INFECTED HOUSES & SANITIZED SPACES: ARCHITECTURE, ADAPTIVE REUSE, & TOURISM OF THE EARLY 20th CENTURY TUBERCULAR ERA

By

Jenna D. Stout

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy in Public History

Department of History
Middle Tennessee State University

May 2017

Doctoral Committee

Dr. Carroll Van West, Chair

Dr. Mary S. Hoffschwelle

Dr. C. Brendan Martin

Dr. Lisa J. Pruitt

ACKNOWLEDGEMENTS

My interest in tuberculosis architecture originated back in my home state of North Carolina where archival photographs of Asheville's sanatoria inspired my investigation into the TB built environment. A public history internship at the Thomas Wolfe Memorial in Spring 2012 solidified my fascination with tuberculosis health tourism history and led me down the path to the MTSU Public History PhD Program. This dissertation would have been impossible without the support of a network of family, friends, and colleagues. Over the course of the past four years, Rachel Lewis and Kayla Pressley Seay have been a great source of friendship and cohort support. My doctoral committee members, Drs. Carroll Van West, Mary Hoffschwelle, Brendan Martin, and Lisa Pruitt, gave their time, guidance, and academic expertise to help bring this dissertation from an idea to a polished product. The MTSU Center for Historic Preservation (CHP) provided me with a built-in community of wonderful colleagues from my first days in Murfreesboro. Through the generous support of the CHP, I was able to spend my residency year researching sanatoria architecture and history at the Kentucky Heritage Council. Finally, I must thank three individuals particularly close to my heart. To my mother and sister, thanks for always supporting my educational journey. Finally, to John Harris, you constantly motivate me and I'm forever grateful for having you in my life. Thanks for appreciating my enthusiasm for sleeping porches!

ABSTRACT

In turn-of-the-century America, tuberculosis (TB) served as a palpable threat to the public. The "infected house theory" posited that tuberculosis infected the actual fabric of buildings, attaching further stigma and public health concerns to sanatoria, boardinghouses, and other architecture that housed consumptives. The razing of sanatoria represented an effort to make way for new housing, cleansed of the stigma of disease. Other spaces were adaptively reused, undergoing a sanitization. Through an architectural and material culture-based approach, this dissertation explores the process by which TB architecture shifted from perceived contaminated to sanitized spaces. It also discusses ways to interpret the forgotten white plague at historical sites with sun parlors, sun rooms, and sleeping porches in the South.

Tuberculosis histories rarely look beyond the sanatorium. Yet, given that the majority of consumptives never saw the inside of a sanatorium, the tubercular architecture landscape largely consisted of constructed sickroom spaces tacked onto domestic buildings. This dissertation is a regional study on the tuberculosis sanatorium movement and architecture in the South. It contextualizes sleeping porches, boardinghouses, and tent cottages within the larger sanatorium movement. As a work of public history, this study further focuses on the preservation, adaptive reuse, and interpretation of consumptive spaces. Case studies shed light on how different sites deal with their consumptive legacy. These sites illuminate how health and disease can be interpreted and serve as a template for public historians.

TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

Miasmas, Germs, & the Search for a Cure: Modern Views of the Tubercular Era

"Houses as built and furnished give the best conditions for implantation and growth of the tubercle bacillus."

- Dr. Lawrence F. Flick, 1903

In 1903, leading tuberculosis specialist Dr. Lawrence F. Flick declared consumption to be a house disease. His infected house theory posited that tuberculosis (TB) infected the actual fabric of buildings formerly inhabited by consumptives:

> "The house is well constituted as a breeding-ground for consumption. Tubercular matter which gets upon the walls, furniture, carpet, and hangings, in the form of dust, retains its viability for a long time on account of the absence of sunlight and the stagnation of the air."[1]

According to Flick, houses retained the tubercle bacillus (the bacteria behind tuberculosis) of former occupants and jeopardized the well-being of healthy new tenants. The construction and furnishing of houses provided dark, poorly ventilated conditions conducive for the tubercle bacillus to thrive. With small lot sizes and narrow streets, urban areas were considered to be hotbeds for consumption outbreaks.[2]

Given Flick's medical authority as a tuberculosis specialist, the infected house theory perpetuated the idea of tuberculosis as a house disease throughout the medical community and American public. Public health concerns over tuberculosis evoked conversations over diseased architecture and how to cleanse these contaminated spaces.

---

[1] Lawrence F. Flick, *Consumption, a Curable and Preventable Disease: What a Layman Should Know about It*, 6th Edition (Philadelphia, PA: Peter Reilly Publisher, 1903), 125.

[2] Ibid., 124 - 127.

TB sanatoria, boardinghouses, and other spaces formerly inhabited by consumptives became stigmatized as places of illness. The razing of sanatoria and other associated TB architecture (e.g. TB boardinghouses, sleeping porches, and solaria) represented an effort to make way for new construction, free from the stigma of disease. Other spaces were adaptively reused, undergoing what was described as a sanitization. Over the course of the twentieth century, tubercular sanatoria transitioned from private hospitals to public institutions and oftentimes vacant buildings at risk for razing. The introduction of the triple therapy drug treatment gradually made the sanatoria system obsolete in the mid-twentieth century. Thus, sanatoria and associated building types offer a glimpse into a specific period of American medical and social history.

Situated within the historiography on tuberculosis, disease theory, and medical tourism, my dissertation, *Infected Houses & Sanitized Spaces: Architecture, Adaptive Reuse, & Tourism of the Early 20th Century Tubercular Era,* examines how the stigma of tuberculosis affected the construction, adaptive reuse, and razing of anti-tuberculosis architecture. This study combines architectural history and public history to document the preservation and interpretation of these consumptive spaces. Utilizing a material culture lens, this work discusses how material evidence can shed light on the medical past of buildings and explore the process by which TB architecture shifted from perceived contaminated to sanitized spaces. This dissertation contextualizes the significance of the tubercular era and its impact on the future of architecture associated with the Anti-Tuberculosis Movement. For the purposes of this project, the majority of my study will be confined to the southeastern United States, particularly Kentucky and North Carolina.

As a work of public history, this dissertation presents a series of case studies that illuminate site interpretation in the Southeast. These case studies feature the Julius Marks Sanatorium (a local county-operated sanatorium in Lexington, Kentucky with segregated quarters for African Americans), the Thomas Wolfe Memorial (a historic site boardinghouse with sleeping porches in Asheville, North Carolina), and the Highlands Tent Cottage Exhibit (a restored tent cottage from Dr. Mary Lapham's Sanitarium in Highlands, North Carolina). This section highlights the ways in which historic preservation of tuberculosis-related sites can give voice to a diverse community of patients, servants, nurses, boardinghouse proprietresses, medical physicians, city officials, and Progressive reformers. Recommendations are also given on how sites can build on their current interpretation to tell a more storied past.

The final component of my dissertation seeks to show how knowledge of the turn-of-the-century Anti-Tuberculosis Movement can benefit historical sites with sun parlors, sun rooms, and sleeping porches. Since sleeping porches and solaria are decidedly twenty-century creations, these additions are an excellent window into how buildings change over time in response to new medical knowledge and social beliefs. Based on my own professional experience and complemented by the literature on historic house museums, this section offers practical application for sites that can aid in interpreting health and disease.

In the wake of the AIDS epidemic and the resurgence of tuberculosis in the United States, "panic and precedent led to calls to re-create the sanatorium and

reinvigorate the power of health departments to confine patients with tuberculosis."[3] Within this heated public health atmosphere of the late 1980s and 1990s, historians and medical scholars turned an eye to the tuberculosis epidemic that galvanized not just the nation but the world in the late nineteenth and early twentieth centuries. Looking to better understand the current public health crisis, these historians sought answers in the sickrooms of the past. Scholars employed a range of lens to examine the history of tuberculosis, but nearly all engaged in a discourse about agency and space. For medically trained scholars, the doctor and his research laboratory took center stage. Other cultural historians examined the consumer culture of tuberculosis and the agency of consumptives to choose their own treatment plan at home. Others emphasized how medical personnel, who not only dictated the design of the sanatorium[4] landscape but also the daily health regiment inside the sanatorium, wielded enormous social control. As contested spaces, the built environment of the sanatorium landscape simultaneously reflected health and disease. With the growth of the historiography, social, race, and political historians explored new layers in the story of tuberculosis. Yet, as scholars have widened their focus, it has become evident that the physical landscape of the Anti-Tuberculosis Movement permeated all aspects of society, particularly within the overcrowded depths of cities. Urban housing, although lacking the romanticized imagery of the sanatorium,

---

[3] Sheila M. Rothman, *Living in the Shadow of Death: Tuberculosis and the Social Experience of Illness in American History* (New York: Basic Books, 1994), 252.

[4] Sanitarium and Sanatorium are used somewhat interchangeably in the literature. There are various arguments for the correct term to use in regards to tuberculosis treatment facilities to distinguish among health resorts, mental institutions, and TB hospitals. Sanitarium tended to be used in western North Carolina, most likely because of the city's resort roots. I use sanatorium and sanatoria in this work, except in the case of place names and direct quotes.

provided a setting for discourse on public health, race, class, and how the war on tuberculosis could be won.

Since tuberculosis is a medical condition, several physicians have contributed to the literature on the early tuberculosis epidemic. In 1997, Thomas M. Daniel, a medically-trained laboratory researcher, produced an epidemiologic history of tuberculosis that traced medical knowledge of the disease, its infectious nature, and modern treatment. Daniel's *Captain of Death: The Story of Tuberculosis* (1997) is constructed out of secondary sources to provide a global perspective on tuberculosis. As a scholar of tuberculosis and not a historian, Daniel's work focuses primarily on the well-known medical professionals who researched and furthered the study of disease. The work as a whole is reverent towards those professionals and spends little time on the day-to-day experience of tuberculosis sufferers. Robert Koch, the German physician who discovered the tubercle bacillus, takes a front seat in Daniel's work. Daniel places Koch on a pedestal, noting that Koch's discovery of the cause of tuberculosis earned him the distinction of "one of the greatest contributors to medical knowledge of all time."[5]

Tuberculosis transcended the borders of the United States as shown in Koch's laboratory experiments abroad. The tuberculosis experience in the United States was largely derived from German medical knowledge and practices; yet, as Daniel hints at, the American experience was shaped through the work of Edward Livingston Trudeau. Dr. Trudeau, an American survivor of tuberculosis, took inspiration from German predecessors and created a sanatorium for consumptives at Saranac Lake, New York in

[5] Thomas M. Daniel, *Captain of Death: The Story of Tuberculosis* (Rochester, NY: University of Rochester Press, 1997), 74.

1884. Although *Captain of Death* tells the story of tuberculosis through biographies of the leading medical figures, there is brief mention of the sanatorium architecture in reference to Trudeau's Adirondack Cottage Sanitarium (later renamed the Trudeau Sanatorium) at Saranac Lake. Adirondack Cottage Sanitarium encompassed thirty-six building, sixty acres, and one hundred and fifty patients by the early 1900s. Cottages, balconies, and porches for convalescing patients became a prominent local architectural feature in the town of Saranac Lake. According to Daniel, "Trudeau's treatment regimen of rest, outdoor air, and a hearty diet might have made his sanatorium popular among the patients who cured at Saranac Lake, but it alone would not have secured Trudeau his major place in the history of American medicine."[6] Instead, Daniel claims that Trudeau's research laboratory at Saranac Lake earned him that place. The laboratory, not the sanatorium, was the place of significance in tuberculosis history. This belief in the superiority of the laboratory reflected Daniel's own professional bias as a medical researcher. As Daniel argued,

> The leaders of American medicine in the sanatorium era, Trudeau and Flick among them recognized that solving the problem presented by the tuberculosis epidemic they faced required more than good patient care. It required better understanding of the disease. It required new modalities of prevention and cure. It required a vigorous biomedical research program.[7]

Mark Caldwell's *The Last Crusade: The War on Consumption, 1862-1954* (1988) treats medical doctors as one of many key players in the so-called war on consumption. Arguing that "tuberculosis was more than a scientist's obsession or a challenge to physicians," Caldwell examines American perceptions and fixation with tuberculosis

[6] Ibid., 184.
[7] Ibid., 191.

from 1862 to 1954.[8] This historical interpretation of the tuberculosis epidemic focuses on the sanatorium movement as both a social and cultural experience. Consumption, long thought to be a disease of the atmosphere, was linked to urban overcrowding and poor housing conditions. Pestilence thrived in the congested slums of the cities. Caldwell notes that tuberculosis came to be seen as inseparable from the "life being live around it, a natural produce of a bad atmosphere"; thus, "the study of its sources and remedies" became "as much a branch of urban planning or domestic science as medicine."[9]

The Last Crusade makes connections between poor housing and the public health movement that are later explored by historians in more depth. For Caldwell, the discussion of housing is inevitably tied to agency of the victim and the pursuit of a cure: "the home could be ventilated, the slums cleared. Why couldn't the constitution of the sufferer be remodeled as well?"[10] Edward Livingston Trudeau once again takes a starring role in the story of tuberculosis because he possessed the authority as not only a trained medical physician, but also the lived experience of a tuberculosis survivor: "a consumptive of the old school, refined by disease."[11] Caldwell credits Trudeau with molding the battle against consumption into a thoroughly American experience:

> He caught the nation's attention by deserting the city, forging his way into the wilderness, meeting its challenges and emerging a stronger man; repeating in a medical context the story of the whole American experience, endorsing in the process its suspicion of the cities and its loves of open space.[12]

---

[8] Mark Caldwell, *The Last Crusade: The War on Consumption, 1862-1954* (New York: Atheneum, 1988).

[9] Ibid., 31.

[10] Ibid., 37.

[11] Ibid., 44.

[12] Ibid., 47.

The development of American sanatoria reflected the emergence of public awareness that tuberculosis was a disease of the poor and adequate planned housing should be provided for the sick. Caldwell addresses the larger cultural meanings conveyed through the architecture of tubercular sanatoria. According to Caldwell, there were two distinct sanatorium ground plans: the cottage model with a central administration building and infirmary and bungalow-style accommodations scattered around the grounds to achieve a home-like setting; and the institutional plan with patient accommodations designed like hospital wards and connected formally through corridors and covered walkways to the administrative center. A commonality in these plans was the importance of centralization, "the administrative center dominated the sanatorium landscape, a natural consequence of the importance in the cure of supervising the patient's daily life."[13]

A dominant ethic of centralization also inspired the specific design of sleeping cottages. The typical cottage consisted of "a central communal living room, backed by bathrooms and lockers for patients' belongings, and flanked by two long dormitories, each fronted by a porch."[14] Although American sanatoria were based initially on European models, Caldwell contends that the cottage plan became the dominant force in American sanatorium design and held deeper meanings about American society. The physical separation of cottages allowed for communion with the outdoors away from the miasma of industrial centers, but also promoted easy socialization between cottages in an atmosphere of centralized power. Existing both in isolation and community, the

[13] Ibid., 88.
[14] Ibid., 90.

"sanatorium built on the cottage plan harked back to a time when the country was place of small villages of manageable and unthreatening scale, fostering the independence of their citizens without leaving them unprotected."[15]

The cottage-planned sanatorium directly mirrored the American enthusiasm for town plans, particularly ideal planned communities, in the late nineteenth and early twentieth centuries. Against the backdrop of nature, the sanatorium was a complex, hierarchal commercial development that belied the traditional rural-urban dichotomy. Caldwell asserts that the sanatorium model evolved from the utopian communities of the nineteenth century. He also looks beyond the grounds of the sanatorium to see how the search for the cure impacted the surrounding architecture. In the case of Saranac Lake, New York, the sanatorium "engendered a new style of domestic architecture, adapted to the requirements of the cure, and in time this transformed the appearance of the residential streets."[16] During the town's building boom of the 1880s, grandiose Queen Anne-style cottages of irregular floor plans, asymmetrical gables, and sweeping verandas dominated the townscape. Since the Trudeau Sanatorium couldn't house all the hopeful applicants coming to the area, the local townspeople capitalized on the economic opportunity by opening their doors to boarders. The "cure cottage" soon became a "mainstay of the local economy and a principle of architecture."[17] The outdoor porch (sleeping porch) redefined the look of the neighborhoods:

> Often these (porches) were tacked on wherever they fit, when a former private residence became a private sanatorium. If the owners attracted the tubercular and made a success of their enterprise, new porches would sprout above or beside old

[15] Ibid., 91.
[16] Ibid., 137.
[17] Ibid., 138.

> ones; houses sprawled outward, acquiring facades of glass…Ubiquitous porches blurred or even hid the building lines, and houses became in consequence rather shapeless but buxom, even maternal, and pleasantly informal.[18]

The sleeping porch found itself into the design of middle-class American homes throughout the nation by the 1920s. Aware of the aesthetic appeal of their townscape, the townspeople of Saranac Lake became preoccupied with upholding the cure-inspired architectural tradition. Tuberculosis's imprint in the built environment prevented the memory of sanatoria from fading into the woodwork. The sanatorium seemingly vanished from the American landscape and consciousness by the 1960s, but "sleeping porches – now used as studies, sewing rooms, or repositories for junk – still recall the era of the crusade in hundreds of thousands of American homes built between the first and second world wars."[19]

Katherine Ott's *Fevered Lives: Tuberculosis in American Culture since 1870* (1996) builds on the scholarship of Caldwell and places consumer culture at the center of her historical study. The material culture produced for consumptives is at the heart of Ott's work. Rather than focus on sanatorium architecture specifically near well-known sanatoria, Ott explores the culture of sleeping outdoors that developed by the 1910s and its impact on the built environment. The fresh-air cure gradually replaced the climate cure and birthed a craze for home rest goods. Galvanized by the idea that fresh air could be had at home, Americans embraced verandas and sleeping porches. A fixture of the Queen Anne-style house, the veranda remained fashionable long past the Queen Anne-style's heyday. According to Ott, "the ideal antituberculosis veranda extended around three sides

[18] Ibid., 138.
[19] Ibid., 271.

of the house, with at least one side facing south…wide enough for a chair or entire bed to be wheeled along it, to follow the sun or breezes."[20] If houses couldn't accommodate verandas, a distinct anti-tuberculosis creation, known as the sleeping porch or California room, could be constructed. Attached to upper stories, the sleeping porch encompassed an area of approximately six by ten feet, enough space for a bed and little else. Available through mail-order catalogs, prefabricated sleeping porch kits ranged from fifty to ninety dollars although the materials cost as little as ten dollars.[21]

Given the availability of mail-order kits and the widespread threat of tuberculosis, a marketplace existed for anti-tuberculosis goods. Ott emphasizes the economic side of the Anti-Tuberculosis Movement and how the need for cure-inspired architecture at home spurred a growing marketplace throughout the United States. Caldwell first voiced the idea of the sanatorium as a commercial development, but Ott carries the thread further by focusing on commercial goods not limited to the sanatorium landscape and surrounding townscape. She also paints the construction of anti-tuberculosis domestic architecture as an act of agency on the part of sufferers[22]:

> The widespread addition of sleeping porches to houses points to a relationship to home architecture different from our own. Home owners tacked on these rooms without regard to aesthetics or the effect on resale value, and in the absence of zoning laws or building codes to prevent them. For these families, the situation was serious enough to alter not only their habits and hygiene but also the physical structures of their lives.[23]

---

[20] Katherine Ott, *Fevered Lives: Tuberculosis in American Culture Since 1870* (Cambridge, Mass.: Harvard University Press, 1996), 90.

[21] Ibid.

[22] It is important to note that Ott loses sight of the fact that economic motives also influenced owners' decisions to add on to their homes; a sleeping porch could become a source of revenue from boarders.

[23] Ibid., 91.

