane in Tuscaloosa. His

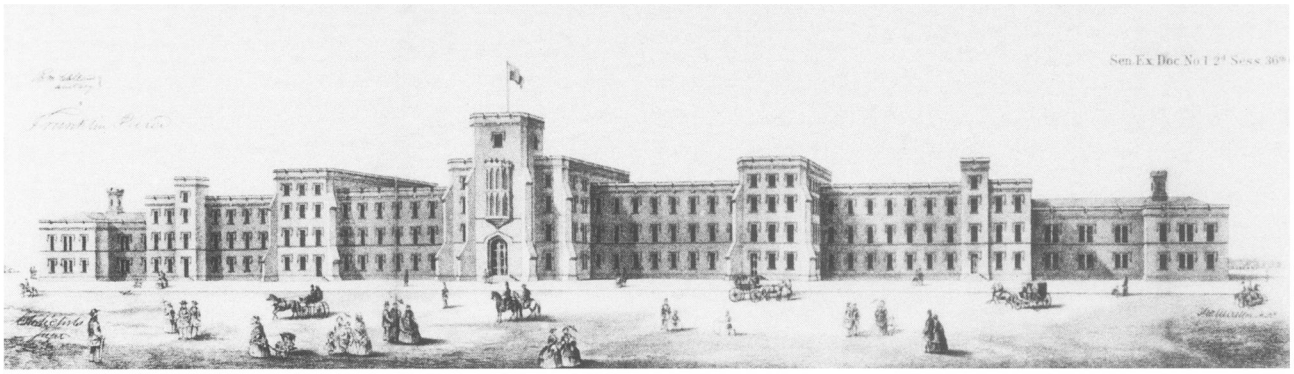

Figure 19 Thomas U. Walter, St. Elizabeth's Hospital (originally Hospital for the Insane of the Army and Navy and District of Columbia), Washington, D.C., 1852

Figure 20 Thomas U. Walter, St. Elizabeth's Hospital, exterior of center main

southern foray may have benefited the highly skilled Thomas U. Walter (1804–1887), who had recently arrived in the capital and was already nationally known for his elegant Greek Revival Girard College building in Philadelphia. The first archival note of Walter's engagement on the project comes in 1852, and by then the job was well under way. Walter was already working for the federal government, and from the front of St. Elizabeth's, originally called the National Asylum for the Veterans of the Army and Navy and Residents of the District of Columbia, he could see his more famous architectural contribution to the city, the dome of the Capitol (1851–65), under construction. Walter designed the exterior of the red brick asylum in a flat, fortresslike Gothic style. The building was completed in 1855; it was used as a military hospital during the Civil War, and afterward as a home for recuperating soldiers. The veterans did not want to be associated with the insane, and they began the practice of calling the institution St. Elizabeth's.

The asylum's plan was the work of Nichols, who signed a site plan that included an unambiguous printed note: "Ground plan designed by C. H. Nichols Supt." (Figure 21). Nichols designed a feature that was later copied widely: The wards farthest from the center were lower in height, thus the building tapered toward its outer ends. These wards could be smaller for two reasons. First, the untidy, noisy, and deranged patients that they housed were fewer in number. Second, the wards for the sickest patients did not have parlors, based on the observation that the most deranged patients could not interact successfully in the common rooms.

The division of labor between doctor and architect was characteristic of hospital construction, and indicates that physicians saw asylum planning as a specialized task suited to medical experts. Although the client/architect relationship was not unique to the hospital building type, it is apparent that architects were hired primarily to design the exterior and add finesse to the plans. This point does not diminish the importance of architects; rather, it merely illustrates the fact that the architect's job was different from the overarching creative process that historians imagine (and prefer). The asylum architect gave the exterior a coherent shape that fit nicely with the predetermined plan, applied appropriate details, and supervised the construction.

Oddly, St. Elizabeth's maintained the equal distribution of rooms for men and women on either side of the center main. Since most of the clients were veterans, there were many more men than women. The only women would have been residents of the District of Columbia. Thus the idealism of the builders—and the notion that this hospital was supposed to be a model—took precedence over practicality.

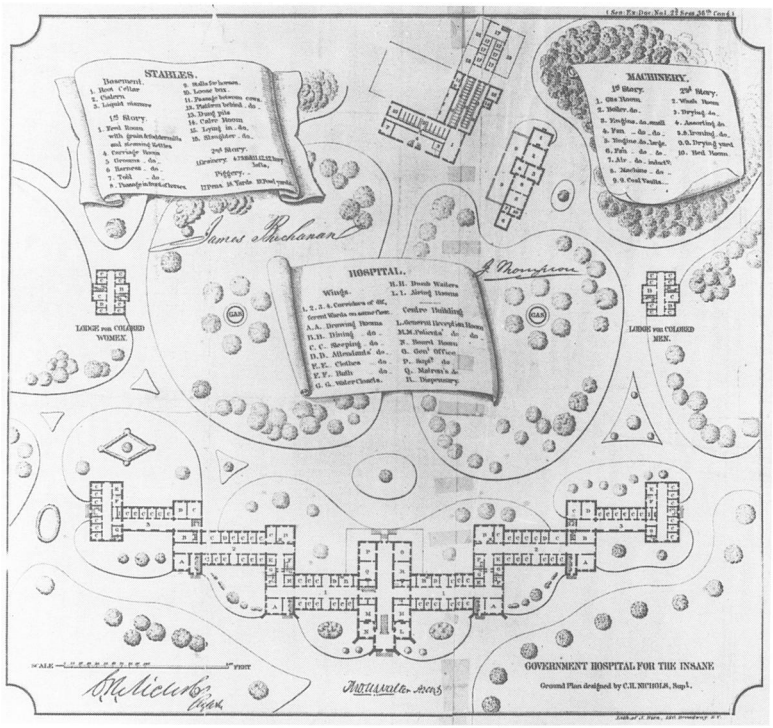

Figure 21 Charles H. Nichols, plan of St. Elizabeth's Hospital, 1852. The lodges for "colored men" and "colored women" were separated from the main building, as was the case in most nineteenth-century asylums.

The hospital utilized the usual arrangement of double-loaded corridors with day rooms and dining halls at the end of each ward. Connections between the wings were opened up more than in the New Jersey State Lunatic Asylum or Kirkbride's ideal linear-plan asylum. At St. Elizabeth's, the wider linking hallways—almost as wide as the ward corridors—allowed attendants and doctors to move more easily through the right angle between wards. Iron doors blocked access from one ward to the next—not only to stop the spread of fire, but also to keep patients from going from one pavilion to the next.