While Caldwell and Daniel perpetuate the triumphal side of the Anti-Tuberculosis Movement, Ott provides a more realistic view. The lack of available beds at sanatoria and funding shortages meant that most consumptives stayed at home. While a market definitely existed for more sanatoria based on public health recommendations, many communities opposed the construction of tubercular sanatoria. Court cases ensued over sites and even when sanatoria were constructed, the buildings often were victims of arson. Ott posits the question, "If sanitariums were ineffective, and perhaps even unnecessary, why do they figure so prominently in American tuberculosis histories and resonate so strongly in family memories?"[24] According to Ott, sanatoria flourished because they filled a community's need to isolate the diseased while also allowing consumptives to form a sense of community. They reinforced social order as patients learned self-control over coughing and other unhealthy behaviors such as spitting in public spaces. The moral and aesthetic appeal of sanatoria helped them prosper financially. All these reasons contributed to the saliency of sanatoria: "Despite its inaccessibility for most people, the sanitarium became the paradigm for tuberculosis control and remained resilient in public memory."[25]

The sanatorium, although deeply embedded into the discourse on tuberculosis, is not at the heart of *Fevered Lives*. Since an estimated ninety percent of consumptives dealt with their disease at home, the sickroom was actually at the center of an elaborate system of homecare. Coinciding with the rise of the professionally trained nurse, the sickroom of the late 1890s diverged greatly from its "pillow-laden, fabric-swathed, stuffy throne room

[24] Ibid., 150.
[25] Ibid., 151.

of the pregerm 1870s."[26] Located on the house's south side if possible and lined with windows, the sickroom consisted of uncovered wood floor, painted walls rather than easily infected wallpapers, and only the basis of furnishings to mimic the hospital setting. While the sanatorium was considered one's first choice, the sickroom experience revolved around a similar controlled organization and design. For example, the sickbed's arrangement in the center of the room and away from possibly contaminated wallpapers "was designed for the convenience not of the patient but of the nurse and caregivers."[27] Yet, despite the caregiver-controlled nature of the sickroom, patients taking the rest cure maintained a sense of agency. As Ott points out, "A consumptive who could not go to a sanitarium or hospital could create his or her own facility in miniature with a room, tent, or cot and just as effectively labor to get well."[28]

Disease and class went hand-in-hand. Considered to be the primary carriers of disease, the poor lacked the resources to construct their own sickrooms. Clusters of overcrowded, infected tenements, such as the notorious Lung Block of turn-of-the-century New York City, dramatically contrasted with the warmth and security of middle-class dwellings. Social workers saw the squalor of tenements as a blight on the health of the entire city and advocated for slum clearance. Ott ties the razing of entire buildings to the larger cultural force of consumerism. Without the spending power of the middle-class, the poor's "homes and possessions figured the shabby, patched, and scavenged world of the past."[29]

---

[26] Ibid., 81.
[27] Ibid., 82.
[28] Ibid., 86.
[29] Ibid., 133.

While the social stigma of tuberculosis plagued the poor, those truly suffering from consumption learned how to navigate the public health system. Sheila A. Rothman's *Living in the Shadow of Death: Tuberculosis and the Social Experience of Illness in American History* (1994) is a direct response to the physician-centric medical histories produced about tuberculosis. In an effort to better understand the textured layers of patients' experiences, Rothman examines the personal papers, diaries, and memoirs that comprise 'narratives of illness.'[30] These narratives reveal the varied experiences of consumptives and demonstrate their agency. Rather than face banishment to a sanatorium, some consumptives hid their ailments from family and friends. As phthisiophobia (fear of tuberculosis) became widespread in the early twentieth century, "passing" as healthy was an attractive alternative to ostracism from society. Others opted for living "in the shadow of sanatorium" (i.e. moving to the towns that grew up around sanatoria) to gain access to skilled tuberculosis specialists and more importantly to be accepted in a "one-industry town."[31]

Building on the cultural framework set forth by Ott in *Fevered Lives*, Rothman argues that sanatoria spawned an elaborate patient subculture. Distanced from their own homes and with little opportunity for family visits, patients created their own sense of community united under the omnipresence of death: "the sanatorium experience was at its core an encounter with mortality."[32] Close friendships and sexual relationships ('cousining') occurred in the charged atmosphere of the sanatorium. In her discussions of the power of the patient subculture, Rothman departs greatly from other works that exalt

[30] Rothman, *Living in the Shadow of Death*, 1.
[31] Ibid., 215.
[32] Ibid., 238.

the control manifested in the architectural layout of sanatoria. As Rothman argues, "it was the patient subculture, not the administrative personnel, that forced the confrontation" with death.[33] Rothman's emphasis on the patient's agency deemphasizes the importance of sanatorium architecture and planning designed by medical personnel. Sanatoria and sanatorium towns derived power from the social communal of consumptives. The sanatorium merely provided the architectural backdrop for those social activities.

Barbara Bates's *Bargaining for Life: A Social History of Tuberculosis, 1876-1938* (1992) occupies a medium ground between the top-down view of the early medical histories and the bottom-up view of the later patient-centric studies. Looking at the bargains between patients and caregivers, Bates views the treatment of tuberculosis as a shared activity between the sick and the healthy. The sanatorium acted as the common space for these bargains. Bates acknowledges that the sanatorium existed as a business, but patients wielded as much power as caregivers in the running of the sanatorium. As a service industry, sanatorium relied on the satisfaction of its clients. "If an establishment was to survive, it had to attract and please patients, satisfy their families, maintain a roster of visiting physicians, and furnish the care and supervision that all of them expected."[34]

The architecture of the Anti-Tuberculosis Movement involved not just the sanatorium, sickroom, and cure-inspired domestic construction, but also spaces geared towards the prevention (as opposed to the treatment) of tuberculosis. At the Henry Phipps Institute, the dispensary could reach a wider audience, rather than just consumptives, and

---

[33] Ibid., 241.

[34] Barbara Bates. *Bargaining for Life: A Social History of Tuberculosis, 1876-1938* (Philadelphia, PA: University of Pennsylvania Press, 1992), 185.

"staff could teach the patients and their families how to prevent the spread of infection."[35] Spit-cups, rules, instructions, milk (for the popular milk cure treatment), and low-cost medicines were dispensed. Advice from nurses at the dispensary followed patients into their own homes and promoted a healthy environment in the domestic setting. Despite the importance of the dispensary in working-class neighborhoods, the preventorium ultimately came to symbolize the space most geared towards the prevention of tuberculosis. Modeled on sanatoria, the preventorium served children at risk to contract the disease.

Cynthia A. Connolly's *Saving Sickly Children: The Tuberculosis Preventorium in American Life, 1909-1970* (2008) examines the preventorium in great detail. By studying the preventorium in its historical context, Connolly shows how tuberculosis can be used to "explore the ways that values and interests, often unacknowledged, determine health care providers' research programs, perceptions, clinical decisions, and interventions."[36] The "reform-oriented, child-saving ethos of early twentieth-century America" created "an ideal environment for the preventorium to flourish."[37] Yet, despite the social control and power of medical authority in the preventorium, the institutions existed because society desired a remedy for the tuberculosis epidemic. Like other historians, Connolly notes how planners borrowed from European models to design preventoria. They also inevitably copied the sanatorium system and its emphasis on fresh air and nutrition to build up resistance to tuberculosis. While preventoria represented health and progress for

---

[35] Ibid., 113.

[36] Cynthia A. Connolly, *Saving Sickly Children: The Tuberculosis Preventorium in American Life, 1909-1970* (New Brunswick, N.J.: Rutgers University Press, 2008), 9.

[37] Ibid., 5.

poor children, their physical presence threatened many communities not wishing to be associated with the white plague. The preventorium's paradoxical role as both a sign of health and of tuberculosis led to conflicting receptions and ultimately fostered a conflicted memory of the institutions. In contrast to Ott's assertion that sanatoria became intrinsically linked to tuberculosis in public memory, Connolly argues that preventorium's conflicted past (i.e. the paternalistic removal of poor and immigrant children to instill middle-class values through assimilation) contributed to historical amnesia. Those who do reflect on why preventoria were a mainstay of the Anti-Tuberculosis Movement should remember that the preventorium was a construct of its time and more complex than a good-bad dichotomy. As Connolly concludes,

> In 1909, the preventorium represented a well-meaning, albeit limited, response to an epidemic responsible for the deaths of thousands of children a year. It founders not only engaged with the latest science, they rejected a status quo that held parents alone responsible for children's mental and physical well-being, offering proactive assistance in an era in which the federal government had not yet assumed any responsibility for families in need.[38]

Discussions of the sanatorium and preventorium in American life open up a wider discourse on class, gender, and race. Wealthier patients could afford the luxury of the sanatorium while the less well-off sought the cure in the cottages and boardinghouses of sanatorium towns. Even with the development of state-run sanatoria, most consumptives stayed at home, due to either economic necessity or an active choice to avoid the trappings of sanatoria. The association of disease with the poor, working-class, and immigrant populations living in cities led to slum clearance, dispensaries, and preventoria. Social histories, such as *Bargaining for Life*, pay significant attention to

[38] Ibid., 129.

gender by tracing the rise of professionally trained female nurses with the Anti-Tuberculosis Movement. Race, on the other hand, is only hinted at in the early historiography since the most well-known sanatoria catered to an exclusively white clientele.

The segregation of space relegated African Americans to a minor role in the sanatorium landscape; yet, particularly in industrial centers, race was emphatically linked to disease. Samuel Kelton Roberts, Jr.'s *Infectious Fear: Politics, Disease, and the Health Effects of Segregation* (2009) fills a gap in the historiography by looking at the political and racial views that surrounded tuberculosis in the early twentieth century. While previous works acknowledged tuberculosis's impact on housing, Roberts contends that scientific racism motivated the razing of urban communities. Under Lawrence Flick's house infection theory, surveillance efforts largely targeted the ethnic poor and reinforced ideas about racial susceptibility. The stigma associated with African Americans' role in spreading tuberculosis eventually justified the demolition of slums. Roberts argues that public health efforts among African Americans largely stemmed from a desire to protect white health. By destroying the built environment inhabited by African Americans, public health officials took control over previously racialized spaces under the guise of the Anti-Tuberculosis Movement.[39]

The Anti-Tuberculosis Movement, in its many forms, relied on the segregation of spaces, albeit the sanatorium, sickroom, or sleeping porch. Writing in 2007, Emily K. Abel witnessed the politics of exclusion that continued to surround tuberculosis and

[39] Samuel Kelton Roberts, Jr., *Infectious Fear: Politics, Disease, and the Health Effects of Segregation* (Chapel Hill: University of North Carolina Press, 2009).

commented on the disease's role in American society: "As in the 1920s and 1930s, tuberculosis helps to define who should be considered a member of U.S. society and who should be treated as an outsider."[40] Abel's *Tuberculosis and the Politics of Exclusion: A History of Public Health and Migration to Los Angeles* focuses primarily on the experience of tubercular Mexicans and other migrants who faced expulsion for overwhelming public resources. Abel lends agency to minority consumptives previously overlooked in the historiography. Similar to Rothman in *Living in the Shadow of Death,* Abel posits that low-income consumptives had varied experiences navigating through the public health programs and eventual exclusionary campaign of the 1930s. More importantly, "a few groups and individuals powerfully challenged prevailing assumptions about who should be considered a burden and who a resource, asserting their right not only to remain in the metropolis but also to share equally in its social and economic benefits."[41] Black Los Angelenos, for example, chose to erect their own sixteen-bed tuberculosis facility as a physical manifestation of their public health awareness and authority.[42] Disenfranchised from fully participating in the established sanatorium landscape, these African Americans created their own built environment to convey larger messages of citizenship and inclusion.

The story of tuberculosis, despite variations, adheres to a progressive narrative form in the historiography. As a house disease, tuberculosis seemingly originated in the miasma of the city slums. The prevailing treatment of tuberculosis in sanatoria upheld the

[40] Emily K. Abel, *Tuberculosis and the Politics of Exclusion: A History of Public Health and Migration to Los Angeles* (New Brunswick, NJ: Rutgers University Press, 2007), 137.

[41] Ibid., 4.

[42] Ibid., 136.

power of architecture and redefined the house as a potential source of health. As a distinct domestic architectural style and consumer culture emerged in the early twentieth century, the poor found themselves marginalized further to the outskirts of society. Discussions about anti-tuberculosis vilified those without the resources to escape the tenements and lung blocks of America. Poor housing, intrinsically linked to the occupants, threatened the health of the entire community; thus, by associating certain classes and races with the disease, public health officials shaped the Anti-Tuberculosis Movement into an act of social cleansing. The razing of the tubercular built environment was the most potent manifestation of this cleansing. Yet, while the historiography examines multiple layers of this tuberculosis story, little has been written on the post-tuberculosis epidemic lives of the sanatorium landscape. Ott, in *Fevered Lives*, briefly mentions that sanatoria remain a dominant symbol of tuberculosis treatment and the sleeping porch building craze is alluded to in multiple works; however, there is a lack of scholarly research on the adaptive reuse of tubercular sanatoria, boardinghouses, and other associated architectural types. Constructed to meet a specific need and plagued with the stigma of disease, sanatoria could have all been razed from the physical landscape. How and why were some tubercular spaces able to overcome their consumptive past? Did their proprietors sanitize the past or embrace the tubercular legacy embedded in the architecture? The tubercular architectural landscape offers a rich field of scholarship for future studies of memory and historic preservation to explore these questions and uncover the heritage of the American sanatorium.

Although a substantial historiography on tuberculosis exists, architectural historians and public history practitioners have not produced any lengthy scholarly

studies on tuberculosis architecture and preservation in the United States. Annmarie Adams is perhaps the most well-known architectural historian writing on tubercular sanatoria design in North America, although her lens of study is focused on Canada. Quite a few undergraduate and graduate students have, however, written theses that focus on American tubercular sanatoria, both as a whole and site-specific. Matriculating from the University of Illinois's Architecture Program, Strawn Aldrich Gay wrote "A Tuberculosis Hospital and Sanatorium" in 1913.

In more recent years, historic preservation graduate students have paid particular attention to the matter of tuberculosis sanatoria adaptive reuse and developed projects on the topic. These include Rebecca Snyder, Janey Crouse Terry, and Margaret Tulloch's "Blue Ridge Research Park Proposal: Adaptive Reuse of the Blue Ridge Sanatorium" (2002), Lisa M. Kucik's thesis "Restoring Life: The Adaptive Reuse of a Sanatorium" (2004) and Caitlin A. Chamberlain's thesis "From Vacant to Vibrant: Adaptive Reuse of Abandoned Asylums and Sanatoriums: Through the Study of Glenn Dale Hospital in Glenn Dale, Maryland" (2011). As part of her master's work in Ball State University's Historic Preservation Program, Anya Grahn completed a thesis entitled "The Rise and Fall of the Tuberculosis Sanitarium in Response to the White Plague" (2012) that discussed the trajectory of the American sanatorium movement from its European roots through the 20th century institutionalization of tuberculosis treatment. While Grahn provides a chronological overview of tuberculosis sanatoria, emphasis is placed on two Indiana sites, Kneipp Springs Sanitarium and Silvercrest Sanitarium.

There has yet to be a significant regional study on the tuberculosis sanatorium movement and architecture in the South. Kristin Reynolds's thesis "Well-Built in

Albuquerque: The Architecture of the Healthseeker Era, 1900" (2010) serves as a template for a localized study of tuberculosis architecture that could be applied to the southern sanatorium movement. In addition to the dearth of regional study, the current literature fails to fully examine the other types of tuberculosis architecture beyond the sanatorium. Sleeping porches, boardinghouses, and tent cottages need contextualization within the larger sanatorium movement. While students are increasingly looking at sanatoria from a historic preservation and adaptive reuse perspective, there lacks extensive study on how to interpret these spaces. This work addresses these gaps in the historiography by exploring not only different architectural types of the southern tuberculosis sanatorium movement, but also incorporating public history theory and practice. In this dissertation, I explore public history efforts surrounding tuberculosis architecture and weigh in on how current trends can be applied to sites.

My dissertation answers a series of intertwined research questions. First, how did the stigma of tuberculosis impact the construction, adaptive reuse, and razing of architecture associated with the Anti-Tuberculosis Movement? Second, how are these building interpreted in regards to their consumptive past? In what ways can material culture be effectively used to give voice to how these spaces were once used? What role has tourism played in the preservation and interpretation of these spaces? And finally, how can contextualizing the significance of the tubercular era impact the future of architecture associated with the Anti-Tuberculosis Movement?

In order to answer these questions, I have consulted a wide range of sources. There currently exists a substantial historiography on tuberculosis, particularly the social and cultural histories produced in the 1990s and 2000s, which serves as the backdrop for

my study. To supplement the historiography, I draw on historic preservation, architectural history, material culture, and public history works to better understand the adaptive reuse, interpretation, and razing of tubercular architecture. As for primary sources, I'm fortunate in that there's a great wealth of pamphlets, brochures, Sanborn Fire Insurance maps, photographs, architectural treatises, catalogs, and directories pertaining to tubercular architecture. The National Association for the Study and Prevention of Tuberculosis published a series of educational pamphlets, including *Some Plans and Suggestions for Housing Consumptives* and *Sleeping and Sitting in the Open Air*, which serves as a natural starting point for my study. The nature of my dissertation subject lends itself well to a material culture approach, so I utilize architecture and furnishings (e.g. physical objects and those featured in catalogs and photographs) to provide a rich analysis of the southern sanatorium movement. Finally, my own fieldwork functions as a window into the interpretation of these spaces.

PART I

Creating a Therapeutic Space: The TB Built Environment

A bacteriological revolution swept through the United States in the Progressive Era. The miasma theory with its disease-inducing gases dissipated as the work of scientists abroad demonstrated that contagions actually caused disease. While the germ theory gradually took root, the medical community and public still contended that unsanitary conditions bred illness.[1] Progressive-minded urban reformers, largely middle-to-upper class individuals with leisure time for social crusades, took it upon themselves to improve the living conditions of lower classes. Altruism was not necessarily at play as there was a genuine fear of disease moving socially upward through the community into the homes of middle-class and upper-class employers.[2] This preoccupation with sanitation had a two-fold effect on the built environment: the construction of cure-inspired architecture and the belief that consumptive spaces were contaminated.

Turn-of-the-century efforts to combat tuberculosis produced a distinct tuberculosis associated environment of cure-inspired architecture. While not formally acknowledged as a style of architecture, cure-inspired architecture sits at the heart of this study. For the purposes of my research, I consider cure-inspired architecture (also referred to interchangeably as tubercular/tuberculosis architecture or TB architecture) to encompass the constructed spaces in which consumptives sought medical treatments.

---

[1] Daniel Freund, *American Sunshine: Diseases of Darkness and the Quest for Natural Light* (Chicago: University of Chicago Press, 2012), 14 -15.

[2] Lawrence F. Flick, "The Spread of Tuberculosis by Consumptive Servants," *Consumption, a Curable and Preventable Disease: What a Layman Should Know about It*, 6th Edition (Philadelphia, PA: Peter Reilly Publisher, 1903).

These spaces include TB boardinghouses, private sanatoria, public hospitals, tent cottages, sleeping porches, and solaria.

Architecture offers a lens into this specific period of medical thought. The various types of cure-inspired architecture shed light on how tuberculosis, and the fear of contracting the illness, impacted daily life in the United States. Private sanatoria and public hospitals showcase the regimented institutionalization of tuberculosis treatment. Boardinghouses, as transient housing, accommodated the overflow of consumptives not able to secure a coveted spot in sanatoria. Progressive Era reformers viewed these places where the healthy and consumptives comingled as pestilence houses in need of strict regulations. Nowhere was the fear of contagion as palpable as the boardinghouse. Often attached onto the sides and backs of boardinghouses, sleeping porches and sun parlors served as a bridge between the tuberculous and the healthy. Originally hallmarks of the sanatorium, these rooms found their way into domestic architecture as healthy spaces.

The TB built environment is a tangible landscape that can be viewed throughout the Southeast. In the following section, I present a series of case study chapters that focus on specific types of cure-inspired, tubercular architecture. Together these chapters explore the public health paradox concerning TB treatment in which spaces simultaneously existed as both healthy interiors and infected spaces. Chapter Two, "Selling a Cure in the Land of the Sky: Private Boardinghouses and Sanatoria in Asheville's Tubercular Age," examines the construction of sanatoria and operation of TB boardinghouses in Asheville, North Carolina. This chapter also discusses the sanitization of Asheville's consumptive past from a tubercular safe haven to a health mecca. In Chapter Three, "An Art Deco Treatment: The Mid-Century State TB Hospitals in

Kentucky," the Commonwealth of Kentucky serves as the setting for the transition of TB treatment from the private, local sector to public-funded institutions. These institutions resembled the hospitals of today more than the resort-like sanatoria of the past. This third chapter will focus on the construction and adaptive reuse of facilities as well as the phasing out of sanatoria in the wake of effective drug treatments. Chapter Four, "From Cure Porch to Cure-All: Sleeping Porches in the American Architectural Landscape, 1890 – 1930," traces the evolution of sleeping porches from their anti-tuberculosis creation to eventual inclusion in everyday domestic American architecture. This chapter adopts a material cultural approach and relies on a range of material evidence, including mail-order catalogs and interior furnishings.

These chapters delve into the dichotomy of infected-sanitized spaces in tubercular architecture. TB boardinghouses and sanatoria catered specifically to consumptive patients; as the communicability of tuberculosis was better understood, these places were stigmatized as contaminated spaces that needed to be either cleaned extensively or completely razed. Sleeping porches followed a slightly different path. Created as at-home TB rooms and tacked onto boardinghouses to accommodate the tuberculous, sleeping porches indicated the presence of consumptive housing and were ubiquitous features in TB resort areas like Asheville. Despite this early association with illness, sleeping porches gradually were incorporated in house designs for mass consumption. A multitude of factors, including the popularity of mail-order porch kits and the rise of the open-air health movement, contributed to the reason that sleeping porches, unlike many TB boardinghouse and sanatoria, could overcome their tubercular roots and be considered healthy spaces as early as the mid-1910s.

Tubercular architecture constitutes a unique health-related property type that has been somewhat obscured from history. Many TB boardinghouses and sanatoria were physically wiped from the landscape to make way for new, "healthy" construction. Sleeping porches and solaria, if remaining intact, have often been converted for multi-use or storage space. Since many early sleeping porches and solaria were quickly added onto houses and not a part of the original footprint, they are particularly vulnerable to demolition by homeowners. Linda Nash, in *Inescapable Ecologies: A History of Environment, Disease, and Knowledge*, writes of the "historical 'forgetting' of disease."[3] This erasure of disease from the landscape is particularly potent when considering the imprint tuberculosis left on the early twentieth-century built environment. In order to read architecture as part of the larger tuberculosis landscape, what's missing from the built environment is equally as important as the buildings that are still extant. The razing of TB infected houses occurred along class lines with middle-class neighborhoods viewed as more benign than slum areas. The lack of negative connotations with middle-class homes helped protect those local spaces, such as boardinghouses and sleeping porches, from destruction. At a time when even physicians recommended razing and rebuilding hospitals, "no one suggested destroying an infected brownstone or a suburban bungalow."[4]

During the Progressive Era, improved building techniques allowed for quicker, more efficient construction. Widespread consumerism, in particular the availability of

---

[3] Linda Nash, *Inescapable Ecologies: A History of Environment, Disease, and Knowledge* (Berkeley: University of California Press, 2006), 17.

[4] Katherine Ott, *Fevered Lives: Tuberculosis in American Culture Since 1870* (Cambridge, MA: Harvard University Press, 1996), 133.

prefabricated houses, further added to the willingness of owners to wipe away entire buildings and contents to start afresh.[5] Fortunately for scholars of this period, newly formed health departments and boards of cities aggressively charted and mapped out the locations of TB occurrences. These records coupled with city directories, census data, and Sanborn Fire Insurance Company maps add layers of interpretation for the physical architecture that remains. The following chapters utilize these types of sources to provide a nuanced look into cure-inspired architecture of the Southeast.

[5] Ibid., 132-134.

CHAPTER TWO

Selling a Cure in the Land of the Sky: Private Boardinghouses & Sanatoria in Asheville's Tubercular Age

"Asheville is probably the best known of all the climatic resorts of the South. In former years the city was extensively advertised as a resort for the tuberculous, but now the tendency is to encourage the coming of healthy tourists rather than the coming of the tuberculous."

- A.D. Foster, 1915

In the 1870s, Dr. Robert F. Speir's *Going South for the Winter* gave voice to the importance of medical tourism in the treatment of pulmonary consumption. The South, according to Speir, contained winter resorts of moderate temperature and humidity that were ideal for consumptives. The act of wintering in the South was not to be embarked on without ample preparation. Fortunately for consumptives traveling for their health, transportation routes of both steam travel and railways provided access as far south as Florida.[1] Only a decade after Speir espoused the merits of traveling to the South, Asheville, North Carolina garnered national attention for its medicinal, climatic qualities and gradually transformed into a renowned city for tuberculosis treatment.

In the days before effective drug treatments, tuberculosis was a leading cause of death in the United States. The widespread occurrence of the disease resulted in a number of nomenclatures for tuberculosis, chiefly the White Plague[2] for the pallor of its sufferers and consumption for the way the patients wasted away from the disease. Considered a

[1] Robert F. Speir, M.D., *Going South for the Winter* (New York: Edward O. Jenkins, 1870).

[2] There are varying accounts on the origins of this nickname. The term "white" is due to the pallor of patients. The plague part is tied to the widespread threat of the disease. It was believed to also be a public health tactic to raise awareness of the disease and the need for more sanitary practices.

disease of the environment, tuberculosis became a social issue linked to overcrowding in urban areas and poor housing conditions. Spaces in the built environment associated with tuberculosis were stigmatized as pestilence "pest" houses and lung blocks, places to be avoided if at all possible. Rather than attribute the disease to microbes, many early medical practitioners contended that bad air was the true culprit. The miasmatic theory argued that decaying organic matter in low-lying, swampy areas emitted a fog of disease.[3] This connection between disease and unhealthy landscape conditions in turn facilitated the promotion of other environments as healthy, sanitary places. Mountain resorts with high elevations appeared to be the perfect place to escape miasmas and seek the cure for ailments. In particular, "new hospitals [sanatoria], hotels, and boardinghouses profited from the steady stream of tuberculars or 'lungers."[4]

The Appalachian Mountains attracted a wealth of middle and upper class tourists seeking a summer health resort. Whereas northern resorts had been fashionable spots for much of the nineteenth century, southern health resorts gained popularity as the century drew to an end. According to an 1893 article that appeared in *The Worcester Daily Spy,* Asheville offered an alternative to the Northeast for a class of tourists "whose tastes are more quiet, or whose means are limited, or whose physical conditions regulate their choice of a winter abiding place."[5] In addition to those considerations, the fresh mountain air, temperate climate, and scenic terrain promised a perfect antidote to the industrial miasma of urban life. But for consumptives, Asheville and its neighboring resort towns

---

[3] Linda Nash, *Inescapable Ecologies: A History of Environment, Disease, and Knowledge* (Berkeley, CA: University of California Press, 2006), 65 – 70.

[4] Thomas J. Schlereth, *Victorian America, Transformations in Everyday Life, 1876-1915* (New York: HarperCollins Publishers, 1991), 288.

[5] "Southern Health Resorts," *Worcester Daily Spy*, December 24, 1893.

were not simply fashionable summer destinations. They offered a potential open-air cure for tuberculosis that local hospitality providers (e.g. boardinghouse keepers, sanatoria directors, and hoteliers) claimed could be found through extended stay in their resort towns. Unfortunately, with more and more tourists flocking to the mountains, the operators of sanatoria, boardinghouses, and hotels attempted to distance themselves from their tubercular roots. As the 1900s gave way to the 1910s, consumptives, once targeted in tourism literature, were relegated to the outskirts of the sanatorium landscape to make way for healthy tourists. The phrase "No Sick" adorned establishments throughout Asheville, signifying the town's rebranding campaign as a health destination where consumptives were no longer welcome.

By the early 1910s, the sick became an economic liability for Asheville's future and a threat to the welfare of the healthy. In an attempt to legislatively control and monitor tuberculosis, the Asheville Joint Board of Health required proprietors of tubercular boardinghouses and sanatoria to apply for licensing to serve the tuberculous. Spaces occupied by consumptive patients, in boardinghouses and other housing accommodations, were considered infected rooms. Asheville's disinfection policy required a public health official to visit these rooms and fumigate them with formaldehyde. This method of disinfection utilized germ theory to devise a "simple strategy of disease prevention: to eliminate tuberculosis, eliminate the bacillus, whether it was located in people's lungs or on the objects they touched and owned (called fomites)."[6] This public health policy aimed at disinfecting consumptive housing spaces fit

[6] Katherine Ott, *Fevered Lives: Tuberculosis in American Culture Since 1870* (Cambridge, MA.: Harvard University Press, 1996), 115.

within a larger movement to sanitize the image of Asheville. Yet, as much as Asheville endeavored to lose its tubercular legacy in the early twentieth century, boardinghouses serving the sick and the healthy continued to co-exist in neighborhoods. The paradoxical role of Asheville's tubercular legacy can be viewed in the early twentieth century tourism literature, specifically in the advertisements for boardinghouses, hotels, and sanatoria.

The resorts of western North Carolina flourished in large part due to the heavy promotion and commercialization of the local tourist industry. Regional boosters, in both the South and the West, advocated for their area's "unparalleled role in the treatment of suffering easterners."[7] Tourism advertisements lauded on about the fresh air, restorative natural environment, and amenities awaiting tubercular patients. Richard H. Gassan, in his pivotal work *The Making of American Resorts: Saratoga Springs, Ballston Spa, Lake George,* notes that a scenic or healthful place only attracted visitors if a resort infrastructure was first constructed and then advertised through the proper channels.[8] Tourism required "a compelling destination with homelike accommodations, a comfortable travel infrastructure, and a cultural infrastructure that [gave] ... the tourist a model of thinking about what he or she is experiencing."[9]

Befitting a tourist destination, Asheville had homelike accommodations in the form of healthcare-oriented boardinghouses and sanatoria. These health care facilities,

---

[7] Daniel Freund, *American Sunshine: Diseases of Darkness and the Quest for Natural Light* (Chicago: University of Chicago Press, 2012), 25.

[8] Richard H. Gassan, *The Birth of American Tourism: New York, the Hudson Valley, and American Culture, 1790-1830,* Amherst: University of Massachusetts Press, 2008, 5.

[9] Ibid, 5.

which developed early on in Asheville's tubercular age (roughly spanning 1880–1930)[10] resembled small rest homes more than the public institutions later attached with the sanatorium movement. The Winyah Sanitarium, a pioneer of the area's sanatoria, opened in the 1880s. Marketed as an upscale climatic resort, Winyah was described in a November 1888 newspaper advertisement as a "fine hotel and first-class sanitarium" for "invalids suffering from diseases of lungs and throat."[11] Dr. Karl von Ruck and his brother Silvio, director and assistant directors of the Winyah Sanitarium respectively, put Asheville on the map as a haven for tubercular patients. Karl Von Ruck's reputation as a tuberculosis specialist undoubtedly drew crowds of consumptives to the area hoping for a cure. The von Rucks not only operated a tubercular sanatorium in Asheville, they also researched and experimented with developing a vaccine for tuberculosis using dead *tubercle bacilli*.[12] Their efforts were in vain; however, the prestigious Winyah Sanitarium attracted consumptive Americans seeking the cure to Asheville and fostered a thriving health culture.

The success of the Winyah Sanitarium depended upon the ease with which patients could travel to Asheville. The 1880s advent of a railroad infrastructure in the Appalachian Mountains of North Carolina and installations of streetcar systems made it possible for healthseekers to journey to Asheville and surrounding resort areas. By the

---

[10] For the purposes of this study, I define Asheville's tubercular age as the period spanning from 1880 to 1930. This period marks the decades in which TB patients regularly travelled to Asheville to stay in health care housing facilities. The development of public-funded TB hospitals and at-home drug treatments combined with the Great Depression effectively curtailed the TB health tourism industry in Asheville.

[11] K. Von Ruck, "Winyah House, Asheville, N.C.," *New York Herald-Tribune* (November 13, 1888).

[12] J. Arthur Myers, *Tuberculosis: A Half Century of Study and Conquest* (St. Louis, MO: Warren H. Green, Inc., 1970), 25.

1890s, the Southern Railway connected Asheville by rail as far north as New York, west as St. Louis and south as Jacksonville, Florida. And once parties arrived in Asheville, they could travel in electric cars around town for just five cents or in carriages for twenty-five cents.[13] Soon enough, the Land of the Sky was being exalted throughout the country, particularly in the Deep South where Asheville's mild climate promised a reprieve from the summer heat and harmful miasmas. As early as the summer of 1882, *The Daily Picayune* in New Orleans boasted of the region's many virtues: "Western North Carolina, is commended for a delightful resort for invalids and pleasure seekers. The scenery is magnificent, and the climate is unsurpassed for purity and freshness…"[14]

Asheville quickly gained recognition as an American health resort town specializing in tubercular cases. The work of the von Rucks and other TB medical specialists in Asheville only partly explains why Asheville became a consumption-oriented health destination. Another major component rests in the branding and marketing campaign undertaken in Asheville from the 1890s into the 1900s. The Asheville Board of Trade distributed a plethora of travel brochures and advertisements that helped ensure a steady stream of health-seeking tourists from across the country. Dubbed "Nature's Sanitarium" by an 1899 publication, Asheville stood as "the impregnable fortress against pulmonary troubles; the consumptive's safest refuge and the invalid's best physician."[15] The publication further positioned Asheville as an unparalleled source of health:

---

[13] *Asheville, Nature's Sanitarium* (1899). Pack Memorial Library Special Collections, Asheville, NC.

[14] "The Land of the Sky," *The Daily Picayune* (May 23, 1882).

[15] *Asheville, Nature's Sanitarium*.

> Eminent doctors state emphatically that they know of no spot in Europe so desirable as a health resort as the country around Asheville…Asheville is now the…most noted health and pleasure resort in America. It is the Mecca of the Southerner as he flees from the mosquito, heat and malaria of the Southern Summer, and the dream of the Northerner as he shivers from the blizzards of the North and West. Here tubercular consumption is not hereditary, and malaria is unknown….[16]

The picturesque scenery of the western North Carolina mountains served as window-dressing for the open-air, environment-based treatment that consisted of "good food, fresh air, sunlight, and exercise."[17] As the communicability of tuberculosis was better understood, public health officials promoted the construction of sanatoria, the first opening in 1875 in Asheville.[18] The medical publication, *Sanitary Advice for Keepers of Summer Resorts*, voiced this need for the segregation of the sick from the healthy:

> The careful tuberculosis patient may be quite harmless in a summer hotel, but those who are careless and expectorate promiscuously are a positive danger, and while such persons are always to be regarded with consideration and charity, it may become necessary to recommend that they spend their summer in a sanitarium, rather than in a public resort where they may endanger others.[19]

With this reasoning in place, sanatoria gained a reputation for both their therapeutic facilities and isolation away from well-populated urban areas.

Created as private institutions, the first sanatoria were typically designed by the medical physicians operating them with the aid of local tradesmen. Thus, sanatoria

---

[16] Ibid.

[17] Georgina D. Feldberg, *Disease and Class: Tuberculosis and the Shaping of Modern North American Society* (New Brunswick, NJ: Rutgers University Press, 1995), 53.

[18] Dr. J. W. Gleitzmann of New York opened a private sanatorium in Asheville in 1875. The von Rucks later reportedly purchased and remodeled this facility; Robert G. Paterson, "The Evolution of Official Tuberculosis Control in the United States," *Public Health Reports (1896 – 1980)* 62, no. 10, Tuberculosis Control Issue No. 13 (Mar. 7, 1947): 336 – 341.

[19] *Sanitary Advice for Keepers of Summer Resorts*, 1912.

architecture took on a vernacular appearance that reflected and influenced domestic styles in towns. Sweeping verandas, sleeping porches, and solaria were all common attributes in these buildings. With the eventual establishment of state-run sanatoria for the public in the 1920s, sanatorium design became more standardized. TB education and prevention organizations, such as the National Association for the Study and Prevention of Tuberculosis, facilitated this process by disseminating sample plans for sanatoria and other associated architectural types. The design of institutional sanatoria relied on and emphasized the importance of climatic and natural conditions surrounding the buildings. In the 1921 "Notes on Tuberculosis, Sanatorium Planning," the aptly named T.B. Kidner of the National Tuberculosis Association outlined the principal factors of tuberculosis sanatorium landscape planning:

> (a) accessibility; transportation facilities and distance from a center of population, (b) the topographical features, (c) the exposure (orientation) and shelter from prevailing disagreeable winds, (d) the climatic conditions, (e) water and power supply, (f) soil and drainage facilities.[20]

In addition to climate and accessibility, Kidner highlighted the importance of scenic beauty "because of the tedious nature of the treatment of tuberculosis."[21] A picturesque setting, after all, alleviated some of the boredom of the strict bedrest regimen prescribed to consumptive patients.

Situated in the Appalachian Mountains, the von Ruck's Winyah Sanitarium boasted the type of therapeutic view encouraged by the National Tuberculosis Association. Its architectural style represented a hodgepodge of Second Empire and

---

[20] "Notes on Tuberculosis Sanatorium Planning," *Public Health Reports (1896-1970)* 36, no. 24 (June 17, 1921): 1371.

[21] Ibid., 1372.

vernacular styles. Constructed around the mid-1870s by another physician and remodeled in 1888 by the von Rucks, the original Winyah Sanitarium featured a mansard roof, wraparound veranda, and dormer windows. Standing three stories high, the building contained distinctive second-floor sleeping porches. A Sanborn Fire Insurance map from 1891 reveals the presence of at least three sleeping porches that allowed patients to take in the landscape from a sheltered vantage point.[22] Due to the overwhelming success of the Winyah Sanitarium, the von Rucks constructed a larger and grander facility in 1900. The new Tudor Revival building provided modern conveniences in a 25-acre wooded park within walking distance of the city's electric tramline. A 1905 directory of sanatoria described the facility's first-class amenities in great detail:

> The buildings, which are light and attractive, consist of a main structure, a large annexe [sic], and two cottages, all connected by glass-enclosed, steam-heated porches and passages. Walls and floors are double, filled with mortar, to prevent conduction of sound. Abundant provision of piazzas has been made on all floors, looking north, south, east, and west. Many of these are enclosed with glass; some are steam heated. Where they overhang bedrooms the roof has been omitted and replaced by removable awnings. There are altogether eighty private rooms; also bath-rooms and dressing-rooms on every floor, both public and attached to special bedrooms. A number of reception-rooms have been provided, including a large dining-hall. Every room has a fireplace; the building is heated throughout with air warmed by steam radiators in the basement. Lighting is by electricity; the water supply and sewerage those of Asheville. A well-equipped laboratory has been provided. Dr. v. Ruck is aided by a lay manager and two physicians. Trained nurses are only obtained for special cases. *Charges:* $30 upward per week.[23]

The glassed-in, heated piazzas with removable awnings provided a scenic view of the mountain surroundings and bountiful supply of fresh air to aid in the recovery of consumptive patients. Winyah Sanitarium remained a fixture in the sanatorium landscape

---

[22] Winyah Sanitarium, Asheville, Buncombe County, NC, 1891 Sanborn Fire Insurance Map, 6.

[23] National Tuberculosis Association, *Directory of Sanatoria, Hospitals and Day Camps for the Treatment of Tuberculosis in the United States* (1905).

of Asheville through the 1910s as documented in the Sanborn Fire Insurance Maps for the property. Owner Dr. Karl von Ruck continued to gain attention for his laboratory research. He reached a peak of success in 1913 when he claimed to have invented a vaccine from dead tubercle bacilli; unfortunately, the United States Public Health Service denied him a license.[24]

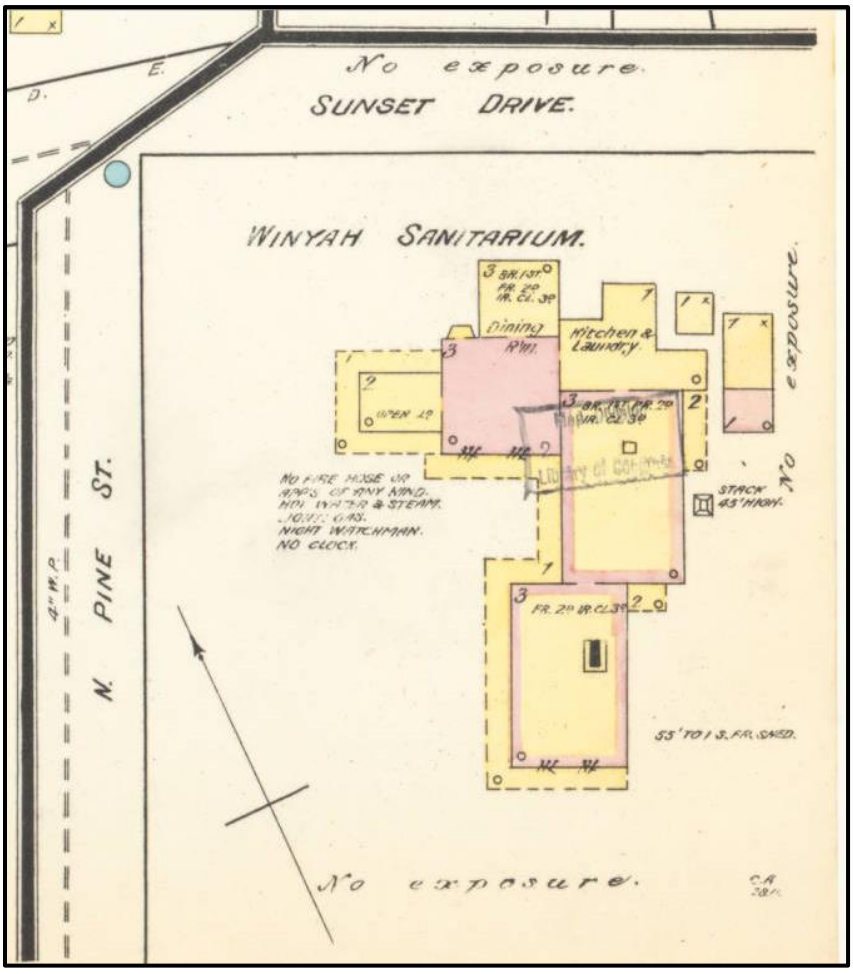


Figure 1. Winyah Sanitarium, Sanborn Fire Insurance Map, Asheville, Buncombe County, NC, November 1891.