Doctors debated the proper location of living quarters for African American inmates, and at St. Elizabeth's Nichols offered an allegedly model solution. The plan shows the lodge for colored men and the lodge for colored women separated from the main building by several hundred feet. Nichols even specified that the distance of each should be "not more than 200 nor more than 400 feet" from the main edifice.[68] Most alienists agreed that slaves were less likely to become deranged than free blacks or even free whites, because they did not have to contend with "excessive mental action" or the strain of owning property.[69] Such racist views make the superintendents seem more like manipulative slave owners than therapeutic healers. There is perhaps an unavoidable conundrum to be addressed in examining this building type: How much did these dubious actors shape public opinion, and how much were they shaped by it? Hospitals for the insane were the only places where psychiatric specialists could practice—there were no office visits, no outpatient care.[70] The establishment of psychiatry as a legitimate branch of medicine was advanced by the construction of state-funded temples and castles. As many scholars have shown, asylums were a microcosm of society, and St. Elizabeth's was no exception.

As compared to the New Jersey State Lunatic Asylum and St. Elizabeth's, Kirkbride 's hospital must have seemed to be a constricted building with an awkward plan. To relieve the overcrowding at his own institution, the Pennsylvania Hospital, he raised funds and constructed a second hospital, slightly larger than the first, on the same site in West Philadelphia. He commissioned Sloan to design the second hospital, about five blocks west of the first, running parallel to Market Street (Figure 22). In 1859, the men were moved into the new building, while the women occupied the entire former building. The two linear hospitals were separated by Mill Creek and a deep vale in which sheep grazed; there were deer parks and vegetable gardens as well (Figure 23). Kirkbride described the deer park as surrounded by a palisade fence, with "different animals in it [that] are in full view from the adjoining grounds."[71] Because of the narrow site, Sloan and Kirkbride altered the standard plan by placing pavilions at right angles to the façade, thus creating courtyards toward the outside edges of the buildings (Figure 24). An illustration from 1869 shows people staring at the inmates (Figure 25). Gamwell and

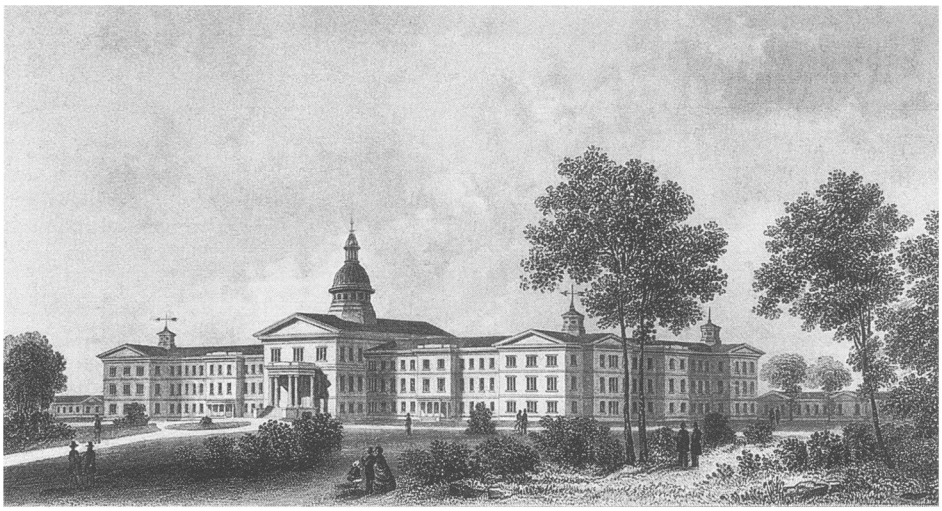

Figure 22 Samuel Sloan, Pennsylvania Hospital for the Insane, Department for Males, 1856–59. This was the second building constructed at Kirkbride's institution.

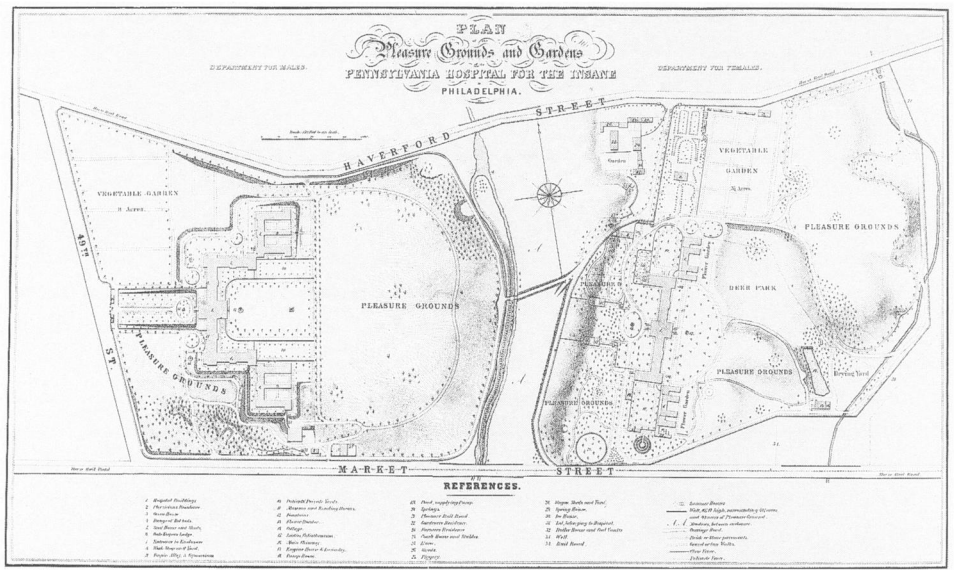

Figure 23 Pennsylvania Hospital for the Insane, site plan showing, from left to right, the men's department, the pleasure grounds, a stream, the women's department, a deer park, and other pleasure grounds, lithograph, ca. 1860

Tomes note that in an attempt to discourage the practice, doctors inadvertently sanctioned it when they began to charge an entrance fee for visitors.[72] This type of tourism was not unusual in the nineteenth century, when upper-class ladies visited orphanages and schools for the deaf and dumb, and families strolled the grounds of picturesque cemeteries.[73]

Kirkbride and Sloan had met when both were in their twenties, and they became lifelong collaborators. As Cooledge points out, "The long and fulsome eulogies of Sloan which Kirkbride included in many of his books have a tone of personal pride, as if the doctor felt a sense of accomplishment in the architect's success."[74] Sloan encouraged his fellow architects to take up the cause of the insane, "the great[est] suffering class of every community." He wrote: "Nothing speaks more favorably for the true civilization of a community than the state of perfection in which its hospitals of every class are kept, and there is not one among these that requires the unbounded sympathy of our people, more than does the hospital for the insane; for, their patients are, in the fullest sense of the word, our protégés, and we, as Christians, their natural guardians."[75] He was not the least bit disturbed by the aggressive size and unhomelike quality of his asylums, and even claimed, "These sections may be increased in number . . . as the wants of the State may demand, and even extended to any number, this arrangement or composition cannot but prove harmonious as a whole."[76] Sloan's confident paternalistic tone served him well as he defended the importance of the asylum and his architectural specialty—a specialty that was not as secure in 1870 as it was in 1840.