[24] Myers, "Status of Tuberculosis in 1920," *Tuberculosis: A Half Century of Study and Conquest*, 24.

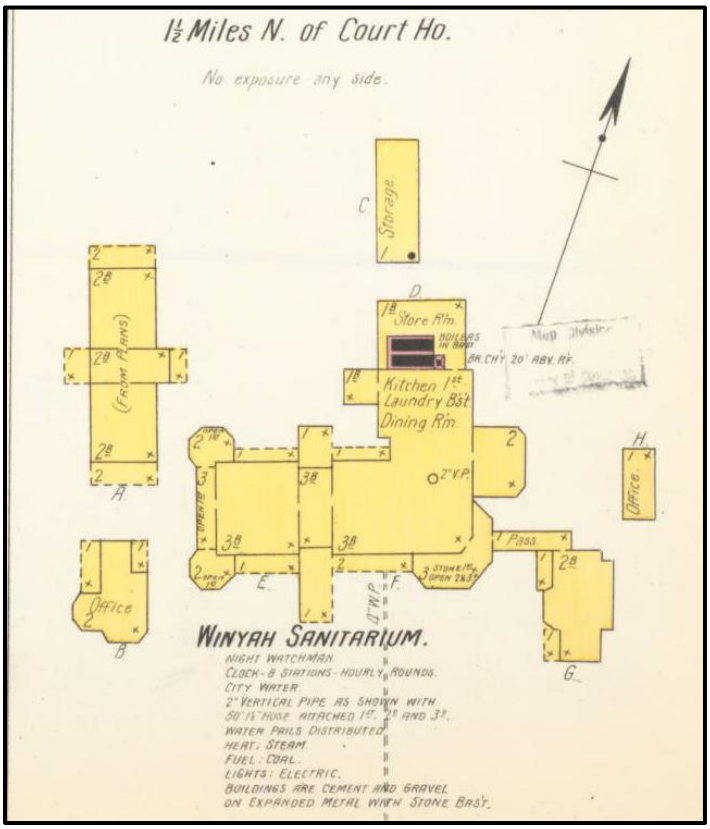


Figure 2. Winyah Sanitarium, Sanborn Fire Insurance Map, Asheville, Buncombe County, NC, February 1901.

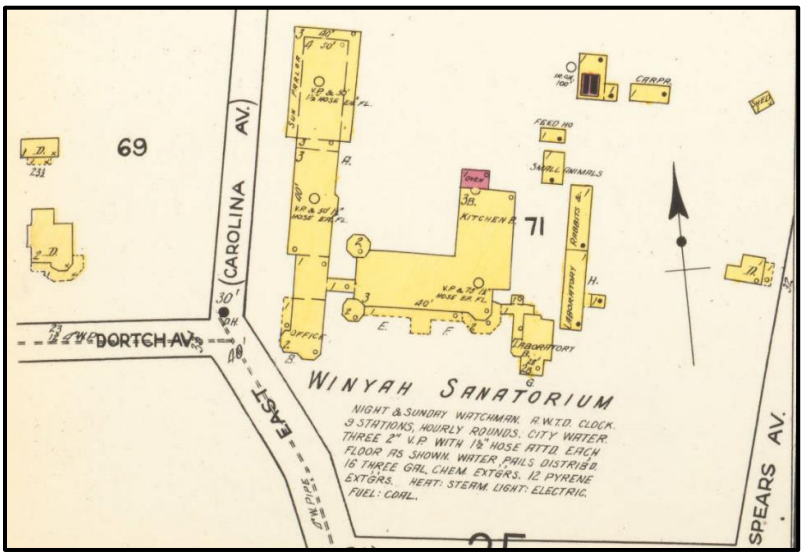


Figure 3. Winyah Sanitarium, Sanborn Fire Insurance Map, Asheville, Buncombe County, NC, November 1917.

Although the new Winyah Sanitarium offered a luxurious experience, many middle-class patients without the financial resources of the von Rucks' clientele opted to stay at boardinghouses operated by enterprising nurses. Dr. Thomas Frazer addressed the financial side of these tubercular boardinghouses in his 1914 article "The Financial Aspect of the Sick Leaving Home in Search of a Beneficial Climate." While room and board prices varied, Frazer estimated that a weekly rate of $10 to $12 could rent a boarder a fair quality room in a licensed TB boardinghouse or a small personal shack[25] adjacent to the house. Price variations depended on a number of factors, including room location, diet, furnishings, and medical services. Patients often desired first or second-floor rooms, although third-floor room or those without adjacent baths and porches could be had for a more affordable price (e.g. an $8 weekly rate). The price to stay at a boardinghouse typically included regular meals prepared in the kitchen with special diets costing extra. Other appurtenances consisted of $4 to $15 reclining chairs (e.g. Adirondack cure chairs), blankets, and sputum boxes. Interestingly enough, room and board in a TB boardinghouse did not always come with medical supervision. An additional monthly rate of approximately $20 was tacked onto the patient's bill for medical services. Given all these extra fees, a ten-month stay could cost a boarder at least $700.[26]

Whereas Asheville had once been a sleepy mountain town of just a few thousand, its population swelled to the seams by the early 1900s. Summer proved to be the most

[25] This type of small shack is referred to as a sleeping shack, tent cottage, or similar name in the literature.

[26]Thomas Frazer, "The Financial Aspect of the Sick Leaving Home in Search of a Beneficial Climate," *Public Health Reports (1896 – 1970)* 29, no. 38 (Sep. 18, 1914): 2433 – 2436.

popular time of the year for tourists to visit Asheville. The more well-heeled guests frequented a selection of elegant hotels, such as the Battery Park, Victoria Inn, Margo Terrace, and Kenilworth Inn. Boardinghouses offered an economical alternative to hotels and sanatoria, so it's no surprise that boardinghouses sprung up all over Asheville. First incorporated in 1893 and annexed by Asheville in 1905, the suburb of Montford (now known as the Montford Historic District and listed on the National Register of Historic Places) housed a number of boardinghouses that benefited from the trolley service as early as 1891.[27] An estimated 150 boardinghouses, charging anywhere from $3 to $25 per week, were in operation in Asheville by 1899.[28] In 1907, the Asheville Board of Trade cited the hotel and boardinghouse capacity at almost 5,000.[29]

Unfurnished and furnished houses were available in Asheville for those desiring to set up "rooms for light housekeeping."[30] In the early 1900s, the monthly rental price for an unfurnished house ranged from $20 to $60.[31] The booming market made it increasingly hard to secure large houses. In 1907, that monthly price could rent an eight to twelve room unfurnished house; however, by 1914, a modest house with two bedrooms, bath, and porch fetched a similar price. Of course, a furnished house came with a steeper price "depending on the size, number of bedrooms, baths, sleeping

---

[27] Richard Hansley, *Asheville's Historic Architecture* (Charleston, SC: The History Press, 2011), 95 – 98.

[28] *Asheville, Nature's Sanitarium*.

[29] Asheville Board of Trade, *Asheville, North Carolina: The Land of the Sky* (1907), Pack Memorial Library Special Collections, Asheville, NC, 8.

[30] Ibid., 7.

[31] The Asheville Board of Trade's 1907 publication set the price of an unfurnished house at $20 to $50 per month. Thomas Frazer's 1914 "The Financial Aspect of the Sick Leaving Home in Search of a Beneficial Climate" estimated a monthly rate of $25 to $60 for an unfurnished house.

porches, location, and other features."[32] For those who did open a boardinghouse, the turn-of-the-century tourist industry offered a lucrative income if promoted properly.

As promoters of Asheville's status as a health mecca, proprietors of boardinghouses, hotels, and sanatoria fully realized that their out-of-town guests came to Asheville for its fresh, open air in a mountain setting. Advertisements for Asheville lodgings pointed out the availability of well-ventilated spaces (e.g. bedrooms with transoms and windows, sleeping porches, solaria, and verandas), signifying the importance placed on the local air quality. The Colonial, for example, boasted of "Up-To-Date, Large, Airy Rooms."[33] The famed Swannanoa Hotel, with a capacity for 200 guests, advertised "Rooms airy and cheerful. Sun parlors and verandas."[34] One proprietor, G. L. McDonald, went as far as to name his Queen Anne style boardinghouse, "Bon Air," literally meaning "good air."[35] Whether the name drew more visitors is questionable, but established boardinghouses usually hosted regular boarders who returned each summer season to bask in the mild climate. As R. Bowman Matthews of the *New Orleans Picayune* commented "All hail, and farewell to Asheville, but not forever, I hope – for who comes once will come again."[36] The Old Kentucky Home, of *Look Homeward, Angel* fame, reportedly retained its original name after Julia Wolfe

---

[32] Frazer, "The Financial Aspect of the Sick Leaving Homes in Search of a Beneficial Climate."

[33] "The Colonial," *Asheville City Directory, Advertisers' Directory*, 1909.

[34] *Asheville, Nature's Sanitarium*.

[35] Ibid.

[36] Asheville Board of Trade, *Asheville, North Carolina: The Land of the Sky* (1907).

purchased it to prevent confusion for returning boarders. This business decision also saved on the reprinting of advertisement space and business cards.[37]

Asheville, long promoted as a consumptive health resort town, found itself in a precarious position as attitudes towards tuberculosis shifted from mild toleration to widespread fear of contagion. In 1893, Michigan's State Board of Health made it the first state to mandate the reporting of TB cases, but other places were slow to follow suit.[38] The 1904 establishment of the National Association for the Study and Prevention of Tuberculosis (NASPT) helped pave the way for many cities to create local anti-TB programs.[39] Asheville waited until the early 1910s to undertake a formal public health effort against tuberculosis. Given the relative newness of the germ theory and the entrenchment of TB health tourism in Asheville's economy, it's no surprise that it took time for local officials to declare tuberculosis communicable and set up legislative control.

Local efforts gradually attempted to segregate consumptives away from the healthy populace and prevent intermingling. By the 1910s, private sanatoria as well as every other boardinghouse in Asheville were legally obligated to only serve the sick or the healthy, not both. Operating under the auspices of the Asheville Joint Board of Health, the city strictly monitored violations of this policy. Not only were infected rooms (i.e. rooms in which a person suffering from smallpox, cholera, scarlet fever, whooping

---

[37] *Tour Information*, Thomas Wolfe Memorial, Asheville, NC.

[38] Georgina D. Feldberg, *Disease and Class: Tuberculosis and the Shaping of Modern North American Society* (New Brunswick, NJ: Rutgers University Press, 1995), 84.

[39] Jeanne E. Abrams, "'Spitting Is Dangerous, Indecent, and against the Law!' Legislating Health Behavior during the American Tuberculosis Crusade," *Journal of the History of Medicine and Allied Sciences* 68, no. 3 (2012), 419.

cough, pulmonary tuberculosis, etc. had stayed) required to be fumigated with formaldehyde by a health official, fines of $25 were levied on any proprietor or physician who failed to report a disease within one day.[40]

As laid out in the 1913 "Tuberculosis Control of Regulation of Sanatoria," anyone choosing to operate "any hospital, sanitarium, sanatorium, hotel, boarding house, rooming house, or other institutions at which any person or persons suffering with tuberculosis are received, lodged, kept, roomed, or boarded in the city of Asheville" had to apply for a license,

> setting forth specifically the location of the property in which such business is proposed to be conducted, together with the name and resident address of the proprietor or owner of such proposed business, also names and street addresses of all property owners and any other persons residing within 200 feet of the proposed location.[41]

These sanitation rules superficially segregated the sick from the healthy in Asheville. City directories from the period highlight this shift in boardinghouses and hotels barring entry to sick tourists. City directories started to separate listings of sanatoria in the city directories by type to prevent any co-mingling between the healthy and sick. Headlines such as "No Consumptives Taken," "No Tuberculosis," and "No Sick," were commonplace for housing advertisements in 1910s Asheville. The fact that some tubercular boardinghouses were located just down the street from those admitting "no consumptives" underscored the hypocrisy of the segregation.

---

[40] Asheville Board of Trade, *Asheville, North Carolina: America's Beauty Spot in the Land of the Sky* (1911), Pack Memorial Library Special Collections, Asheville, NC.

[41] Asheville, N.C.: Tuberculosis Control of Regulation of Sanatoria (Reg. Joint Bd of H., Feb. 7, 1913), *Public Health Reports (1896 – 1970)* 29, no. 3 (Jan. 16, 1914): 153 – 155.

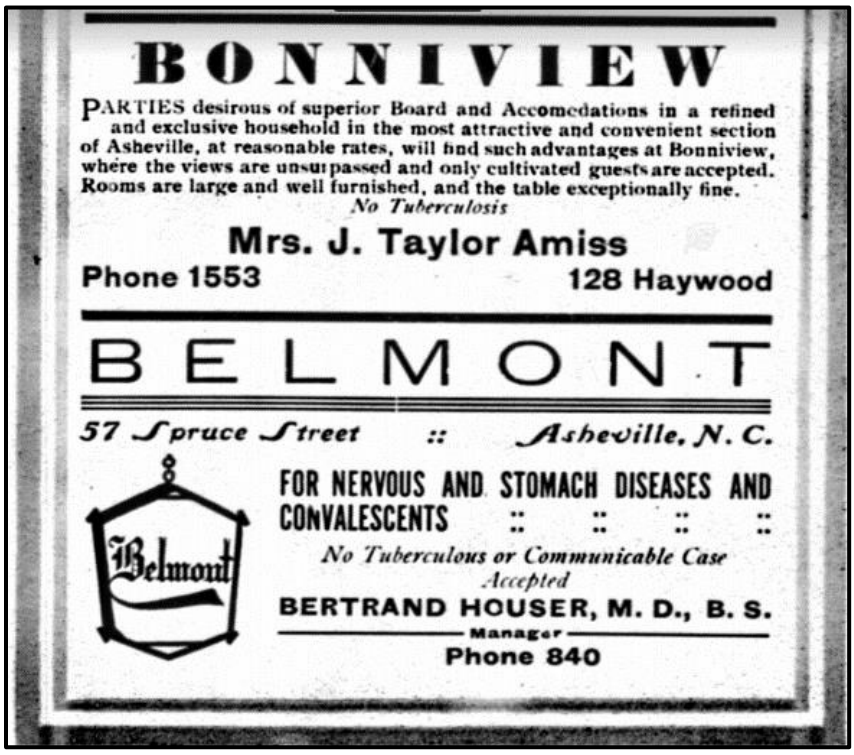


Figure 4. No Sick Advertisement, 1913 *Asheville City Directory*, Special Advertisers' Directory.

Figure 5. No Sick Advertisement, 1918 *Asheville City Directory*, Special Advertisers' Directory.

In the 1910s, this type of anti-tuberculosis rhetoric surrounding Asheville tourism occurred in health resort areas across the United States. Those involved in the tourist industry in southern and western destinations began to "realize that the climate tourism that drew ailing easterners in search of health was becoming more of a liability than an asset."[42] In order to continue to present themselves as healthy places, these former TB cure destinations had to sever any links they had with the disease. Of course this process was not clear-cut and involved navigating against decades of marketing efforts.

Over the course of first two decades of the twentieth century, tubercular boardinghouses weathered a myriad of changing attitudes toward disease, germs, and the desired health tourist in Asheville. Boardinghouses, originally praised for their domestic settings, became a source of suspicion threatening the welfare of residential neighborhoods and beyond. Their proximity to electric streetcar lines[43] meant that consumptive boarders not only posed a danger to neighbors, they also endangered the entire city through their movements. The Pullman and Southern Railroad Companies, both active in Asheville, went as far as to establish a sanitation and disinfection policy for train cars to protect the traveling public. This cleaning was deemed necessary given the frequenting of Asheville by the tuberculous.[44]

---

[42] Freund, *American Sunshine*, 136.

[43] The 1899 *Asheville, Nature's Sanitarium* publication stated: "Asheville has a Dummy Line Railroad and three Electric Street Railways of several miles and one other road going into the country soon to be built, making a total of from thirty to forty miles of electric railways…"

[44] A.D. Foster, "Interstate Migration of Tuberculous Persons: Its Bearing on the Public Health, with Special References to the States of North and South Carolina." *Public Health Reports (1896 – 1970)* 30, no. 11 (Mar. 12, 1915), 756 – 757.

From November 1913 to June 1914, the United States Public Health Service undertook an investigation focused on interstate migration of tuberculous people in North and South Carolina. A.D. Foster, a surgeon with the United States Public Health Service, published the investigation's findings in a March 12, 1915 Public Health Report. Despite an effort to determine the exact tuberculous population tracked by the local Asheville health office, Foster noted that the records were inaccurate. Discrepancies occurred given that "physicians, householders, hotel keepers, and boarding-house keepers" either failed to report open TB cases or the same patient was reported multiple times to the health authorities.[45] As the Joint Board of Health attempted to map out TB cases in Asheville, boardinghouse keepers assumed the new responsibility of tracking consumptive boarders in their houses. Fulfilling this responsibility meant negotiating a medium between hospitality and disease policing. Reporting open TB cases was not exactly an easy task. The symptoms of tuberculosis, as public health officials were slowly starting to understand at the time, could present themselves months or years after exposure. Without a specific onset time or incubation period for the disease, it was difficult to pinpoint when it was first contracted.[46] While some boardinghouse keepers may have skirted the law by allowing the tuberculous to go unreported, it is also likely that many consumptive boarders simply passed as healthy tourists.[47] Difficulty in enforcing quarantine rules meant that "the most that individual communities could accomplish was the prohibition

[45] Ibid., 749 – 750.

[46] Ibid., 755.

[47] Georgina D. Feldberg, in *Disease and Class: Tuberculosis and the Shaping of Modern North American Society* (New Brunswick, NJ: Rutgers University Press, 1995), notes that the fashion for young women to be thin and pale in the 1920s actually allowed for many to hide or ignore their own TB symptoms.

of tuberculosis facilities such as boardinghouses and sanitariums in city limits."[48] These local ordinances aimed at controlling tuberculosis helped put communities at ease, despite the fact that most regulations lacked strict enforcement.[49]

Into the 1920s and 1930s, TB boardinghouses dwindled and disappeared from Asheville's marketing materials. Former TB boardinghouses were razed, used as "no sick" boardinghouses, and sometimes converted back into private residences. The consumptive past associated with these spaces could easily be forgotten as was intended by those marketing the city as a health destination in the early twentieth century. Yet the TB boardinghouse landscape in Asheville can be pieced together through an assortment of physical buildings, directories, advertisements, Sanborn Fire Insurance maps, National Register of Historic Place forms, and Census Bureau records. The case study of Sherwood Sanitarium, operated by Mildred E. Sherwood, offers a local history lens into boardinghouse life in turn-of-the-century Asheville. For over thirty years, Sherwood Sanitarium treated and housed consumptive patients in the heyday of Asheville's tubercular health tourism and Sherwood's death in 1939 coincided with the decline of tubercular sanatoria in Asheville.

Mildred E. Sherwood was born on August 4, 1868 in the town of Unadilla, New York. Little is known about her early years, but she appears in the 1892 *Hartford Connecticut City Directory* as a nurse working at 20 Hudson Street, the location of the Hartford Hospital Training School for Nurses. In 1893, Miss Sherwood graduated with twelve fellow students from a competitive three-year program in Hartford, Connecticut,

[48] Ott, *Fevered Lives*, 121.
[49] Ibid., 120.

and moved to Albany, New York. Sherwood undoubtedly received some basic instruction in tubercular cases, although the Hartford Hospital Training School for Nurses did not open its own "Tubercular Hospital" until 1902. An outsider from the North, Sherwood arrived in Asheville in 1904.[50] The Asheville Sherwood moved to was a booming city with upwards of one hundred thousand visitors each year and an increasing demand for housing accommodations.[51] What initially drew Sherwood to Asheville is unclear, but it's likely the city's demand for nurses played a huge role. For a nurse like Sherwood who was new to Asheville, keeping a TB boardinghouse offered a reliable stream of income. This economic advantage likely outweighed Sherwood's own fear of contracting tuberculosis; it is also possible that Sherwood moved to Asheville originally to cure her own case of TB and chose to remain in the mild climate for health reasons.[52]

In 1906, Sherwood began her tenure as the proprietress of Sherwood Sanitarium, a Queen-Anne style boardinghouse with a winter capacity for twenty and a summer

---

[50] "Mildred E. Sherwood Death Certificate," *Ancestry.com*; "Twenty-fifth Annual Report of the Executive Committee of the Hartford Hospital Training School for Nurses for the year ending September 20, 1902," *Public Documents of the State of Connecticut, Volume 3, Part 2, Connecticut Order of the General Assembly*, 1903, 84, 89. From at least 1895 to 1898, Sherwood lived in Albany, New York at 78 South Swan Street; *Albany City Directory*, 1895-1898 editions, *Ancestry.com.* By 1904, she had permanently relocated to Asheville, North Carolina. Sherwood appears as the proprietress of Fairview Cottage and Camp Sherwood in Sunset Drive near Baird in the 1904 City Directory. Within the next two years, Sherwood had opened her own private sanatorium at 167 South French Broad Avenue (listed from 1906 to 1910). Although the sanatorium's address changed to 179 South French Broad Avenue in 1912, the phone number remained 543; *Asheville City Directory*, 1904-1912 editions, *Ancestry.com.*

[51] *Asheville, Nature's Sanitarium*.

[52] Former female consumptive patients commonly served as nurses at TB boardinghouse and sanatoria. This practice stemmed from the difficulty in securing healthy nurses to work at these places as well as the desire of former consumptive patients to stay on in healthy resort towns.

capacity for forty, half the size of the largest sanatorium in Asheville.[53] The higher capacity in summer suggests that the Sherwood Sanitarium used sleeping porches and exterior tent cottages to accommodate more boarders in the on-season. An imposing two-and-half story building with a sprawling veranda, stained glass windows, and a spacious yard, the house appeared in a 1913 advertisement for the "Miss Sherwood Home."[54] The 1915 advertisement in the *Asheville City Directory*[55] noted the availability of "tents," most likely small wood-frame sleeping tent cottages popular at sanatoria and depicted near the house in a 1917 Sanborn map.[56]

Figure 6. Sherwood Sanitarium, *Asheville City Directory*, 1915.

[53] *Polk's Medical Register and Directory of North America,* 1912*;* The Winyah Sanitarium possessed the capacity for eighty patients.

[54] *Asheville City Directory*, 1913.

[55] *Asheville City Directory*, 1915.

[56] The 1917 Sanborn Fire Insurance Map depicts two identical cottages, likely sleeping tent cottages, on the 179 S. French Broad Avenue property. After Miss Sherwood vacated the residence, the house served as Appalachian Hall, a private hospital specializing in mental illness treatment. Two brother physicians, Drs. M.A. and W.R. Griffin, operated the facility.

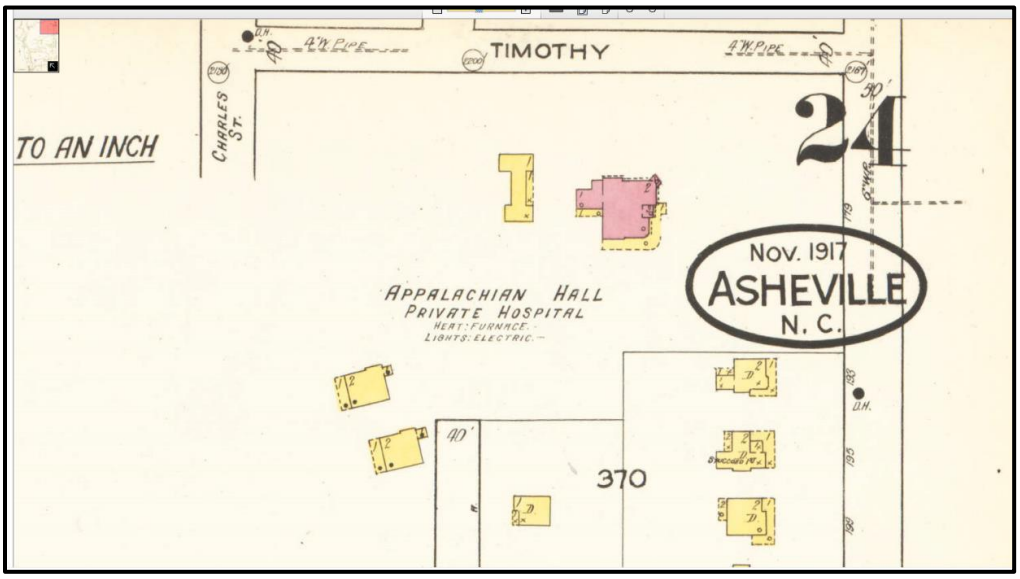


Figure 7. Appalachian Hall, 179 S. French Broad Avenue, Asheville, Buncombe County, NC, Sanborn Fire Insurance Map, November 1917.

As of the 1910 United States Census, Mildred E. Sherwood and a nursing assistant from Kansas ran the sanatorium. At the time of the record, twelve patients and one nurse boarder resided at the sanatorium. Of the patients, five were males and seven were females. The nurse boarder came to the sanatorium from Canada with her female sixty-year-old relative, listed as a patient. This practice of a family member finding work in a sanatorium was not uncommon for those of more modest means. The fact that the patients all traveled from either out-of-state (New Jersey, Georgia, Alabama, South Carolina, Washington, DC, Louisiana, Pennsylvania, and Kentucky) or country (Canada) to the sanatorium attests to Asheville's reputation as a consumptive haven during that time.

The town of Victoria, later incorporated into Asheville, was once home to the acclaimed Oakland Heights Hotel. Although the exact construction date of the Elbermar,

located at 35 Victoria Road, is unknown, it neighbored the property of the hotel in Oakland Heights. Mention of the Elbermar as a private boardinghouse first appeared in an 1894 newspaper advertisement.[57] Twenty-one years later, the "Medical News" section of the *Journal of the American Medical Association,* noted that a "Sanatorium Fire" seriously damaged "the Elbermar, a tuberculosis sanatorium at Asheville" on July 18, 1915, but "the patients were removed without casualty."[58] Given the damage sustained, over two years passed before the newly renovated Elbermar was advertised in the 1918 *Asheville City Directory* as "ready to receive convalescent Tubercular Patients." How the fire started is lost to history. In a time of limited fire safety precautions, the Elbermar fire could have been sparked by a number of sources ranging from an innocuous kitchen mishap to arson. Far-fetched as it might seem, it was not unheard of at the time for a sanatorium to be destroyed by someone viewing it as a blight on the neighborhood. Richard D. Starnes notes that local hotelier Edwin W. Grove purchased and burned down quite a few tubercular sanatoria in 1913 to make way for his new Grove Park Inn.[59]

By 1921, Mildred E. Sherwood had taken over the management of the Elbermar. The 1921 *Asheville City Directory* featured a large advertisement in the "Sanitariums" section for the Elbermar, a "Home-Like Sanitarium for Tuberculose Patients."[60] Set in a two-story boardinghouse, the Elbermar featured a long porch stretching the length of the

---

[57] "The 'Elbermar,'" *New Outlook* (Outlook Publishing Company, Inc., 1894).

[58] American Medical Association, "Sanatorium Fire," *JAMA: The Journal of the American Medical Association* 65 (1915).

[59] Richard D. Starnes, "'A Conspicuous Example of What Is Termed the New South': Tourism and Urban Development in Asheville, North Carolina, 1880-1925," *The North Carolina Historical Review* 80, no. 1 (2003): 52-80.

[60] *Asheville City Directory*, 1921.

building.[61] Similar to 179 S. French Broad Avenue, 35 Victoria Road contained both a main house and small outbuildings, identified as "sleeping shacks" in the 1917 Sanborn map.[62]

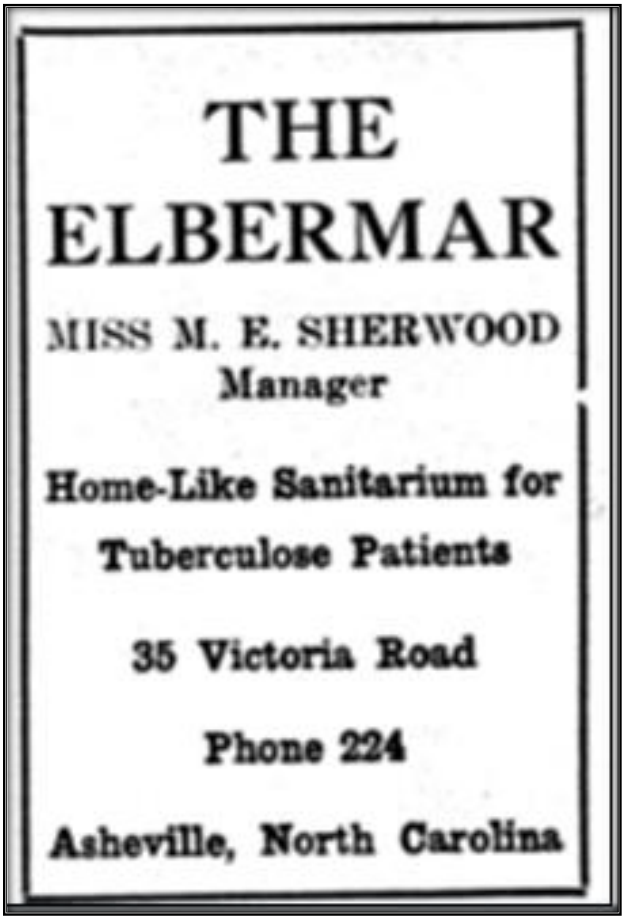


Figure 8. The Elbermar (Sherwood Sanitarium), 35 Victoria Road, *Asheville City Directory*, 1921.

[61] *Asheville City Directory*, 1916.

[62] The Elbermar (Sherwood Sanitarium), 35 Victoria Road, Asheville, Buncombe County, NC, Sanborn Fire Insurance Map, 1917, 27.

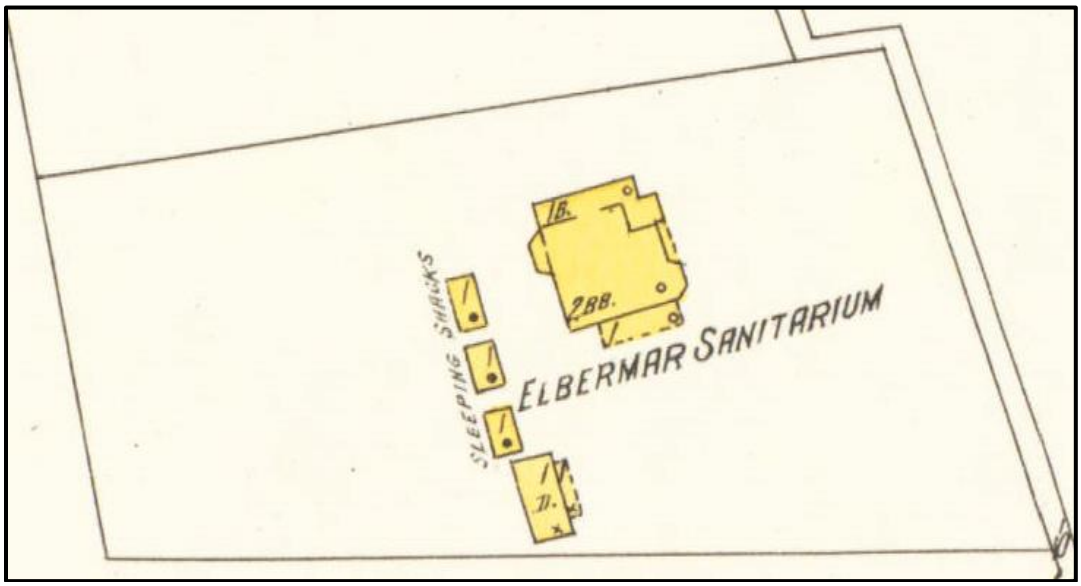


Figure 9. The Elbermar (Sherwood Sanitarium), 35 Victoria Road, Asheville, Buncombe County, NC, Sanborn Fire Insurance Map, 1917.

Sherwood's move from the well-populated French Broad Avenue, home to an assortment of boardinghouses claiming "no sick," to the less crowded Victoria Road perhaps stemmed from the 1913 regulations on sanatoria. Property owners residing within 200 feet of any tubercular sanatorium possessed the right to oppose renewal of the license to operate the business. In a 1914 meeting of the Buncombe County Medical Society, several licenses were not renewed due to opposition from local residents:

> One case cited was that of the keeper of a large boarding house for tuberculous persons, who had been caring for this class of cases for the past 15 years and who was well versed in the management from a sanitary standpoint. This year a license for only six months was granted by the joint health board, with the understanding that at the expiration of that time the use of the house as a boarding house for tuberculous would be discontinued. The protestor to the joint health board in this case was a person who himself came to Asheville several years ago suffering from tuberculosis and who has since apparently recovered. He bought the adjoining property and built a residence within 200 feet of the boarding house, thus gaining the right to protest against its use for the housing of the tuberculous. Another case cited was that of a resident who protested against the use of a house adjoining his residence and later withdrew his protest to the joint health board on

> condition that the sick persons living in the house would refrain from reclining in steamer chairs on the front veranda.
> As a result of inadequate facilities for housing and the agitation against the tuberculous individual, there is no doubt that not all cases of tuberculosis are being reported to the health authorities.[63]

The 1910s regulations on tubercular sanatoria heralded in a shift in Asheville from a tubercular haven to a health mecca. Loose interpretation of the laws, however, enabled boardinghouses to advertise themselves as "no sick" while being either located in a former tubercular boardinghouse or in close proximity. The decrease in licensing for tubercular boardinghouse sanatoria and general hostility towards consumptives led to unreported cases. Gradually, tubercular sanatoria got pushed towards the periphery of the city, in large part because of the rights of neighbors to protest license renewals. By 1915, A.D. Foster remarked on this sanitization of the city's consumptive past: "Asheville is probably the best known of all the climatic resorts of the South. In former years the city was extensively advertised as a resort for the tuberculous, but now the tendency is to encourage the coming of healthy tourists rather than the coming of the tuberculous."[64] The 1920s found Asheville in the midst of a major city planning movement led by a commercial-civic elite comprised of "non-natives who often came to Asheville for vacations or their health and saw both financial opportunity and a civic leadership vacuum that was ready to be filled."[65] This new direction in city planning aimed at transforming Asheville into a modern southern city free of the stigma of disease. Although the tuberculosis healthcare industry was responsible for much of Asheville's

---

[63] A.D. Foster, "Interstate Migration of Tuberculous Persons," 745 – 774.
[64] Ibid.
[65] Kevan D. Frazier, "Outsiders in the Land of the Sky: City Planning and the Transformation of Asheville, North Carolina, 1921 – 1929," *Journal of Appalachian Studies* 4, no. 2 (Fall 1998): 303.

growth up to the 1920s, it was ultimately cast aside to make way for new era of tourism and economic expansion. Boardinghouses, such as Sherwood Sanitarium, and other spaces associated with the sanatorium movement were either physically demolished or literally wiped clean of their consumptive past with some formaldehyde, fresh paint, and a new name.

CHAPTER THREE

An Art Deco Treatment:
The Mid-Century State TB Hospitals of Kentucky

"In viewing this link in the State's system of sanatoria for the treatment of Kentucky's worst plague, tuberculosis, one is bound to be impressed by the ability of government to do what private citizens would find impossible. A great deal of money has been spent, that is true, but great good can come of it in salvaged lives that previously have been doomed."

- *The Glasgow Times*, Thursday, August 24, 1950

In the early twentieth century, public health campaigns to stop the spread of tuberculosis led to the creation of public hospitals across the United States. State governments built many of these facilities in the 1920s, a transitional time in which private sanatoria fell out of popularity in favor of state-supported institutions. Kentucky, however, progressed at a slower pace in its development of public tuberculosis hospitals. Although Kentucky formed a tuberculosis commission in 1912,[1] sanatoria largely remained in the hands of local and county organizations for the next three decades. The construction of five 100-bed tuberculosis hospitals in the late 1940s marked a transition from smaller, county-operated sanatoria to larger, modern district hospitals. Kentucky's state TB hospitals fused traditional sanatoria design features with Art Deco stylistic influences. Created at the cusp of shifting ideas about tuberculosis treatment and therapeutic architecture, this set of TB hospitals became seemingly obsolete within a decade of construction. Public concerns about contaminated tubercular spaces gradually dissipated in the mid-twentieth century; nevertheless, the Kentucky TB Sanatoria

[1] *First Biennial Report of the Kentucky Tuberculosis Commission* (Frankfort, KY, January 1914)

Commission struggled to find new uses for the hospital complexes. With a lingering stigma associated with sanatoria, the Kentucky TB Hospitals constitute a group case study for both adaptive reuse and razing of tubercular architecture.

The first attempts to develop sanatoria in Kentucky happened on the local level and produced a handful of county-operated facilities for residents. Hazelwood Sanatorium opened in 1907 with similar sanatoria following suit over the next few years. By 1912 , three sanatoria—Hazelwood, Waverly Hills, and Jackson Hill—existed, as well as tuberculosis wards at the Eddyville Branch Penitentiary and the Western Kentucky Asylum for the Insane.[2] With only a piecemeal group of local sanatoria in place, state officials in Kentucky began to contemplate the idea of district tuberculosis sanatoria dispersed throughout the Commonwealth. Under the Acts of 1912, Kentucky formally undertook a state-wide anti-tuberculosis campaign. Chapter III of the legislation specified:

> An Act concerning tuberculosis and to provide for the creation of a commission to be known as the Kentucky Board of Tuberculosis Commissioners, to define its powers and to make an appropriation therefor, and to authorize and provide for the establishment of districts consisting of one, or more than one, county, and to authorize and provide in each district for the location, erection, organization and management of a district sanatorium for the care and treatment of tuberculosis, and authorizing county and district taxations for the purpose of making an appropriation for the purchase of necessary land and construction and equipment of necessary buildings and an annual appropriation for the maintenance of such sanatorium.[3]

Created by the new legislation in 1912, the Kentucky Tuberculosis Commission set out to study and disseminate research on tuberculosis as well as take necessary measures to prevent its spread. The early work of the commission included designing a movie to

[2] Ibid., 11 – 12.
[3] Ibid., 3.

reach rural communities throughout Kentucky. The commission's work furthered that conducted by the Kentucky Association for the Study and Prevention of Tuberculosis. Yet, as optimistic as the Kentucky Tuberculosis Commission strove to be, it failed to carry out the district sanatoria plan conceived by Chapter III of the Acts of 1912. Instead, county sanatoria continued to be the norm.[4]

For much of the early twentieth century, Kentucky lagged behind many other states in tuberculosis treatment and prevention for a number of reasons. The lack of public health amenities, large number of poor rural communities, and geographic isolation (i.e. the Appalachian mountains of eastern Kentucky) contributed to a significant health disparity. Given the geographic isolation of Kentucky, it's no surprise that the earliest sanatorium developed on the local level. Hazelwood Sanatorium helped bridge the gap between the era of county-operated sanatoria and the next phase of state tuberculosis hospitals. The state's first tuberculosis sanatorium opened in Louisville on September 7, 1907. The ten-bed hospital, known as the Hazelwood Sanatorium, derived its namesake from the nearby railroad depot of Hazelwood Station. The number of consumptive cases in Louisville and surrounding areas quickly overwhelmed the small sanatorium's capacity. Within three years, Hazelwood had expanded to include "three open-air cottages – called 'shacks,' a sewage disposal plant, a dairy barn, a garden and several tents for the male patients."[5] This expansion was just the first of many at Hazelwood. The sanatorium steadily grew from 60 beds in 1914 to 140 beds in 1917. A new two-story building with screened-in porches accommodated a large influx of patients

[4] Ibid.

[5] C.C. Thomas, *With Their Dying Breaths: A History of Waverly Hills Tuberculosis Sanatorium* (CreateSpace Independent Publishing Platform, 2012), 43.

from throughout the state. In order to receive treatment at Hazelwood, Kentuckians had to apply first to their county's fiscal court because counties bore financial responsibility. It was ultimately up to counties to decide if tuberculosis sufferers would be sent to the sanatorium.[6]

Monetary problems plagued Hazelwood from its beginning and eventually led to the state assuming ownership in 1920. By 1924, Hazelwood required that all patients pay a weekly rate of fifteen dollars for their own treatment. Despite this effort to recover financially, the sanatorium remained overcrowded and fell into disrepair.[7] Superintendent and medical director Dr. Paul A. Turner stated,

> The buildings and equipment at Hazelwood are in such poor condition that unless immediate repairs are made it will have to be closed…. If Kentucky, which does less than any other State in curing tuberculosis, allows its only institution for that purpose to close, it will require twenty years to build back where we are today.[8]

Hazelwood Sanatorium managed to weather its financial hardship into the 1940s when it became the surgical center for the newly-built tuberculosis hospitals in Kentucky.