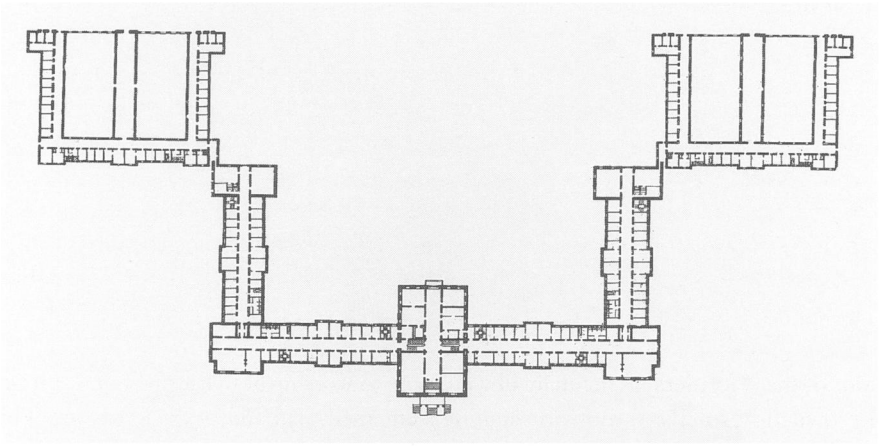

Figure 24 Samuel Sloan, Pennsylvania Hospital for the Insane, Department for Males, plan showing central pavilion, perpendicular wings, and courtyards, 1865. Published in Kirkbride, *On the Construction, Organization, and General Arrangements of Hospitals for the Insane* (Philadelphia, 1880)

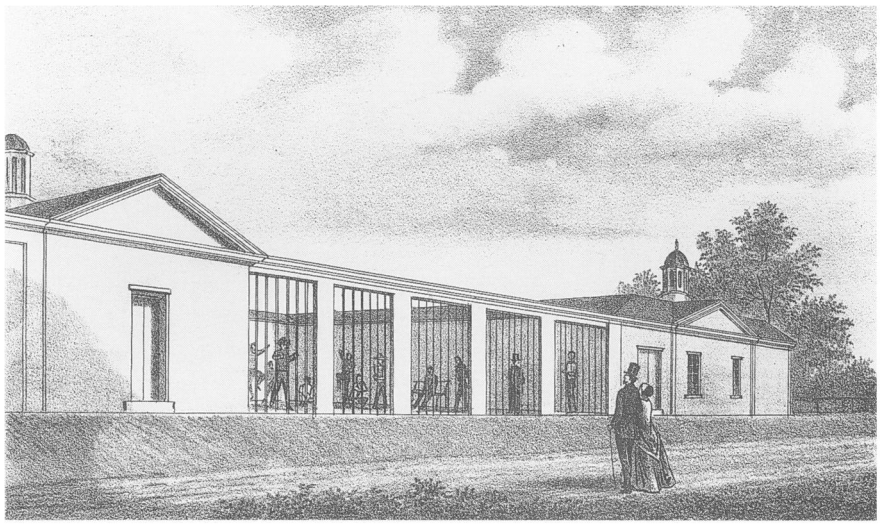

Figure 25 Visitors observing male patients at the Pennsylvania Hospital for the Insane, Department for Males, courtyard facing pleasure grounds, rear of building. Illustration from Ebenezer Haskell, *The Trial of Ebenezer Haskell* (Philadelphia, 1869)

Overcrowded Hospitals

If Kirkbride's private hospital became overcrowded, imagine the circumstances at St. Elizabeth's after the Civil War, when the nation's only federal asylum was flooded with impoverished mentally ill veterans. Doctors and nurses could do little but watch their model hospital become a kind of human warehouse. In fact, the biggest challenge facing the American Association of Medical Superintendents was the sheer number of patients. Had the doctors fallen victim to their own success—had families learned to trust the doctors, thus producing an influx of new patients? Or had the patients checked in, but not checked out? The questions are complex and have sparked some of the most energetic arguments among historians of psychiatry—although most agree with Scull that "insanity was indeed increasing over the course of the nineteenth century." Scull finds that the doctors' vested interest in professional expansion offered a motive for enlarging the category of the mentally ill, but he also acknowledges that if doctors truly believed the asylums were curative, they would have been more likely to recruit cases rather than turn them away.[77]

Some have argued that a contagious mental illness (something we tend not to think of today) led to a sharp increase: the late stages of syphilis cause severe mental confusion and thus neurosyphilis accounted for many cases of mental illness.[78] The amount of alcohol consumed also doubled in the nineteenth century, and alcohol addiction led to commitments for habitual drunkenness as well as the delirium tremens.[79] Finally, medical historians have pointed out that more people who would have been cared for at home in an earlier period were moved into institutions by families who believed they could be cured there. From the family's perspective, "the asylum provided a convenient and culturally legitimate alternative to coping with 'intolerable' individuals."[80] The Victorian era reveled in its self-created family values, which included the sanctity of the home. If the existence of the family unit was perceived to be under siege, family members reluctantly committed relatives.[81] As

Grob explains, "In its origins, the mental hospital—irrespective of its medical role—was primarily an institution designed . . . to assume functions that previously had been the responsibility of families."[82] Young people tended to be released fairly quickly, but state hospitals increasingly became homes for the elderly—what was once generally called senile dementia accounted for many cases of physically healthy individuals who might live for decades in a hospital.[83] The pace of hiring attendants never kept up with the increase in the overall number of mentally ill patients, and moral treatments depended on an attendant/patient ratio of about 1/15.[84] The good intentions of the reformers of the 1840s could not be fulfilled in crowded hospitals. Medical treatments continued throughout the nineteenth century, as did moral management. The latter was especially demanding of staff time. Although the members of the AMSAII still claimed allegiance to the moral treatment, they could not practically carry it out after they pronounced that the number of patients in a single building could be increased from 250 to 600.[85] The subject caused intense debate at the society's annual meeting in April 1866, and after a long day the members finally voted on the new propositions. The vote was 8 to 6 in favor of expanding the size of institutions. Kirkbride voted against.[86]

Sadly, increasing the size of the hospitals did nothing to halt overcrowding. St. Elizabeth's had been expanded to accommodate 800 patients; it held 1073 by the 1890s. The Michigan State Asylum at Kalamazoo had a capacity of 500 but housed 742; and the State Insane Hospital in Napa, California, was designed for 640 but held 1174.[87] One British asylum doctor stated in 1891 that "overcrowding is a distinguishing feature of American asylums" and he accused his American counterparts of hypocrisy: "If it be true that individual treatment is absolutely necessary in the treatment of insanity, as a competent American doctor declares, it follows, that in one vital point the institutions in his country are diametrically opposed to the cause they were intended to further."[88] This British writer recognized the demise of the moral treatment caused by overcrowding.