The tuberculosis problem in Kentucky eventually overwhelmed Hazelwood Sanatorium and the sparse number of other county-operated sanatoria. It was estimated in 1944 that an annual average of 2,000 Kentuckians died of tuberculosis. One source even cited Kentucky with "the country's highest tuberculosis death rate if precedence of Arizona and New Mexico, health resort States, is discounted."[9] The long-term care needed for tuberculosis treatment, paired with the contagious nature of the disease, meant

---

[6] Ibid.
[7] Ibid., 44 – 48.
[8] Ibid., 47.
[9] Sol Schulman, "Thousands Doomed to Die Get Reprieve From the State," *The Courier-Journal* (Louisville, KY), August 13, 1944.

most private hospitals rejected tuberculosis patients. As of the mid-1940s, only a few places in Kentucky received consumptives. These included the 375-bed United States Veterans Hospital in Outwood, the 26-bed Warren County Tuberculosis Sanatorium in Riverside, the 17-bed Kenton County Tuberculosis Hospital in Covington, the 575-bed Waverly Hills in south Louisville, and the 115-bed Julius Marks Sanatorium in Lexington. Hazelwood Sanatorium, home to the state sanatorium, received an annual appropriation of $88,000 while the rest relied solely on local sources and/or patient payment.[10]

The outbreak of World War II prompted a change in how Kentuckians dealt with the treatment of tuberculosis. Health inspections of troops during the war exposed the hundreds of tuberculosis cases among just the male population. The sentiment among the medical community was that a handful of large sanatoria would provide the most efficient way to bring together highly trained staff and modern equipment.[11] Galvanized by public interest in state-funded tuberculosis facilities, the General Assembly of Kentucky passed House Bill No. 147 and Governor Simeon Willis subsequently approved it on March 17, 1944. That legislation divided the state into six tuberculosis sanatoria districts, allowed for the construction of sanatoria, and created the Tuberculosis Sanatoria Commission of Kentucky.[12] This initial commission consisted of eleven males and one female. In addition to establishing the commission, the act specifically allocated

[10] Ibid.
[11] Ibid.
[12] Fred J. Hartstern, *Report on Sites for the Tuberculosis Sanatoria Commission of Kentucky* (Frankfort, KY: January 1945), 1.

government funding for "six sanatorium districts with at least a 100-bed sanatorium in each district."[13]

Under the auspices of the Tuberculosis Sanatoria Commission, Architect Fred J. Hartstern traveled throughout Kentucky to recommend sites for the five new state hospitals and expansion of the Hazelwood Sanatorium. As dictated by legislation, sites required "an adequate municipal water supply" and "convenient access to utility service and fuel."[14] Hartstern's recommendations culminated in the 1945 *Report on Sites for the Tuberculosis Sanatoria Commission of Kentucky*. The report assumed that most patients would arrive by private automobile, and thus gave little importance to railroad transportation. Potential locations were assigned scores based on the following factors: foundation conditions, roads and grading on site, landscaping (trees only), accessibility, distance from town, elevation of site, and transportation. These factors aligned with those established by the National Tuberculosis Association in its 1921 "Notes on Tuberculosis Sanatorium Planning."[15]

The potential to house a state tuberculosis hospital in one's community led to a variety of responses, some opposed to and others in favor of the opportunity. The August 13, 1944 edition of *The Courier-Journal* noted that some communities opposed the construction of TB hospitals near them given the belief by some doctors that "the Veterans Hospital near Dawson Springs killed Dawson Springs as a resort city."[16] This sentiment reflected the lingering idea that diseased spaces, such as hospitals and

---

[13] Schulman.
[14] Hartstern, 3.
[15] T.B. Kidner, "Notes on Tuberculosis Sanatorium Planning," *Public Health Reports* (1896-1970) 36, no. 24 (June 17, 1921), 1371.
[16] Schulman.

sanatoria, could detract from the economic growth of city. Yet, while sanatoria had historically been considered a stain on community's wellbeing, many communities actively pursued the new modern TB hospitals for their economic, symbolic, and health purposes.

After the delivery of the *Report on Sites for the Tuberculosis Sanatoria Commission of Kentucky,* state officials had to determine where the TB hospitals would be located. For example, Paducah ranked first in the recommendations, but second choice Madisonville ultimately housed District One's tuberculosis hospital that served twenty-two counties in the western part of the Commonwealth. According to September 27, 1950 edition of the *Madisonville Messenger,* local resident Lawrence H. Ashmore, an original member of the sanatoria commission, advocated for Madisonville's selection.[17] Eventually, the six district hospitals were located in Madisonville (District One), Louisville (District Two), Paris (District Three), Ashland (District Four), London (District Five), and Glasgow (District Six). A new hospital was planned for each district except District Two, where Hazelwood Sanatorium already stood.[18]

The construction of the state tuberculosis hospitals spanned from 1946 through 1950. All five new hospitals adhered to a standard five-building layout – main hospital building, director's residence, staff residence, nurses' residence, and combination boiler house and laundry – designed by architects John T. Gillig and Fred J. Hartstern of

---

[17] Ernest Claytor, "Hospital Will Serve 22 West Counties," *Madisonville Messenger* (Madisonville, KY), Wednesday, September 27, 1950.

[18] *Tuberculosis Sanatoria Commission 1950 -1951 Annual Report*, Kentucky Sanatoria Commission Records Collection, Kentucky Department of Libraries and Archives (Frankfort, KY).

Lexington and J. T. Wilson of Louisville.[19] The initial design of these hospitals failed to meet national hospital construction standards later set forth by the Hill-Burton Act of 1946, also known as the Hospital Survey and Construction Act. In order to gain Hill-Burton funding, Hartstern and members of the Tuberculosis Sanatoria Commission met and negotiated design changes with the U.S. Health Department in Washington, D.C. This meeting secured an allotment for hospital furnishings and some operation costs.[20]

Using the revised design, local contractors in each district carried out Gillig-Hartstern and Wilson's plan. This process resulted in five identical, $1.5 million hospitals built to accommodate at least 100 patients each and provide an equal level of tuberculosis treatment across the Commonwealth. With Hazelwood's 250 beds and an additional 750 beds located in city and county TB sanatoria, Kentucky secured about "1,500 beds to fight an estimated 17,000 cases of tuberculosis in Kentucky."[21] The dedication of the first opened tuberculosis hospital occurred at Paris on June 14, 1950 followed by the Glasgow Tuberculosis Hospital in late August 1950. Madisonville's dedication on September 29, 1950 marked the opening of the third tuberculosis hospital. Government officials later held dedication ceremonies at London and Ashland's sanatoria.[22]

Despite the stigma attached to the contagious disease, communities celebrated the opening of the tuberculosis hospitals as steps of progress and modernity. Local newspapers published lengthy articles and advertisements leading up to the official

---

[19] William M. Hunter, *Paris Tuberculosis Sanatorium*, Kentucky Individual Buildings Survey Form (Frankfort, KY: Kentucky Heritage Council, 2011).

[20] Johan Graham, *Ashland Tuberculosis Hospital*, National Register of Historic Places Registration Form (Frankfort, KY: Kentucky Heritage Council, 2007), 9.

[21] Claytor.

[22] Ibid.

dedications of the new hospitals. The Wednesday, September 27, 1950 edition of the *Madisonville Messenger* remarked on what a tuberculosis hospital meant for the community:

> We Welcome A New Landmark Dedicated to Mercy! No finer tribute could be paid to Madisonville and Hopkins County than to be selected for District One's Tuberculosis Sanatorium. We extend congratulations to the entire management and staff, and to all those whose efforts made this great monument to the future possible. Best Wishes from Another Who is Proud to Have the Sanatorium in Our Midst![23]

Elaborate, multi-page spreads on TB sanatoria dedications appeared in local newspapers. Some businesses jumped at the chance to align themselves with this tangible symbol of modernity. An advertisement from *The Glasgow Times* dubbed the new hospital as "another progressive step for Glasgow and the community we serve."[24] In order for local citizens to attend the festivities around the District One TB Hospital's dedication, Madisonville opted to close its downtown stores, with most business firms allowing employees to attend the ceremony.[25]

Celebrated in communities, Kentucky's TB Hospitals represented a shift in how the Commonwealth dealt with disease and healthcare. Gone were the county-operated sanatoria of the early twentieth century; in their place, the Commonwealth developed public institutions more akin to the hospitals of today than their earlier counterparts. Annmarie Adams, in *Medicine by Design: The Architect and the Modern Hospital, 1893 – 1943*, discusses how this shift in hospital design from home-like facilities to more

---

[23] Ibid.

[24] "Tuberculosis Hospital Dedication Section," *The Glasgow Times* (Glasgow, KY), Thursday, August 24, 1950.

[25] Claytor.

professional institutions occurred by the mid-twentieth century. Standardization of hospital design improved cost-efficiency and evaluation of hospital performance.[26] By the late 1940s, tuberculosis sanatorium planning departed from its earlier emphasis on domestic settings to reinforce good health. Until this period, "hospitals, in fact, relied on the likeness of the big, safe house to convince middle-class city dwellers that their chances were as good there as they were at home."[27]

In Kentucky, the institutional plans for the public TB hospitals utilized architecture to convey an image of the sanatoria as modern antidotes to the white plague. The choice of materials for the buildings further exemplified the power inherent in these sanatoria:

> In viewing this link in the State's system of sanatoria for the treatment of Kentucky's worst plague, tuberculosis, one is bound to be impressed by the ability of government to do what private citizens would find impossible. A great deal of money has been spent, that is true, but great good can come of it in salvaged lives that previously have been doomed. This money has furthermore been wisely spent from the standpoint of permanency of construction… brick and tile, steel and concrete, even the window sills will resist wear and rotting because they are of marble.[28]

Created as a statewide initiative, Kentucky's state tuberculosis hospitals physically represented the Commonwealth's mid-twentieth century public health campaign to cure tuberculosis. Based on a standard design, the hospitals encapsulated all that modern medical architecture had to offer in terms of up-to-date building materials and technology. The mid-twentieth century tuberculosis hospitals erected in Kentucky were a

---

[26] Annmarie Adams, *Medicine by Design: The Architect and the Modern Hospital, 1893 – 1943* (Minneapolis: University of Minnesota Press, 2008), 120.

[27] Ibid., xxiii.

[28] "Tuberculosis Hospital Dedication Section."

far cry from the sanatoria popularized in the early part of the century. One holdout from the earlier sanatorium model was the self-sufficiency of every site. In order to keep facility operations and maintenance in-house, each sanatorium complex contained housing for its employees as well as a combination boiler house/laundry. The seclusion of the sanatoria sites and the ability of the hospital staff to clean/dispose of contaminated materials on-site served as additional safeguards to prevent the spread of the disease within each district location.

As the anchor of each site, the main hospital building followed a modified cross/t-shaped plan. Composed primarily of brick in a running bond pattern, the main building was multi-story with the back cross-section the highest at four stories. The hospital's flat roofs were trimmed with coping caps while scuppers filtered rain into metal gutters. The combination windows on all elevations contained stone sills. On the two-story front façade, the windows were articulated in bays flanking the main entrance. The metal gutters visually divided bays of window into sections on each elevation. The original solaria, one located on each of the four floors, highlighted the use of windows to provide fresh air and a view of the landscaped grounds.

Figure 10. Main Hospital Building, London TB Hospital, London, Laurel County, KY, 2015, Photograph by Author.

The main entrance to each hospital distinctly identified it as a tuberculosis sanatorium. A large two-story, stone-faced portico prominently displayed the bronze seal of the Commonwealth of Kentucky above the entranceway. A limestone cornerstone on the façade commemorated the date that construction started on each building under the administration of Governor Simeon Willis. A muted row of dentils adorned the lentil above the door. On the lentil, the metal word "SANATORIUM" spelled out the function of the hospital building. Etched double-barred crosses in the stone flanking the front door on the façade further marked each hospital building as a sanatorium. Adopted by tuberculosis prevention associations and later the American Lung Association, the double-barred cross originally symbolized the crusade against tuberculosis. The inclusion

of a universal symbol, such as the double-barred cross, hinted at the stylistic roots of the TB hospitals as it was common for Art Deco buildings to feature national symbols (e.g. eagles on period post offices) on their facades.

Figure 11. Façade, London TB Hospital,
London, Laurel County, KY, 2015, Photograph by Author.

Heavily promoted as modern hospitals, Kentucky's TB hospitals drew on the somewhat outmoded Art Deco architectural style. Part of the early Modernism movement, the Art Deco style gained great traction in the United States in the late 1920s and early 1930s. Streamlined features, geometric details, decorative motifs, and glass were hallmarks of this Modernistic architectural style that departed from early twentieth-century revival traditions. Commonly used in apartments, commercial buildings, and urban skyscrapers, the Art Deco style also appeared in government-commissioned

architecture.[29] In the 1930s, New Deal public buildings infused Art Deco elements into the Classical Revival style, creating a blended style often referred to as PWA (Public Works Administration) Modern. Carroll Van West's study on New Deal era public buildings notes that the application of modern styles gave "the impression of more efficient government administration in which federal, state, and local officials worked together for public benefit."[30] Kentucky's TB Hospitals were created a decade after the heyday of the Art Deco style; however, the architects incorporated futuristic Art Deco elements into the sanatoria architecture. The distinct Art Deco design chosen for the hospital buildings was intended to convey a sense of modern progress and technology. This architectural style choice presented the new sanatoria as a permanent solution to Kentucky's tuberculosis problem.

Figure 12. Madisonville TB Hospital,
Madisonville, Hopkins County, KY, 2015, Photograph by Author.

[29] Rachel Carley, *The Visual Dictionary of American Domestic Architecture*, 228.
[30] Carroll Van West, *Tennessee's New Deal Landscape, A Guidebook* (Knoxville, University of Tennessee Press, 2001), 30-31.

In the main hospital building's Art Deco design, the primary façade's multiple stories presented a stepped effect typical for the style. The use of geometric features and steamship glass further reflected the Art Deco style. The main portico was framed by a geometric cornice carved into the stone. Echoes of this design appeared in the parapet brickwork of the front section's roof, cornices of the secondary rear entrances, and the elaborate two-story steamship glass of the rear staircases. While the stone portico served as the original main entrance, six other entrances provided secondary access to the main building. They included four on the ground level of the main hospital and two in the front three-story section of the building. The two rear entrances featured graduated brick porticoes with cornices comprised of stone geometric elements. A two-story bay of steamship glass above each rear entrance illuminated the staircase at the ends of the building. One of the rear entrances was intentionally receded into the interior by two bays to accommodate the south-facing solaria at that end. These large, airy solaria with interior glazed, tile walls represented a modern take on the sleeping porches and sunrooms found in earlier forms of tuberculosis sanatoria.

Figure 13. Solaria, London TB Hospital,
London, Laurel County, KY, 2015, Photograph by Author.

In anticipation of the dedication of the new tuberculosis hospitals, local newspapers published descriptions of the interior spatial arrangements and décor of the facilities. A tour of the Glasgow Tuberculosis Hospital from *The Glasgow Times*[31] offered the most thorough description of the interiors of the main hospital building and auxiliary buildings as they appeared upon opening in 1950. Since all five new tuberculosis sanatoria followed a standardized architectural and design scheme, this account illuminated how the interiors originally looked and functioned to promote health and recovery.

For the original hospital design, yellow glazed tiles adorned the walls while dark brown/red tiles made of asphalt, ceramic, and quarry materials covered the floors. The first floor housed "offices, a reception room, a morgue, a room for physicians, an x-ray room complete with a dark room, a gymnasium-size kitchen, five cold storage rooms, and employees' dining room and a nurses' dining room."[32] Examination rooms, operating rooms, dental clinic, and a beauty/barber shop enabled the hospital to isolate its patients from the healthy populace. Four stainless steel mop wagons and a large stock of cleaning supplies enabled the staff to keep the hospital disinfected and sanitized. In accord with strict tuberculosis sanatoria regulations, one of the five large cooling units in the ground-floor kitchen was used for garbage, because the health department stipulated that garbage could only leave state hospitals if frozen or cooked. In addition to the fully-equipped first-floor kitchen, each floor boasted a kitchen equipped with dishware and cutlery. Dishes prepared from the main kitchen were placed on food carts, carried on elevators to

[31] "Tuberculosis Hospital Dedication Section."
[32] Ibid.

the various floors, served on steam tables, and eaten in dining rooms. The color scheme – cream, terra cotta, blue, green – of these dining rooms varied by floor.[33]

The top three floors of the main hospital building contained wards with sterilization/warming stations, telephone booths in corridors, strategically placed fire extinguishers, and electric exit signs. Patient sleeping quarters were divided into wards of two to four bedrooms on the top three floors. Steel casement windows allowed for optimal light and air flow into these patient rooms. Solaria provided further exposure to fresh air and sunlight:

> Ambulatory and wheel chair patients also have the privilege of new vistas from deep, glassed-in solariums found at the end of the three patient floors. Here a lounge atmosphere prevails, with chaise lounges, club chairs, tables, and adjacent lavatory and toilet.[34]

The lounging atmosphere of the solaria harkened back to the days of private sanatoria and the remnants of the idea that pleasant scenery encouraged recuperation from tuberculosis.

Kentucky's TB Hospitals arrived at a time of transition in tuberculosis treatment. The medical community and public still directly connected architectural design and environment with the treatment of tuberculosis. Lingering ideas about the healthy properties of sunlight and air informed the design of the TB hospitals. As far back as the turn of the century, the medical community believed that the tubercle bacilli could survive in household dust and that sunlight offered a way to destroy the bacteria infecting the built environment. Light and air ultimately became intrinsically linked to the twentieth-century Anti-Tuberculosis Movement. Margaret Campbell, in "What Tuberculosis did for Modernism: The Influence of a Curative Environment on Modernist

[33] Ibid.
[34] Ibid.

Design and Architecture," contends that "light and air, and specifically sunlight, were influential in the interpretation of modernist hygienic ideas for the design of flat roofs, balconies, terraces and recliner chairs."[35] The early modernism reflected in the tuberculosis hospitals combined hygienic and environmental knowledge. In terms of tuberculosis treatment, Kentucky's TB Hospitals were practically antiquated at the time of opening and the triple therapy drug treatment diminished the need for sanatoria by the 1950s.[36] Despite this poor timing in construction, the Commonwealth's decision to fund state sanatoria, rather than let them remain in local hands, demonstrated a pervasive belief in the power of medical and scientific progress.

The optimistic origins of Kentucky's TB Hospitals as impermeable defenses against disease quickly slipped away as all five tuberculosis hospitals required major improvements within their first few years of operation. According to the Tuberculosis Sanatoria Commission's 1950-*1951 Annual Report*, the sanatoria lacked storage space and garage parking for hospital vehicles. In addition to building maintenance, the grounds required landscaping attention.[37] As documented in the *1953-1954 Annual Report*, efforts to waterproof the new hospital buildings remained ineffective and required continual attention from the Division of Engineering.[38] On top of the waterproofing issue, leaking and deterioration of steam lines running from the power houses to the main hospital

---

[35] M. Campbell, "What Tuberculosis did for Modernism: The Influence of a Curative Environment on Modernist Design and Architecture," *Medical History* 49, no.4 (2005): 470.

[36] Ibid., 487.

[37] *Tuberculosis Sanatoria Commission 1950 -1951 Annual Report*.

[38] *Tuberculosis Sanatoria Commission 1953 -1954 Annual Report*, Kentucky Sanatoria Commission Records Collection, Kentucky Department of Libraries and Archives (Frankfort, KY), 24.

buildings threatened the functionality of the new sites.[39] Within seven years of opening, all five tuberculosis hospitals required steam line replacements as well as major roof repairs.[40] These structural and maintenance issues undermined the image of the hospitals as modern places of tuberculosis treatment.

The erection of five large hospitals and the expansion of another funneled a substantial amount of state funds into the fight against tuberculosis. Ironically, their opening coincided with new drug treatments, known as the triple therapy, which practically eradicated the long-term need for tuberculosis sanatoria. Faced with the possibility that the new TB hospitals were poor investments, the Tuberculosis Sanatoria Commission's reaction to new drug treatments was predictably conservative:

> Despite a steady decline in the death rate in recent years, the number of people who have tuberculosis is increasing. Whether they die or recover, their number is the real index to the problem. Tuberculosis in Kentucky is still public health enemy number one. It is the most unnecessary, most wasteful, and most expensive of all diseases.[41]

Regardless of the commission's initial view that the state sanatoria were necessities, the development of out-patient clinics and acceptance of tuberculosis patients at general hospitals left the sanatoria with a dwindling patient base. Recognizing the diminished need for tuberculosis hospitals, the State Tuberculosis Hospital Commission (the former Tuberculosis Sanatoria Commission) recommended as early as 1963 that the facilities be

---

[39] Ibid.

[40] *Tuberculosis Sanatoria Commission 1956 -1957 Annual Report*, Kentucky Sanatoria Commission Records Collection, Kentucky Department of Libraries and Archives (Frankfort, KY), 25.

[41] *Tuberculosis Sanatoria Commission 1950 -1951 Annual Report*, 9.

authorized to treat chronic respiratory diseases rather than just tuberculosis.[42] Any attempt to repurpose the hospitals for a more general healthcare use failed during this time and the era of tuberculosis sanatoria came to an end as the medical community embraced drug therapy over regimented bedrest in a hospital setting. Obsolete by the mid-1970s, the set of Kentucky State Tuberculosis Hospitals were decommissioned as sanatoria and the public institutional phase of tuberculosis treatment in Kentucky ended.[43]

Forty years after their decommissioning, the remaining TB sanatoria buildings testify to a particular era of Kentucky's tuberculosis history. The recent listings of the Ashland, London, and Madisonville Tuberculosis Hospitals on the National Register of Historic Places formally acknowledged their statewide significance. Given Annamarie Adams's observation that "hospitals of the 1950s and 1960s tended to look like office buildings,"[44] it is fitting that two of the three extant state tuberculosis hospitals (London and Madisonville) found new life as government office buildings. Their transition from medical to office space represents successful adaptive reuse case studies. Due to the continual involvement of the Commonwealth and occupancy of the buildings, London and Madisonville State Tuberculosis Hospitals have received regular maintenance over the years and not suffered from acts of vandalism. Both hospitals remain in good

---

[42] *Tuberculosis Sanatoria Commission 1967 -1968 Annual Report*, Kentucky Sanatoria Commission Records Collection, Kentucky Department of Libraries and Archives (Frankfort, KY).

[43] Commonwealth of Kentucky, *Plans for General Renovation, New Boilers and Steam Distribution, renovation of T.B. Hospitals* (Frankfort, KY: 1975).

[44] Adams, 130.

condition with their exteriors relatively unchanged since their creation.[45] Ashland TB Hospital, the first hospital to be individually listed on the National Register in 2008, now serves as domestic abuse victim housing and is relatively closed off from the public for security reasons.[46] Unfortunately, not all of the sanatoria complexes fared as well as those in Ashland, London, and Madisonville. Having fallen into states of disrepair, the unoccupied Glasgow and Paris TB Hospitals were razed in recent years to make way for new construction.

Now nearly seven decades after their construction, Kentucky's extant TB Hospitals still recall a specific time in which the Commonwealth combined architecture, medicine, and state funding into a public health campaign against tuberculosis. Their shared design and stylistic features, including solaria on each floor, cornerstones, and double-barred crosses on the facades, make these hospitals easily identifiable and potent as symbols of the mid-twentieth-century Anti-Tuberculosis Movement in Kentucky.

---

[45] Jenna Stout, *Kentucky State Tuberculosis Hospitals,* National Register of Historic Places Multiple Property Submission Form (Frankfort, KY: Kentucky Heritage Council, 2016).

[46] Graham, *Ashland Tuberculosis Hospital*.

CHAPTER FOUR

From Cure Porch to Cure-All: Sleeping Porches in the American Architectural Landscape, 1890 – 1930

"A well ventilated sleeping porch is the pet hobby of the author. The sleeping porch in our estimation, is one of the best investments that a homebuilder can make. It will discount the services of the best physician in the city even if he is employed by the year. The secret is that you breath [sic] the fresh pure air during your sleeping hours, which is worth more than any apothecary's pills in the world. A sleeping porch is one thing every house, little or big, should have."

- Glenn L. Saxton, 1914

In January 1904, crowds of "medical students, student nurses from the various schools and hospitals, teachers from the public schools, working-women's clubs, and other charitable societies"[1] flocked to the Tuberculosis Exposition held on the campus of Johns Hopkins Hospital in Baltimore. Filling the University Hall to capacity, attendees listened to lectures by leading tuberculosis specialists and visited exhibits along the long corridors of McCoy Hall, which was opened 10 AM to 10 PM for the event. Participants heard and read statistics that highlighted the prevalence and distribution rates of tuberculosis while they viewed charts and photographs that illustrated the health conditions of factories, tenement houses, and sweatshops. In the exhibit space, "plans and elevations, photographs and models, illustrated every conceivable variety of hospital, sanatorium, tent, or sleeping-shack."[2] Nurses paid particular attention to the exhibit,

[1] M. Adelaide Nutting, "The Tuberculosis Exposition, Baltimore," *The American Journal of Nursing*, 4 no. 7 (April 1904): 497 – 499.

[2] Ibid., 497.

"House and Home Hygiene." As M. Adelaide Nutting of Johns Hopkins Hospital reported,

> This, beginning with photographs of interiors and exteriors of homes, dwelling especially upon every available adjunct to the house ,- porches, verandas, fire-escapes, - which could afford space out-of-doors for the consumptive, went on to show carefully arranged wheeling – and reclining – chairs for out-of-door treatment, suitable clothing, sleeping-bags, and many varieties of sputum-cups and flasks, etc.[3]

The sleeping porch, situated among the other housing types at the Tuberculosis Exposition, was one of the modern inventions for consumptive patients that drew the attention of visitors. Originally considered an architectural element of the sanatorium landscape, the sleeping porch shown at the exposition demonstrated the increasing domestic importance of the open-air treatment for tuberculosis. While the sleeping porch of 1904 was still distinctly tied to the Anti-Tuberculosis Movement, it would gradually lose much of its tubercular stigma to become a healthy space popularized through the mail-order catalogs of Sears, Roebuck and Company, and Aladdin Readi-Cut Houses. The sleeping porch once had been solely associated with tuberculosis, but by the 1910s and 1920s it had distanced itself enough from its tubercular roots to gain acceptance in the American architectural landscape. The history of sleeping porches from 1890 to 1930 encapsulates a specific time in medical knowledge in which consumptives and health-seekers actively constructed their own physical spaces at home to treat illness and promote open-air living.

The late nineteenth century witnessed a dramatic shift in how Americans viewed disease. Miasmatic theories linking maladies with moisture-laden night air had dominated

---

[3] Ibid., 498.

the large part of the century.[4] Whereas Americans long blamed poor health on miasmas, they began to accept the germ theory and realize the importance of improved ventilation in homes. No longer was night air viewed as dangerous to one's health; rather, it was believed that "sleepers in stuffy rooms were slowly suffocating in a toxic fog of their own breath, sweat, and flatulence."[5] The middle-class household, once thought to be a beacon of security, came under the scrutiny of sanitary experts. Incorporating new ideas about germs into traditional views of miasma, Americans gradually realized that "it was impossible to avoid urban miasmas merely by closing the windows of the home."[6] The fact that American urban homes were increasingly linked by networks of utilities (e.g. water lines, sewers) raised concerns about pollutants possibly traveling from slum areas into middle-class homes. This posed a threat to the middle-class identity based on cleanliness, both in moral and physical senses. Peter C. Baldwin, in "How Night Air Became Good Air, 1776 – 1930," attributes these modern threats to air quality with why the tightly sealed home became an unhealthy space.[7]

Furthermore, as the nineteenth century progressed, fears about "overcivilization" and urban moral decay grew, particularly among middle-class urban groups. Seeking therapeutic immersion in nature, Americans desired a balance between civilization and wilderness. Falling into the tradition set by Andrew Jackson Downing's landscape gardening and Frederick Law Olmsted's parks, house-building guides offered instructions

---

[4] Charlie Hailey, "From Sleeping Porch to Sleeping Machine: Inverting Traditions of Fresh Air in North America," *Traditional Dwellings and Settlements Review* 20, no. 2 (Spring 2009): 27 – 44.

[5] Peter C. Baldwin, "How Night Air Became Good Air, 1776 – 1930," *Environmental History* 8, no. 3 (July 2003): 412 – 429.

[6] Ibid., 416.

[7] Ibid.

on how to achieve a harmonious balance with nature. How to best filter the night air became a source of speculation and innovation. A number of household inventions, including fresh air pipes and window-adjacent furnaces with warm air ducts or steam radiators, emerged to accomplish this task. Those possessing fewer means could opt for a cheaper solution: "to raise the lower sash of a window by a few inches, and to block the opening with a board; the board would prevent direct drafts at bed level, but outside air could still enter between the two sashes and flow upward toward the ceiling."[8] Ventilation advocates engaged in debate over the best course to take in breaking up drafts. Some suggested the use of thin muslin curtains or mosquito netting, in place of heavier fabrics, to remove dampness from the night air. Wire screens over ventilation tubes were also recommended.

The popularity of wire window screens actually helped eliminate the disease-carrying mosquitoes that were the true threat behind night air. Although the medical community did not recognize the mosquito connection to malaria and yellow fever until the late 1890s and early 1900s, windows screens were mass produced as early as the 1860s to protect against pests. Made of coarsely-woven iron wire painted to prevent rusting, wire screens were so expensive that many housekeepers used screen food covers and pantry safes instead. By the 1870s, manufacturing technology improved the quality and decreased the price of wire screens. Machine painted with galvanized iron or steel wire, screens boasted tighter meshes.[9] As Baldwin notes, "The cost of screening a window, which ranged in 1896 from $2.25 to $6, had dropped by 1914 to as little as

[8] Ibid., 419.
[9] Ibid., 419 – 421.

$1.25. Those willing to make their own frames would buy the screening material for as little as two and a half cents a square foot in the early 1890s."[10] Initially aimed at letting in filtered drafts, screened windows gained new meanings with the discovery that insects could transmit diseases. The American Steel and Wire Company addressed this shift in the early twentieth century: "While, until comparatively recently, the use of screens was dictated by a desire for comfort, the exclusion of the housefly and mosquito is now demanded on hygiene ground."[11]

Early twentieth-century Americans better understood that night air was only as dangerous as the mosquitos swarming within it. In addition, concerns over stuffy indoor air started to revolve around communicable diseases, not foul-smelling miasmas. Discarding the antiquated devices aimed at reducing night air's pollutants, fresh-air seekers simply needed a window screen. Following the advice first posited by tuberculosis experts, early twentieth-century Americans did away with "the unhealthy separation of germ-laden indoor air from clean outdoor air."[12] The sleeping porch allowed tuberculosis sufferers and then ordinary health-conscious Americans to fully immerse themselves in the night air and benefit from its curative properties. The practice of building sleeping porches, thus, fit within a larger framework of medical knowledge and disease control. Naomi Rodgers, in *Dirt and Disease: Polio Before FDR*, notes that "the germ theory and the new scientific medicine did not magically dissipate the influence of cultural prejudice in defining the relationship among disease, environment,

[10] Ibid., 421.
[11] As cited in Baldwin, 422.
[12] Baldwin, 422.

and individual behavior."[13] Anti-fly campaigns of the mid-1910s focused on the home as a sanitary haven. Female social reformers, active participants in the settlement house movement and municipal housekeeping, gained a new role as sanitary experts engaged in anti-fly work. By assigning culpability to flies, reformers could explain how unsanitary living conditions in the slums impacted middle-class neighborhoods. Furthermore, flies were visible; thus, everyday Americans, not just laboratory scientists armed with microscopes, could take action against a common enemy.[14] The installation of screens on windows and erection of screened-in sleeping porches reflected a conscious effort to purify the air of pollutants and provide a sanitary space.

The "cure porch," a therapeutic space in which patients rested, became a standard architectural symbol associated with sanatoria. Based on German medical ideas of fresh air exposure, cure porches first appeared at Dr. Edward L. Trudeau's famed Trudeau Sanitorium at Saranac Lake, New York. Builders soon added the cure porch to the design of American homes as the open-air treatment became part of the American health regimen.[15] Although the act of sleeping outside seemed like a novel idea for many Americans at the time, it had been a hallmark of the tubercular patient's experience for decades. Advocating for the open-air treatment and the curative power of the environment, tuberculosis specialists constructed sanatoria with open windows and sleeping porches.[16] Katherine Louise Smith, in the December 1909 edition of *Scientific*

---

[13] Naomi Rogers, *Dirt and Disease: Polio before FDR* (New Brunswick, NJ: Rutgers University Press, 1992), 6.

[14] Ibid., 68.

[15] Thomas Durant Visser, *Porches of North America* (Hanover, NH: University Press of New England, 2012), 63 – 69.

[16] Hailey, 31.

American, addressed the growing importance of the night air: 'Fresh air at night and plenty of it is the cry that is going up among those who are determined to subdue the 'Great White Plague,' and with these persons it has become more than a fad, a necessity.'[17]

Taking fresh air gradually became not just an activity for tubercular invalids, but a pursuit for the health-conscious American. Nancy Tomes, in *The Gospel of Germs: Men, Women, and the Microbe in American Life* (1998), addresses this transition around the turn of the century. Galvanized by the spirit of the Progressive Era, everyday Americans adopted a gospel of germs to combat the dangers of germs. With the advent of the germ theory, Americans combined traditional sanitary science with the new discovery to craft a new understanding of sanitation that focused on the sources of germs. The so-called gospel of germs embedded itself in American culture, particularly through consumer-oriented crusades. Ideas about germ transmission shaped the period's material culture, including advice books, toilets, clothes, and cleaning products. Tomes connects changing ideas in hygiene and sanitation with new trends in the domestic sphere. As protectors of the home, female domestic scientists took it upon themselves to make their households as safe as possible by discarding with heavy Victorian furnishings in favor of lighter, easier cleaned pieces. Changing behavior, from grooming practices to fashion choices, to fit within the new gospel of germs proved to be a staple of public health crusades by the 1920s. Tomes emphasizes that Americans took individual responsibility in modifying their own habits in order to ensure the well-being of the masses. Thanks to the Progressive ethos reverberating through society, motivated everyday Americans

[17] As cited in Hailey, 32.

reorganized their lives around the newly discovered germ theory. This shift in society owed much to its tubercular roots for the domestic science movement and anti-tuberculosis crusade truly transformed "the germ [into] a household word in early twentieth-century America."[18]

Within the domestic household, the sleeping porch existed as both a bedroom and sickroom. Elizabeth Collins Cromley, in her 1991 essay "A History of American Beds and Bedrooms," interprets the evolving meaning of the bedroom as a space, not just an architectural feature, from the late nineteenth to early twentieth centuries.[19] Important in matters of physical health, the bedroom became a focus in nineteenth-century guides to sanitary households. Tuberculosis was by far the most pressing health concern by the turn of the century. Cromley notes that germ-conscious Americans looked to fresh air as the cure-all for tuberculosis and other threats to health. The sleeping porch embodied the new consumer-culture surrounding the Anti-Tuberculosis Movement. Popular magazines, such as *Country Life in America*,[20] published articles on how to attach sleeping porch additions to existing bedrooms while mail-order catalogs provided kits.

Reading the sleeping porch as space requires knowledge of the open-air treatment that motivated turn-of-the-century Americans. Looking at popular magazines of the time, Cromley notes that the attached second-floor sleeping porches in a model house contained screens for summer use and canvas shields for winter use; thus, "the

---

[18] Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life* (Cambridge, MA: Harvard University Press, 1998), 112.

[19] Elizabeth Collins Cromley, "A History of American Beds and Bedrooms," *Perspectives in Vernacular Architecture* 4 (1991): 177 – 186.

[20] C.M. D'Enville, "Sleeping Outdoors for Health: Outdoor Sleeping for the Well Man," *Country Life in America* 16 (May 1909): 43 – 46.

outdoor spaces are incorporated under the main house roof and thus do not read as porches but as part of the body of the house."[21] Arguing that the bedroom serves as a "barometer of the ambiguous role of privacy within the family,"[22] Cromley positions sleeping porches as attempts to locate the outdoor environment within the private sphere of the home. Yet, it was possible to remove a similar structure away from the house in the form of a sleeping structure.[23] The sleeping machine, so named for the sleep it induced, stood at eight feet by five feet with a shed roof and mosquito-wired sides. As Cromley asserts, "this bedroom had broken entirely free of the house and led a life of its own in the backyard."[24]

Contemporary textbooks on house planning addressed how to insert sleeping porches into the design of houses to ensure that they fit well into the architectural scheme. Of paramount concern was the need for sleeping porches to not disrupt the overall flow of interior space and ventilation. The 1923 *House and Home, A Manual and Textbook of Practical House Planning*, commented on the inclusion of a sleeping porch:

> The sleeping porch, which affords the benefits of sleeping in good, fresh air, and the comfort of a warm room to dress in, is in use in many parts of the country. Where the winters are severe, or where winds are high, sleeping porches should be enclosed with windows which may be closed on one or all sides as the weather necessitates. The sleeping porches we see do not always add to the beauty of a house, but by planning them so they do not project beyond the walls of the house, by having the openings not over large, and by making the porches themselves small, they will add character and interest to the dwelling. In planning them care must be taken that the dressing rooms with which they connect are not robbed of air and sunlight.[25]

---

[21] Cromley, 186.

[22] Ibid.

[23] This sleeping structure is historically referred by a variety of terms including sleeping shack and tent cottage.

[24] Ibid., 184.

[25] As cited in Visser, 68.

Katherine Ott, in *Fevered Lives: Tuberculosis in American Culture Since 1870*, argues that the popular construction of sleeping porches "points to a relationship to home architecture different from our own."[26] In Ott's opinion, the decision of homeowners to tack on sleeping porches represented a tangible effort to embrace a hygienic lifestyle. Without the hindrances of zoning laws and building codes, Americans could construct their own therapeutic space.[27] Queen Anne style houses of the Victorian era had embraced eclectic design, so the style was more forgiving in regards to adding on porches. As the Queen Anne style fell out of mode and prefabricated house kits became widespread, early twentieth-century construction companies accepted the need to blend sleeping porches into the overall architectural design of houses. For example, the Aladdin Company of Bay City, Michigan advertised that "any colors of paints can be furnished for outside body and trim to correspond with balance of house."[28] Similarly, the Lewis Manufacturing Company marketed a sleeping porch "built to harmonize with the design of the house."[29] A good example of a sleeping porch harmonizing with the house is illustrated in Roy L. French's 1916 *Home Care of Consumptives.*

---

[26] Katherine Ott, *Fevered Lives: Tuberculosis in American Culture Since 1870* (Cambridge, MA: Harvard University Press, 1996), 91.

[27] Ibid.

[28] The Aladdin Company, *Aladdin "Built In A Day" House Catalog, 1917* (New York: Dover Publications, Inc. 1995), 108.

[29] Lewis Manufacturing Company, *Lewis Homes, Homes of Character*, 1922.

Figure 14. "A permanent, protected porch, harmonizing with the house. Cost, about $100," Roy L. French, *Home Care of Consumptives*, 1916.

Occupying a niche space as a unique bedroom, the sleeping porch served a dual role as a sickroom. M. Adelaide Nutting, a nurse educator from John Hopkins Hospital, commented on the popularity of the model sickroom exhibit at the 1904 Tuberculosis Exposition:

> A feature which received marked attention from visitors was the model sick-room for consumptive patients. No attempt was made here to show a room with modern luxuries. Simplicity, exquisite cleanliness, convenience, and suitability were the points dwelt upon, and the necessity for having a cheerful and homelike an [sic] atmosphere as could be secured compatible with the requirements for the care of such patients and the protection of others about them. The horrors known as antiseptic furniture, which, however necessary for an operating-room, has no place in the room which is the life of a sick person, were studiously avoided, yet we are sure all necessary precautions for safety were observed.[30]

Since an estimated 90 percent of consumptives dealt with their disease at home, the sickroom was actually at the center of an elaborate system of homecare. Coinciding with

[30] Nutting, 498.

the rise of the professionally trained nurse, the sickroom of the late 1890s diverged greatly from its "pillow-laden, fabric-swathed, stuffy throne room of the pregerm 1870s."[31] Located on the house's south side if possible for maximum sun exposure and lined with windows on at least two walls, the sickroom consisted of uncovered wood flooring, painted walls rather than easily infected wallpapers, and only the basic of furnishings to mimic the hospital setting. While the sanatorium was considered one's first choice for those with the financial means, the sickroom experience revolved around a similar controlled organization and design. For example, the sickbed's arrangement in the center of the room and away from possibly contaminated wallpapers "was designed for the convenience not of the patient but of the nurse and caregivers."[32] Yet, despite the caregiver-controlled nature of the sickroom, patients taking the rest cure maintained a sense of agency: "A consumptive who could not go to a sanitarium or hospital could create his or her own facility in miniature with a room, tent, or cot and just as effectively labor to get well."[33]

For many Americans, building their own sleeping porch onto an existing home seemed a necessity. A 1917 article, "The Sleeping Porch Problem: A Modern Necessity and an Architectural Bugaboo – How a Number of Leading Architects have Conquered the Difficulty," appeared in the popular magazine *House Beautiful*. Discussing the challenges of adding sleeping porches to new designs and existing houses, Phil M. Riley noted:

---

[31] Ott, 81.
[32] Ibid., 82.
[33] Ibid., 86.