The Cottage Plan

Some doctors rejected the "bigger is better" principle. Within the Association of Medical Superintendents, Dr. John M. Galt (1819–1862) supported the cottage plan, which was a system that broke the monolithic hospitals into smaller parts. Galt was raised in the world of hospitals for the insane: his father and grandfather were superintendents at Virginia's Eastern State Hospital, the successor to Williamsburg Public Hospital. He and other proponents of the cottage plan argued against the linear model precisely because it was cold and not homelike. The introduction of cottages to asylum grounds varied greatly. In some cases, cottages were added almost randomly over many years, but at other hospitals a series of houses accommodating anywhere from thirty to one hundred patients was constructed in a cluster or along an internal road.

The cottage concept was derived in part from the town of Gheel, Belgium, where a church dedicated to the eighth-century Irish saint Dymphna had attracted lunatics seeking a cure.[89] For centuries, the people of Gheel looked after the mentally ill who came to worship at the shrine but, exorcism notwithstanding, remained mad and never left town. This integration of insane patients into the community continued into the nineteenth century. In 1848, a correspondent for the *American Journal of Insanity* recounted the good character of the host families and the rapid recovery of the insane, who were employed in cultivating the land.[90] Galt later touted the cottage plan in the same publication: "At the village of Gheel, in Belgium, situated thirty-five miles from Antwerp . . . it was well-known that the insane, amounting to many hundreds, have been placed under the management of the villagers, instead of having them in one large building, as elsewhere. These lunatics have nearly the same freedom as the citizens of the commune, going everywhere at large."[91] Galt described how some of them went to bars for a smoke or a glass of beer, and yet "their presence does not excite attention" (Figures 26, 27). Galt identified two types of patients who would benefit from cottage life—tranquil, chronic patients, and others who did not respond well to the linear-plan asylum:[92]

> First . . . the farmer and his family . . . reside in a central house suitable for the accommodation of his own household, and some lunatics. The mass of these patients are intended to be working-men, those of quiet demeanor—laboring under chronic insanity. These will spend a happier life than in the crowded wards of an asylum, and also a more useful one, tending by their work to be self-supporting. A second class will consist of a few lunatics whose unsoundness of mind has not yielded through the operation of the various constituent influences of an asylum; in whom the monotony of an institution seems indeed, to tally with the character of their derangement, actually giving it a fixedness instead of offering relief.[93]

Like Kirkbride, Galt believed that the environment, including architecture, shaped behavior, but he switched sides. He saw the linear plan as "giving a fixedness" to insanity, rather than curing it.[94] Clearly, this enthusiasm for community-based treatment reveals a loss of faith in the linear-plan asylum, especially for the chronic cases.[95]

Figure 26 Street scene in Gheel, Belgium, from G. Janssens, *Gheel in Beeld en Schrift* (Turnhout, 1900), 248. Nineteenth-century doctors viewed the town of Gheel, where mentally ill persons lived among the townspeople, as a potential model for community-based care.

Figure 27 Patients having lunch with their host family in Gheel, from Janssens, *Gheel in Beeld en Schrift*, 306

Another proponent of the cottage plan blamed the hospital environment for contributing to the patient's mental illness: "Where in our present asylums is there proper provision made for that large class of convalescents, who find companionship with the[ir] insane associates irksome, injurious, and intolerable? They might long ago have returned to their homes, if the very influences surrounding them had not exerted an injurious effect upon them, and kept them dejected, melancholy, and dissatisfied. What they needed was small, home-like cottages, with pleasant gardens, filled with shrubs and flowers, ornamental and useful plants, where they could find retirement, quiet and pleasant occupation, and where they could, to some extent, choose their associates and companions."[96] This writer, too, assumed the environment shaped behavior. But whereas Kirkbride and Buttolph thought the home was a cause and the hospital a cure, now the hospital was seen as the cause and the home was the sanctuary. For his part, Kirkbride was convinced that supervision would be more difficult in a range of scattered cottages, which would force doctors to rely on often-irresponsible attendants. Furthermore, he feared that chronic patients, if segregated in their own dwellings, would descend to an inhuman level.[97]

The first state hospital in the U.S. to include purpose-built domestic scale residences was the Illinois Eastern Hospital for the Insane at Kankakee.[98] Chicago architect and Civil War major James Rowland Willett (1831–1907), who had no earlier hospital experience, designed the extensive complex. A bird's-eye perspective drawing shows the main building, a linear-plan asylum (at the top left), and an axial road leading from the lower right toward the rear of the main building, the road cutting through kitchens, laundries, and bakeries, which are marked by smokestacks (Figure 28). As at many asylums, a railroad facilitated delivery of coal, goods, and linen; here a small train chugs toward the miniature industrial complex. Willett also included several streets lined with cottages, each housing fifty to one hundred people. One street (at right) formed a perpendicular edge of the site, and another bounded the site parallel to the main building (Figure 29). The cottages were modest two- or three-story buildings with pitched roofs, porches, and front steps, and although they were too large to look like typical houses, they resembled small college dormitories or fraternity houses (Figure 30). Patients who had been ill for over a year and were not expected to recover were housed in the cottages along with patients who were known to be quiet

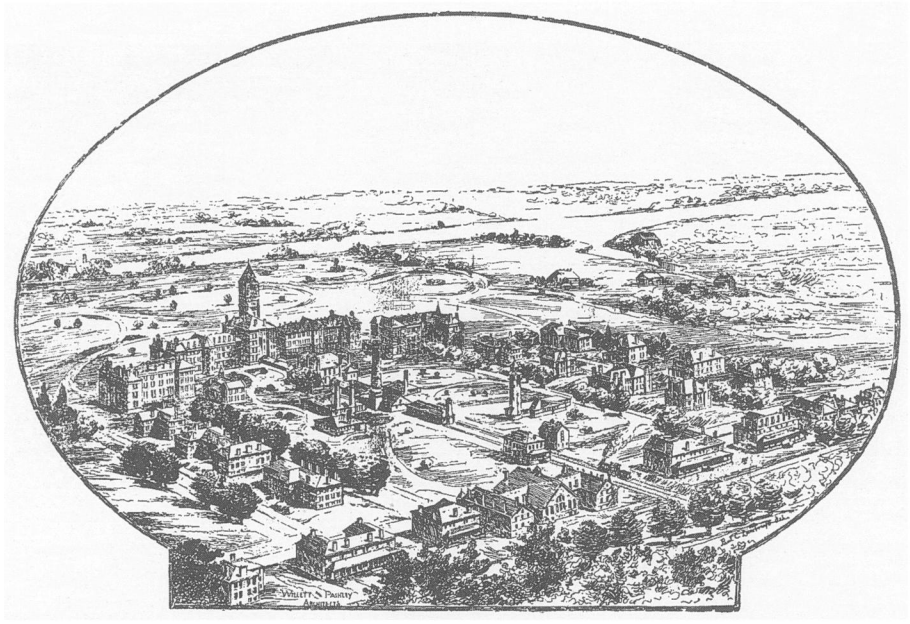

Figure 28 Bird's-eye view showing J. R. Willett's Illinois Eastern State Hospital for the Insane, Kankakee. From *Fifth Biennial Report* (Springfield, 1885–86)

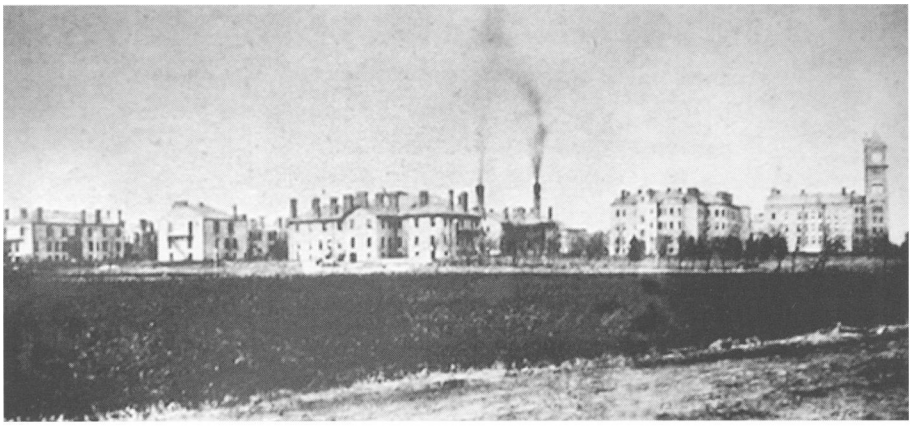

Figure 29 J. R. Willett, Illinois Eastern State Hospital for the Insane, opened 1878. The main building is at the far right; cottages are arrayed in two rows perpendicular to it. Smokestacks mark the kitchen and bakery.

and orderly, based on their good reputation at other hospitals or almshouses. The interiors were cozy, especially compared to the corridors of most hospitals—one parlor was furnished with a piano, a painting on an easel, area rugs, wallpaper, and curtained windows (Figure 31).

The main building at Kankakee was a striking Romanesque linear-plan hospital in buff-colored stone with a charming clocktower (Figure 32). It was intended for the treatment of patients who were considered curable—in the 1860s and '70s, this meant that their disease had manifest itself relatively recently. The cottage system did not indicate a move away from moral management. Doctors still used a combination of medical and moral treatments. The controversy over the cottage plan suggests a continued belief in the importance of the environment in the caring for the insane.

Figure 30 J. R. Willett, Illinois Eastern State Hospital for the Insane, Cottage 10 South

Figure 31 J. R. Willett, Illinois Eastern State Hospital for the Insane, interior of Cottage 5 North, photographed in 1894

Figure 32 J. R. Willett, Illinois Eastern State Hospital for the Insane

Conclusion

In 1866, the AMSAII agreed to expand the institutions because the early hospitals had become dreadfully overcrowded. Given that psychiatry was not practiced anywhere other than at the asylum, the doctors' professional identity was derived in part from the respectability of their buildings. In the nineteenth century, the psychiatric profession was tethered to architecture. Doctors debated the immediate environment of the asylum throughout the nineteenth century, and while they disagreed on the plans, they agreed that the arrangement of spaces was crucial. The moral treatment could not succeed outside these specialized buildings. Old structures could not be adapted; newness counted. Escorted walks in the grounds and daily visits with doctors and matrons were essential to the cure. Once the AMSAII had allowed for the expansion of each hospital to six hundred patients, these walks and visits dwindled. But from about 1840 to 1870, alienists and families believed that an orderly environment would soothe the disorderly mind, and as long as the cure seemed likely, the buildings communicated their ideals with confidence. While such large psychiatric hospitals currently have almost no medical credibility, the edifices (or their ruins) remain, witnesses to the history of medicine and testaments to a once-common faith in a partly architectural cure for insanity.

Notes

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1. Gerald Grob, *The Mad among Us: A History of the Care of America's Mentally Ill* (Cambridge, Mass., and London: Harvard University Press, 1994), 99.
2. In preparing this paper I have benefited from the research of architectural historians such as Annmarie Adams, Christine Stevenson, Jeremy Taylor, and Leslie Topp, who also explore the relationship between architecture and medicine: Annmarie Adams, *Architecture in the Family Way: Doctors, Houses and Women, 1870–1900* (Montreal, 1996), and Annmarie Adams, "Modernism and Medicine: The Hospitals of Stevens and Lee, 1916–32," *JSAH* 58 (Mar. 1999), 42–61; Leslie Topp, "An Architecture for Modern Nerves: Josef Hoffman's Purkersdorf Sanatorium," *JSAH* 56 (Dec. 1997), 414–37; Jeremy Taylor, *Hospital and Asylum Architecture in England, 1840–1914: Building for Health Care* (London, 1991), and Jeremy Taylor, *The Architect and the Pavilion Hospital: Dialogue and Design Creativity in England, 1850–1914* (London and New York, 1997); Christine Stevenson, *Medicine and Magnificence: British Hospital and Asylum Architecture, 1660–1815* (New Haven, 2000), and Christine Stevenson, "Robert Hooke's Bedlam," *JSAH* 55 (Sept. 1996), 254–75.
3. The most comprehensive account of the building may be found in John Cooledge, "The Architectural Importance of H. H. Richardson's Buffalo State Hospital," in Lynda H. Schneekloth, Marcia F. Feuerstein, and Barbara A. Campagna, eds., *Changing Places: Remaking Institutional Buildings* (Fredonia, N.Y., 1992).
4. Henry Burdett used the term "corridor plan" to designate all long, thin hospitals, including Kirkbride's type. Henry C. Burdett, *Hospitals and Asylums of the World: Their Origin, History, Construction, Administration, Management and Legislation*, vol. 2 (London, 1891) passim. In this article, "linear

plan" (the term Kirkbride himself used) and "Kirkbride plan" will be used interchangeably to denote the shallow-V plan.

5. Michel Foucault, *Histoire de la folie à l'âge classique* (Paris, 1961), and Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason*, trans. Richard Howard (New York, 1965); David Rothman, *Discovery of the Asylum: Social Order and Disorder in the New Republic* (Boston and Toronto, 1971); Andrew Scull, *The Most Solitary of Afflictions: Madness and Society in Britain, 1700–1900* (New Haven and London, 1993), 10. Andrew Scull's point of view on the historiography of the field may be found in ch. 2 of his *Social Order/Mental Disorder: Anglo-American Psychiatry in Historical Perspective* (Berkeley, 1989). For a reevaluation of Foucault's *Madness and Civilization*, see the collected essays in Arthur Still and Irving Velody, eds., *Rewriting the History of Madness: Studies in Foucault's Histoire de la folie* (London and New York, 1992), especially the essay by Erik Midelfort, in which he asserts that medieval madmen did not live the "easy wandering existence" Foucault imagined. For recent, concise historiographical summaries, see Johann Louw and Sally Swartz, "An English Asylum in Africa: Space and Order in Valkenberg Asylum," *History of Psychology* 4 (Feb. 2001), 3–23; and James E. Moran, *Committed to the State Asylum: Insanity and Society in Nineteenth-Century Quebec and Ontario* (Montreal, 2000).

6. See Grob, *The Mad among Us*.

7. Nancy Tomes, *The Art of Asylum-Keeping: Thomas Story Kirkbride and the Origins of American Psychiatry* (Philadelphia, 1994), 92 (orig. pub. as *A Generous Confidence: Thomas Story Kirkbride and the Art of Asylum-Keeping* [Philadelphia, 1984]).

8. Horace Buttolph, *Annual Report of the Officers of the New Jersey State Lunatic Asylum* (Trenton, 1849), 23.

9. C. Lockhart Robertson, "The Result of Injury to the Head," *American Journal of Insanity* 3 (Jan. 1847), 272.

10. Charles E. Peterson, Constance Greiff, and Maria M. Thompson, *Robert Smith: Architect, Builder, Patriot, 1722–1777* (Philadelphia, 2000), 134. See also Travis C. McDonald, Jr., *Design for Madness: An Architectural History of the Public Hospital in Williamsburg Virginia* (Williamsburg, 1986).

11. Peterson, Greiff, and Thompson, *Robert Smith*.

12. Edward Shorter, *A History of Psychiatry from the Era of the Asylum to the Age of Prozac* (New York, 1997), 7.

13. William Battie, *Treatise on Madness* (London, 1758); repr. in Richard Hunter and Ida Macalpine, *A Treatise on Madness by William Battie and Remarks on Dr. Battie's Treatise on Madness by John Monroe: A Psychiatric Conversation in the Eighteenth Century* (London, 1962), 68.

14. Lynn Gamwell and Nancy Tomes, *Madness in America: Cultural and Medical Perceptions of Mental Illness before 1914* (Ithaca and Binghamton, N.Y., 1995), 37. The term "moral treatment" did not mean that they considered their approach to be morally superior to other treatments.

15. Anne Digby, *Madness, Morality, and Medicine: A Study of the York Retreat, 1796–1914* (Cambridge, England, 1985), 249.

16. Robert Waln, *An Account of the Asylum for the Insane, Established by the Society of Friends near Frankford in the Vicinity of Philadelphia* (Philadelphia, 1825).

17. This institution for aged and pauper women was housed in "buildings which were formally used in the manufacture of saltpetre; whence it derived its name in common use, Salpêtrière." *American Journal of Insanity* 4 (Jan. 1848), 259.

18. Pliny Earle, *A Visit to Thirteen Asylums in Europe, with Copious Statistics* (Philadelphia, 1839), 20.

19. Thomas S. Kirkbride, *On the Construction, Organization and General Arrangements of Hospitals for the Insane* (Philadelphia, 1854), 1.

20. Horace Buttolph, *Annual Report of the Trenton State Lunatic Asylum* (Trenton, 1851), 31. Following the custom in medical history, annual reports will hereafter be referred to as *AR*, followed by city and year of the report itself, rather than the year of publication, which is usually one year later than the report.

21. Tomes, *Art of Asylum-Keeping*, 44.

22. Henry-Russell Hitchcock, *Architecture: Nineteenth and Twentieth Centuries* (Harmondsworth, 1958), 86.

23. One British critic of typical ward design noted that depressed patients (the "torpid, indolent, and melancholic"), who tended to want to sleep all day, would be better off farther away from their bedrooms. "If you make a rule that they cannot go in their bedrooms during the day . . . the doors, close at hand, will ever create the desire to indulge in the withheld gratification of entering them." John T. Arlidge, *On the State of Lunacy and the Legal Provision for the Insane with Observations on the Construction and Organization of Asylums* (London, 1859), 202.

24. David Schuyler, *Apostle of Taste: Andrew Jackson Downing, 1815–1852* (Baltimore and London, 1996), 78–79.

25. Ibid., 79. According to Schuyler, the reason why the managers chose the axial composition remains "unexplained in surviving documents." George B. Tatum noted, "Until disease destroyed the stately elms, it proved every bit as majestic as Downing predicted." George B. Tatum, in "Nature's Gardener," *Prophet with Honor: The Career of Andrew Jackson Downing* (Philadelphia and Washington, D.C., 1989), 70.

26. Kirkbride spoke at the annual meetings of the AMSAII and published regularly in the *American Journal of Insanity* (hereafter, *AJI*), so many of his colleagues would have known the basic shape of his hospital. In April 1848, the *AJI* printed a plan of the Pennsylvania Hospital showing the partly completed grounds and the first building (*AJI* 4 [Apr. 1848], 347) and in 1851 the journal published the "Report on the Construction of Hospitals for the Insane, made by the Standing Committee of the Association of Medical Superintendents of American Institutions for the Insane," a summary of the principles that had been voted into effect at their 18 June 1850 meeting (*AJI* 8 [July 1851], 79–81.) Thus the basic planning concept that an asylum should have a center building and wings on either side had been widely disseminated among medical men before publication of Kirkbride's book in 1854.

27. Harold N. Cooledge, *Samuel Sloan: Architect of Philadelphia* (Philadelphia, 1986), 41.

28. The drawing published in Cooledge, *Sloan*, with a caption for the Alabama asylum, seems to be an early sketch, a different asylum, or a later, inaccurate rendering of the actual building. The Bryce Hospital archives, maintained by the University of Alabama, hold one surviving photograph of the hospital showing its original cast-iron balconies. The hospital was embellished with a colossal order colonnade in the 1880s, so in its current state it does not resemble Kirkbride's sample asylum and is a likely source of the confusion.

29. British and American asylum buildings grew increasingly similar, and in the 1870s some British institutions incorporated a variation of the setback, with full-length wards receding at right angles to the main façade. Many of these are illustrated in Jeremy Taylor's two books (see n. 2); see also Scull, *Most Solitary of Afflictions* (see n. 5), City and County Asylum at Hereford, fig. 16, 284.

30. The following is a list of twenty-seven asylums built in the U.S. between 1847 and 1868 on the Kirkbride linear model, defined here as having the shallow-V plan, that is, a bilaterally symmetrical linear structure with a central building and connected setback flanking pavilions. 1. Alabama Insane Hospital (also known as Bryce Hospital), Tuscaloosa (est. 1852) 2. Stockton State Hospital, Calif. (est. 1853) 3. Connecticut Valley Hospital (formerly Connecticut State Hospital for the Insane) Middletown (est. 1868) 4. St. Elizabeth's (formerly Government Hospital for the Insane Veterans of the Army and Navy and Residents of the District of Columbia) Washington,

D.C. (est. 1855) 5. Jacksonville State Hospital (formerly Illinois Central Hospital for the Insane), Ill. (est. 1851) 6. Central Indiana Hospital for the Insane (formerly Indiana Hospital for the Insane), Indianapolis (est. 1848) 7. Mt. Pleasant State Hospital, Ia. (est. 1861) 8. Osawatomie State Hospital, Kan. (est. 1863) 9. Spring Grove State Hospital (formerly Public Hospital of Baltimore to 1828, Maryland Hospital, then Maryland Hospital for the Insane), Md. (est. 1857) 10. Northampton State Hospital (formerly State Lunatic Asylum at Northampton), Mass. (est. 1848) 11. Taunton State Hospital (formerly State Lunatic Hospital at Taunton), Mass. 12. Worcester State Hospital (formerly State Lunatic Hospital at Worcester and Worcester State Asylum), Mass. (est. 1833) 13. Kalamazoo State Hospital (formerly Asylum for the Insane at Kalamazoo, then Michigan Asylum for the Insane to 1911), Mich. 14. St. Peter State Hospital, Minn. (est. 1866) 15. State Insane Hospital, Jackson, Miss. (est. 1856) 16. State Hospital No. 1 (formerly Missouri State Hospital), Fulton, Mo. (est. 1852) 17. New Hampshire State Hospital (formerly New Hampsire Asylum for the Insane to 1901), Concord (est. 1842) 18. Trenton Psychiatric Hospital (formerly New Jersey State Lunatic Asylum), Trenton (est. 1848) 19. State Hospital, Dix Hill, Raleigh, N.C. (est. 1856) 20. Cleveland State Hospital (formerly Northern Ohio Lunatic Asylum), Oh. (est. 1855) 21. Dayton State Hospital (formerly Southern Ohio Lunatic Asylum), Oh. (est. 1855) 22. Dixmont Hospital for the Insane (formerly Department for the Insane, Western Pennsylvania Hospital to 1905), Penn. (est. 1853) 23. State Hospital for the Insane (formerly Pennsylvania State Lunatic Hospital), Harrisburg (est. 1851) 24. State Insane Asylum (formerly Texas State Lunatic Asylum), Austin (est. 1861) 25. Western State Hospital (formerly Western Lunatic Asylum to 1894), Staunton, Va. 26. West Virginia Hospital for the Insane at Weston (est. 1859) 27. Wisconsin State Hospital for the Insane (also known as Mendota Hospital for Insane), Madison (est. 1860). This list is based largely on Robert Wozniak's extensive research and postcard collection. Additionally, I used Henry M. Hurd, *The Institutional Care of the Insane in the United States and Canada* (Baltimore, 1916–17), Cooledge, *Sloan*, and the Historic Asylums Web site (www.historicasylums.com). In 1891, British doctor and asylum historian Henry Burdett claimed there were seventy-two linear hospitals in the U.S. Henry C. Burdett, *Hospitals and Asylums of the World* 95 (see n. 4).

31. W. H. O. Sankey, "Do the public asylums of England, as at present constructed, afford the greatest facilities for the care and treatment of the insane?" *Journal of Mental Science* 2 (1856), 472.

32. I have not yet found any interior photographs of bedrooms from before ca. 1880; some photographs show hospital bedrooms at a later date, but it is difficult to know how much the rooms were renovated in the intervening years, or even if they originally were bedrooms.

33. Thomas S. Kirkbride, *Hospitals for the Insane*, 2d ed. (Philadelphia, 1880), 281.

34. Gamwell and Tomes, *Madness in America* 56 (see n. 14).

35. Sankey, "Do the public asylums…?" 472.

36. Elaine Showalter, in *The Female Malady: Women, Madness, and English Culture, 1830 to 1980* (New York, 1985), explores this theme as manifest in Victorian literature.

37. Grob, *The Mad among Us*, 90 (see n. 1). Scull also refutes Showalter by explaining that while the historical statistics show, at certain times, that a greater number of women than men were residing in asylums, this does not mean they were more susceptible to mental disease or more likely to be incarcerated; rather, the difference can be explained by their longer average stay in the asylum and typically greater lifespan. Scull, *Most Solitary of Afflictions*, 160 n. 150.

38. Edward Jarvis, "Comparative Liability of Males and Females to Insanity" (1851), in California Commission on Lunacy, *Insanity and Insane Asylums: Report of E. T. Wilkins, Commissioner in Lunacy for the State of California* (n.p., 1871), 46.

39. Thomas S. Kirkbride, "Description of the Pleasure Grounds and Farm of the Pennsylvania Hospital for the Insane," *AJI* 4 (Apr. 1848), 353.

40. Jeremy Taylor, *Hospital and Asylum Architecture in England 1840–1914* (London, 1991), 136–37. Taylor discusses Charles Fowler's 1846 proposal for the Devon County Asylum at Exminster, near Exeter, a semicircular three-story range from which spokes radiated outward, with an administrative block at the center; Taylor notes that Fowler was well aware of the shortcomings of a simple radial plan, in which the central parts of the building are deprived of light and air.

41. Kirkbride, "Description of the Pleasure Grounds," 353.

42. A. J. Davis designed a quadrangular asylum for Blackwell's Island (now Roosevelt Island), New York City. The island housed a penitentiary, workhouse, hospital for incurable charity cases, and Davis's city-run asylum. Engravings of the plan are held in the collection of the Architectural Archives of the University of Pennsylvania, Philadelphia.

43. *AR* (Trenton, 1853), 13.

44. Andrew Jackson Downing, "A Chapter on School Houses," *Horticulturist* 2 (Mar. 1848), 395. Quoted in Tatum, "Nature's Gardener," 78 (see n. 25), and Schuyler, *Apostle*, 79 (see n. 24).

45. Henry Hawkins, "Made Whole: A Parting Address to Convalescents on Leaving an Asylum" (London, 1871), 6.

46. Downing disliked "Grecian architecture" for rural residences. He wrote, "It is greatly inferior to the Gothic, [and] from the prevalence of horizontal lines and plain surfaces, it is not found to harmonize with picturesque scenery so happily as a style affording more bold and varied outlines." Andrew Jackson Downing, *A Treatise on the Theory and Practice of Landscape Gardening Adapted to North America, Etc.* (New York, 1841), 307–8.

47. Kenneth Hawkins, "The Therapeutic Landscape: Nature, Architecture, and Mind in Nineteenth-Century America" (Ph.D. diss., University of Rochester, 1991), viii.

48. James S. Ackerman, *The Villa: Form and Ideology of Country Houses* (Princeton, 1990), 9.

49. Horace Buttolph, "Modern Asylums," *AJI* 3 (Apr. 1847), 364.

50. David Gollaher, *Voice for the Mad: The Life of Dorothea Dix* (New York, 1995), 195.

51. "Report of the Commission to Build a Lunatic Asylum," in *Votes and Proceedings of the Sixty-ninth General Assembly of the State of New Jersey* (Camden, 1846), 36–37; quoted in Constance Greiff, *John Notman: Architect, 1810–1865* (Philadelphia, 1979), 104. Also, as far back as January 1845, the *AJI* reported that it had received details of the plan of the New Jersey hospital.

52. Kirkbride (1880), 136 (see n. 19).

53. *Pennsylvania Journal of Prison Discipline and Philanthropy* 2, no. 1 (1846), 60. Quoted in Greiff, *Notman*, 103.

54. Tomes, *Art of Asylum-Keeping*, 209 (see n. 7).

55. Edward J. Seymour, "Observations on the Medical Treatment of Insanity" (London, 1832), in John M. Galt, ed., *The Treatment of Insanity* (New York, 1846), 261.

56. Dr. S. G. Howe, Massachusetts State Board of Charities, Report of 1860, included in Charles A. Lee, *Provision for the Insane Poor and the Adaptation of the Asylum and Cottage Plan to Their Wants, As Illustrated by the History of the Colony of FitzJames, at Clermont, France* (Albany, 1866), 16.

57. *AR* (Trenton, 1853), 16 (see n. 43).

58. "A Lunatic's Ball," *Frank Leslie's Illustrated Newspaper*, 9 Dec. 1865, 188.

59. Gamwell and Tomes, *Madness in America*, 44 (see n. 14).

60. California Commission on Lunacy, *Insanity and Insane Asylums: Report of E. T. Wilkins, Commissioner in Lunacy for the State of California* (n.p., 1871), 108.

61. Gamwell and Tomes, *Madness in America*, 123. A cartoon from 1887 shows a similar dormitory room with beds along the walls.
62. Kirkbride, *Hospitals for the Insane* (1880), 57; "City Asylum, New York," *AJI* 4 (Jan. 1848), 273.
63. Nichols's management of the hospital came under investigation several times, and he resigned in 1876. Gollaher, *Voice for the Mad*, 318 (see n. 50). The illustration in Gollaher, 318, is labeled incorrectly; it is a part of the current St. Elizabeth's but it is not the original hospital from the 1850s.
64. Charles H. Nichols, letter to Dorothea Dix, 20 Sept. 1852, Dix Papers, Houghton Library, Harvard University; quoted in Frank R. Milliken, "Wards of the Nation: A History of St. Elizabeth's" (Ph.D. diss., George Washington University, 1991), 32.
65. "On the Bill to Organize an Institution for the Insane of the Army and Navy of the United States and of the District of Columbia," *AJI* 11 (Apr. 1855), 360–61.
66. Thomas S. Kirkbride, letter to Dorothea Dix, 26 Oct. 1852, Kirkbride Papers, Pennsylvania Hospital, Philadelphia; quoted in Milliken, "Wards of a Nation," 32.
67. Francis Tiffany, *The Life of Dorothea Lynde Dix* (Boston, 1890), 154.
68. Charles H. Nichols, "Proceedings from the Tenth Annual Meeting of the Association of Medical Superintendents of American Institutions for the Insane," *AJI* 12 (July 1855), 89; quoted in Gamwell and Tomes, *Madness in America*, 58.
69. Gamwell and Tomes, *Madness in America*, 59.
70. Tomes notes that "with a purely physical disorder, [families] thought of home treatment for insanity as the first and most desirable form of medical intervention," and that "general practitioners in both the city and the country treated a substantial number of mental cases and played a crucial role in referring patients to the mental hospital." Tomes, *Art of Asylum-Keeping*, 104 (see n. 7). These general practitioners did not consider themselves specialists in psychiatry, as did the doctors who worked at asylums.
71. Kirkbride, "Description of the Pleasure Grounds," 348 (see n. 39).
72. Gamwell and Tomes, *Madness in America*, 35.
73. I thank Emily Cooperman for this observation.
74. Cooledge, *Sloan*, 10 (see n. 27).
75. Samuel Sloan, "St. Peter Hospital, Minnesota," *Architects' Review and American Builder's Journal* 2 (June 1870), 712.
76. Ibid., 715.
77. Scull, *Social Order/Mental Disorder*, 240–42 (see n. 5).
78. Shorter, *A History of Psychiatry*, 62–63 (see n. 12).
79. Ibid.
80. Scull, *Social Order/Mental Disorder*, 242.
81. Grob, *The Mad among Us*, 80 (see n. 1).
82. Ibid., 24.
83. Ibid., 127.
84. "Do the public asylums…?," 472 (see n. 31).
85. Tomes, *Art of Asylum-Keeping*, 287 (see n. 7). This decree obviously caused a dramatic change in the architecture. Most architects simply puffed up the linear plan by building up and out—taller, longer, 600-bed hospitals sprawling across their sites, decorated in the fashionable styles of the time: High Victorian Gothic (Frederick Clarke Withers); Romanesque (Richardson); and Second Empire Baroque (Sloan). This era of portentous asylum architecture will be analyzed in forthcoming publications by the author.
86. "Proceedings from the Twenty-First Annual Meeting of the AMSAII," *AJI* 23 (July 1866), 250.
87. Burdett, *Hospitals and Asylums of the World*, vol. 1, 110 (see n. 4).
88. Ibid.
89. In nineteenth-century English sources, there are alternate spellings: Gheel is often spelled Geel, and Dymphna is often spelled Dimphna. I have chosen the more common spellings.
90. Andrew Halliday, "A Village of Lunatics," *AJI* 4 (Jan. 1848), 217–19.
91. John M. Galt, "Farm of St. Anne," *AJI* 11 (Apr. 1855), 354.
92. The irony of the decentralized cottage plan was that once the patients were split into 100-person houses, there was no rationale for limiting the overall size of the institution. This contributed to the overcrowding that reached its peak in the 1950s, when St. Elizabeth's had about 5,000 patients, the hospital at Greystone in New Jersey held 7,000 patients, and Georgia State Hospital in Milledgeville housed about 10,000.
93. Galt, "The Farm of St. Anne," 352.
94. Kirkbride allowed cottages for wealthy patients who could afford the luxury of a small dwelling on hospital grounds, but generally he found cottages to be unacceptable. He said they were "desirable for a certain number of those who do or ought to resort to our Hospitals for the Insane, [but] it is also quite certain, that such an arrangement is not important, nor would it prove useful for the great majority of patients." Thomas S. Kirkbride, "Remarks on Cottages for Certain Classes of Patients," *AJI* 8 (Apr. 1851), 378.
95. The paper focused on the experimental Farm of St. Anne, an addition to the Bicêtre hospital in France. Galt, "The Farm of St. Anne," 352. Although Galt promoted the cottage plan in 1855, the concept did not gain momentum until the 1860s.
96. Charles A. Lee, *Provision for the Insane Poor of the State of New York, and the Adaptation of the Asylum and Cottage Plan to their Wants, As Illustrated by the History of the Colony of FitzJames, at Clermont, France* (Albany, 1866), 7.
97. Tomes, *Art of Asylum-Keeping*, 288 (see n. 7).
98. Grob, *The Mad among Us*, 113 (see n. 1).

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