> When one builds a country or suburban home of his own, the manner of present-day living makes him demand sleeping-porches as among the essentials of health and comfort. Nor will anyone deny their desirability in summer at least, whatever his views on year-round outdoor sleeping. Thus the owner, whose house was erected five or ten years ago, eventually discusses sleeping-porches with his architect, or oftener with his carpenter, either to save expense, or because he considers the matter too insignificant for an architect to undertake.[34]

The sleeping porch problem ultimately arose as homeowners sought to tack on sleeping porches onto their houses. Incorporating a sleeping porch into the design of a house risked disrupting the architectural balance and symmetry. Riley found merit in the fact that these additions could be inconspicuous features of houses and therefore not require elaborate craftsmanship to interpret "the spirit of the sleeping porch."[35] By letting "sleeping-porches become the facile development of much-used architectural forms – conventional and therefore inconspicuous,"[36] it was possible for sleeping porches to seamlessly blend into the architectural landscape. This could be achieved by adapting common forms, such as gabled, dormers, balconies, and verandas, for sleeping porch purposes while retaining the original spirit of design features.[37] Blending sleeping porches into house designs upheld the established architectural scheme and kept the space discreet from passersby. Homeowners at the time desired sleeping porches to be inconspicuous additions to maintain a sense of privacy for those using the porch, which also harkened back to the lingering view of a sleeping porch as a sign of disease in a neighborhood.

---

[34] Phil M. Riley, "The Sleeping Porch Problem: A Modern Necessity and an Architectural Bugaboo – How a Number of Leading Architects have Conquered the Difficulty," *House Beautiful* (February 1917), 136.

[35] Ibid., 137.

[36] Ibid., 137.

[37] Ibid., 183.

The sleeping porch craze swept across the United States. Operating within a society enamored with fresh air, creative individuals developed inventions to facilitate the open-air treatment. Fresh-air enthusiasts early on complained about the cold temperatures of exposed porches. This common complaint paved the way for devices that allowed only the head to be exposed to the air. Called 'indoor bed tents' in a 1909 publication, these inventions included sticking the sleeper's head outside the window and inverting the tent's awnings into the bedroom:

> In the first design, an ordinary hospital bed, with legs adjusted 18 inches back from the head and set at a height to bring the frame directly over the window sill, was rolled over to an open window. The window's lower sash was then raised to correspond to the closure provided by a frame and awning that was pulled over the sleeper's head. An exterior awning, projecting outside the building envelope, protected the sleeper from inclement weather, and strips of felt sealed the window frame's edges to keep the bedroom's interior as climatically controlled as possible. Two aspects of this design proved problematic: however: the sleeper's vertiginous feeling, particularly within second-floor bedrooms, and the visibility of the bed tent from the exterior. As a result, the second design, in which the fresh-air tent was folded entirely within the bedroom space gained popularity. With this less conspicuous version, the side of the bed was placed next to the open window, and a heavy canvas awning was placed over the sleeper's head and tucked under the pillow. The awning frame's depth allowed greater distance (up to three feet) from the exterior envelope, if wind and extreme cold proved uncomfortable.[38]

Patents for sleeping porches detailed a way for patients to immerse their entire bodies in the fresh-air cure. Through public health pamphlets, model designs for sleeping porches were dispersed for personal use. In 1909, the National Association for the Study and Prevention of Tuberculosis published *Some Plans and Suggestions for Housing Consumptives*. In addition to plans for sanatoria and other housing types, the publication included an entire section on sleeping porches for home treatment. Aimed at maximizing

[38] Hailey, 32 – 33.

fresh air exposure and protecting families from tubercular patients, the sleeping porches illustrated in the guide could all be constructed easily and cheaply by a skilled carpenter.

Suitable sleeping porches could be constructed to meet the tastes and financial means of the owner. An ideal location on the second or third floor kept patients from the dampness of the ground and benefitted from the perceived higher quality of air. Adjustable awnings, lattice work, and wire screens could be added to the basic framework. While the simplest porches cost as little as $6 to $10, it was noted that "good verandas can be erected by carpenters for from $12.00 to $25.00, and protected, well-finished structures can be built for from $25.00 to $100.00."[39] As additions to houses, second-floor sleeping porches were often built onto existing first-floor verandas or porches to lower the cost of construction, provide more privacy, and fit into the existing architectural scheme. To achieve this, it was recommended that "a board floor should be laid over the roofing material, which is usually tin, on 2 by 4 timbers placed on edge, which will give a 4 inch-space below the flooring. Where there is a perceptible pitch to the roof the floor can be raised at the outer edge until it is level."[40] While a canvas awning could provide coverage, a porch with a well-built roof was suggested for efficient use as both an open-air sleeping room and potential playroom. In another design, the porch measured six feet by ten feet with pine sheathed walls, double-laid flooring, natural wood interior finishing, and outside painting costing a total of $104.00.

---

[39] The National Association for the Study and Prevention of Tuberculosis, *Some Plans and Suggestions for Housing Consumptives,* 1909, 84.

[40] Ibid., 84.

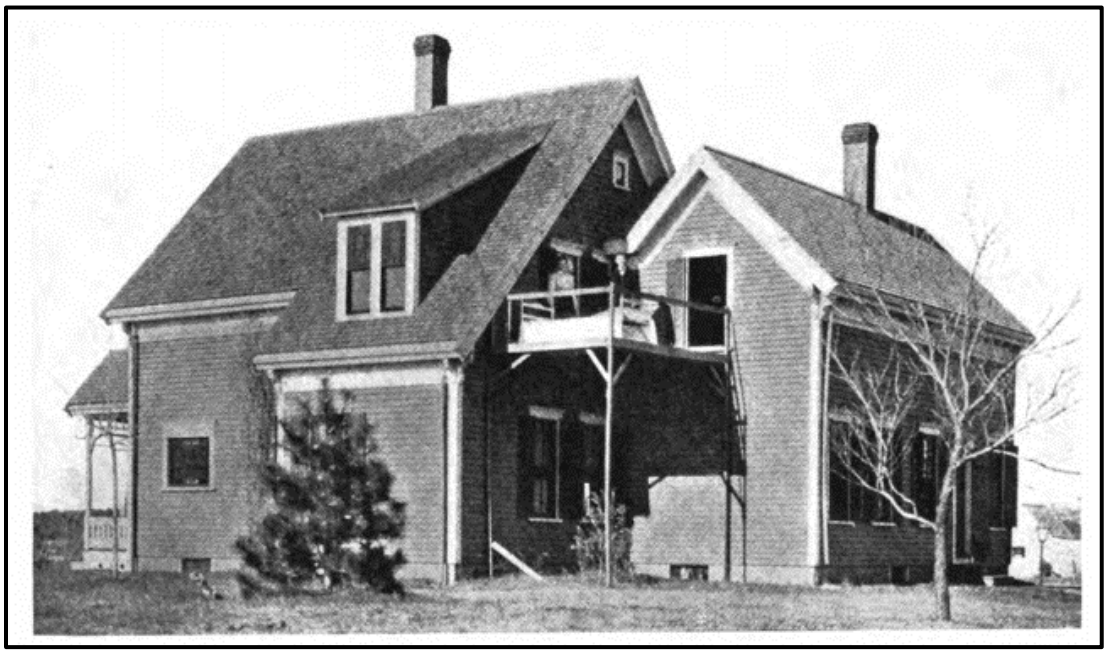


Figure 15. “No. 95 – Inexpensive Temporary Porch for Home Treatment, Without Roof Protection. Estimated Cost, $15,” The National Association for the Study and Prevention of Tuberculosis, *Some Plans and Suggestions for Housing Consumptives*, 1909.

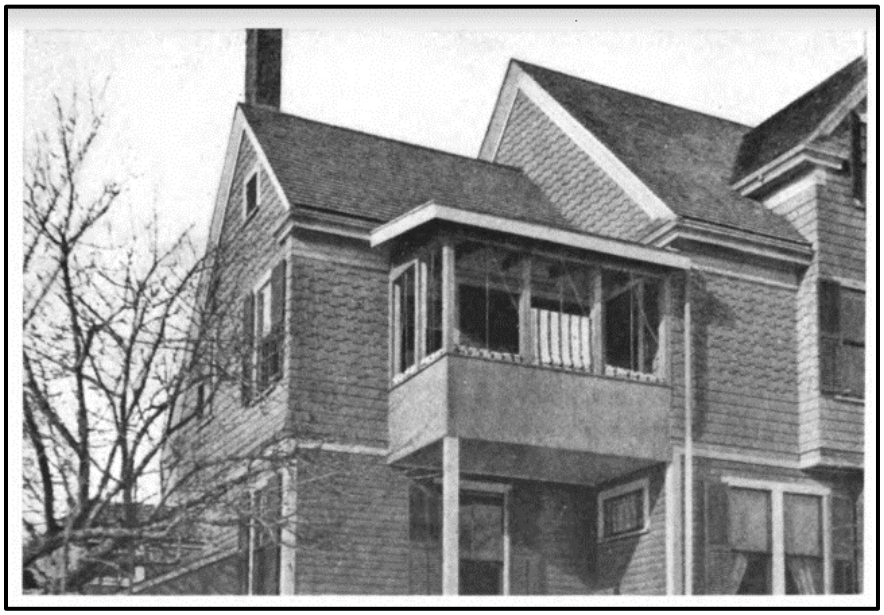


Figure 16. "No. 92 – Well Built Porch with Roof and Canvas Sides for Home Treatment. Cost, $100,” The National Association for the Study and Prevention of Tuberculosis, *Some Plans and Suggestions for Housing Consumptives*, 1909.

Sleeping porches, as additions to houses, inevitably reflected local vernacular building styles. In the 1917 edition of *Sleeping and Sitting in the Open Air*, the ease of constructing sleeping porches was noted:

> There is hardly a detached house in the small towns or cities of this country which has not some sort of porch that can be adapted to outdoor sleeping. Oftentimes only a curtain is necessary, or at little more expense, a porch screen or some sort of Venetian blinds or even canvas awning might be needed. But where privacy and comfort cannot be secured on an ordinary porch and where the various essentials which have been mentioned before are not obtainable, it may be desirable to build a sleeping porch. Almost any upstairs bed room window can be used as an entrance to a sleeping porch which can be attached to the dwelling house and taken down whenever it may be necessary. The expense of building such porches can be kept to a very low figure if it is so desired.[41]

By the mid-1910s, a host of manufacturers were producing outdoor sleeping devices. A monthly magazine, *The Journal of the Outdoor Life,* provided fresh-air seekers with information about these firms. In addition to manufacturers of sleeping porches, sleeping balconies, and tents, firms specialized in shades, screens, windows, ventilators, portable houses, tents, bungalows, sitting and sleeping-out garments, and other supplies. A business in Des Moines, Iowa, called the Des Moines Sleeping Porch Company exclusively produced sleeping porch construction materials.[42]

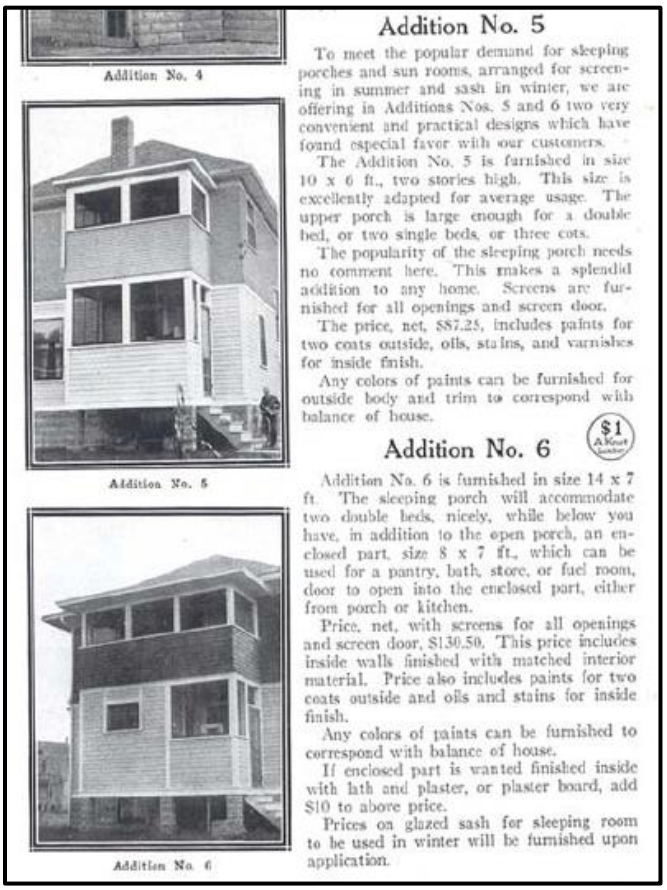
Even companies devoted specifically to building houses found a way to capitalize on the market for sleeping porches. In the early 1900s, the Aladdin Company of Bay City, Michigan developed and sold plans, specifications, and materials for houses. Known as "Built in a Day" houses, Aladdin Readi-Cut Houses were built using the factory-based Aladdin system of construction: "*Modern power-driven machines can do*

---

[41] National Association for the Study and Prevention of Tuberculosis, *Sleeping and Sitting in the Open Air* (March 1917): 16.

[42] Ibid., 22 – 24.

BETTER work at a lower cost than hand labor. Then every bit of work that CAN by done by machines SHOULD be so done."[43] Starting in 1916, the *Aladdin "Built in a Day" House Catalog* advertised two types of sleeping porch additions: "To meet the popular demand for sleeping porches and sun rooms, arranged for screening in summer and sash in winter, we are offering in Additions Nos. 5 and 6 two very convenient and practical designs which have found especial favor with our customers."[44]



Addition No. 4

Addition No. 5

Addition No. 6

Addition No. 5

To meet the popular demand for sleeping porches and sun rooms, arranged for screening in summer and sash in winter, we are offering in Additions Nos. 5 and 6 two very convenient and practical designs which have found especial favor with our customers.

The Addition No. 5 is furnished in size 10 x 6 ft., two stories high. This size is excellently adapted for average usage. The upper porch is large enough for a double bed, or two single beds, or three cots.

The popularity of the sleeping porch needs no comment here. This makes a splendid addition to any home. Screens are furnished for all openings and screen door.

The price, net, $87.25, includes paints for two coats outside, oils, stains, and varnishes for inside finish.

Any colors of paints can be furnished for outside body and trim to correspond with balance of house.

$1 A Year

Addition No. 6

Addition No. 6 is furnished in size 14 x 7 ft. The sleeping porch will accommodate two double beds, nicely, while below you have, in addition to the open porch, an enclosed part, size 8 x 7 ft., which can be used for a pantry, bath, store, or fuel room, door to open into the enclosed part, either from porch or kitchen.

Price, net, with screens for all openings and screen door, $130.50. This price includes inside walls finished with matched interior material. Price also includes paints for two coats outside and oils and stains for inside finish.

Any colors of paints can be furnished to correspond with balance of house.

If enclosed part is wanted finished inside with lath and plaster, or plaster board, add $10 to above price.

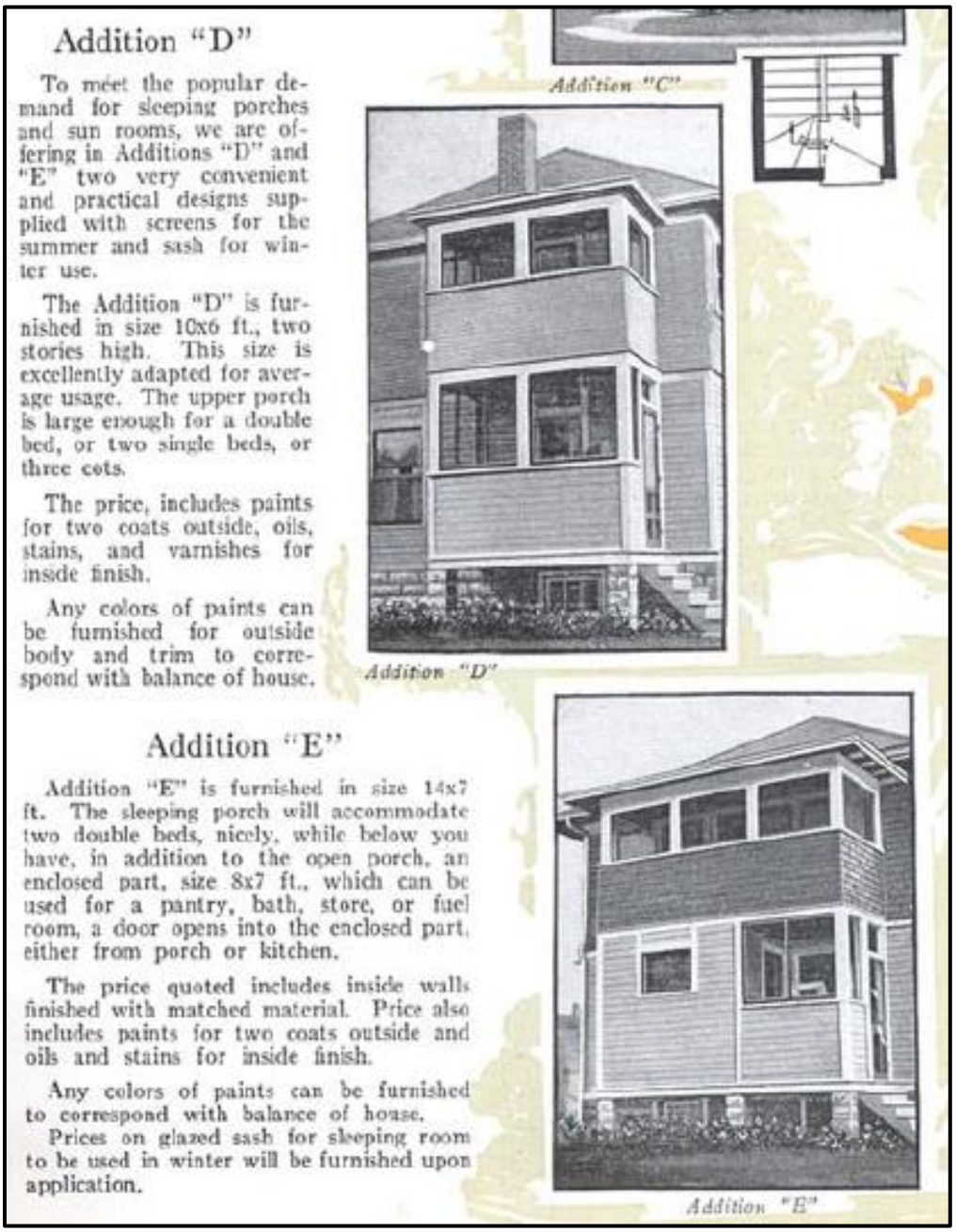
Prices on glazed sash for sleeping room to be used in winter will be furnished upon application.

Figure 17. Addition Nos. 5 & 6, *Aladdin House Catalog,* 1916.

[43] The Aladdin Company, *Aladdin "Built In A Day" House Catalog, 1917*, 3.
[44] The Aladdin Company, *Aladdin House Catalog,* 1916, 94.

Addition No. 5, a two-story porch measuring ten feet by six feet, featured an upper porch that could accommodate a double bed or up to three cots. For $87.25, the addition included window screens, door screens, two coats of paint, oils, stains, and varnishes. A larger option, Addition No. 6, boasted a fourteen feet by seven feet sleeping porch on the second floor with an open porch and eight feet by seven feet enclosed space on the first floor. Costing $130.50, this addition could be converted for winter use through the purchase of glazed sashes. Both additions appeared in the *Aladdin House Catalog* from 1916 to 1919 with the price of Addition No. 5 increasing from $100 in 1917 to $125 in 1919 and the price of Addition No. 6 increasing from $149.50 in 1917 to $187 in 1919.[45] The additions, renamed D and E, appeared for the final time in the *Aladdin House Catalog* in 1922 when they were exclusively marketed as "designed and sold for use on Aladdin Houses only."[46]

[45] The Aladdin Company, *Aladdin House Catalog,* 1916 – 1919.
[46] The Aladdin Company, *Aladdin House Catalog*, 1922.



Addition "D"

To meet the popular demand for sleeping porches and sun rooms, we are offering in Additions "D" and "E" two very convenient and practical designs supplied with screens for the summer and sash for winter use.

The Addition "D" is furnished in size 10x6 ft., two stories high. This size is excellently adapted for average usage. The upper porch is large enough for a double bed, or two single beds, or three cots.

The price, includes paints for two coats outside, oils, stains, and varnishes for inside finish.

Any colors of paints can be furnished for outside body and trim to correspond with balance of house.

Addition "C"

Addition "D"

Addition "E"

Addition "E" is furnished in size 14x7 ft. The sleeping porch will accommodate two double beds, nicely, while below you have, in addition to the open porch, an enclosed part, size 8x7 ft., which can be used for a pantry, bath, store, or fuel room, a door opens into the enclosed part, either from porch or kitchen.

The price quoted includes inside walls finished with matched material. Price also includes paints for two coats outside and oils and stains for inside finish.

Any colors of paints can be furnished to correspond with balance of house.

Prices on glazed sash for sleeping room to be used in winter will be furnished upon application.

Addition "E"

Figure 18. Additions D & E, *Aladdin House Catalog*, 1922.

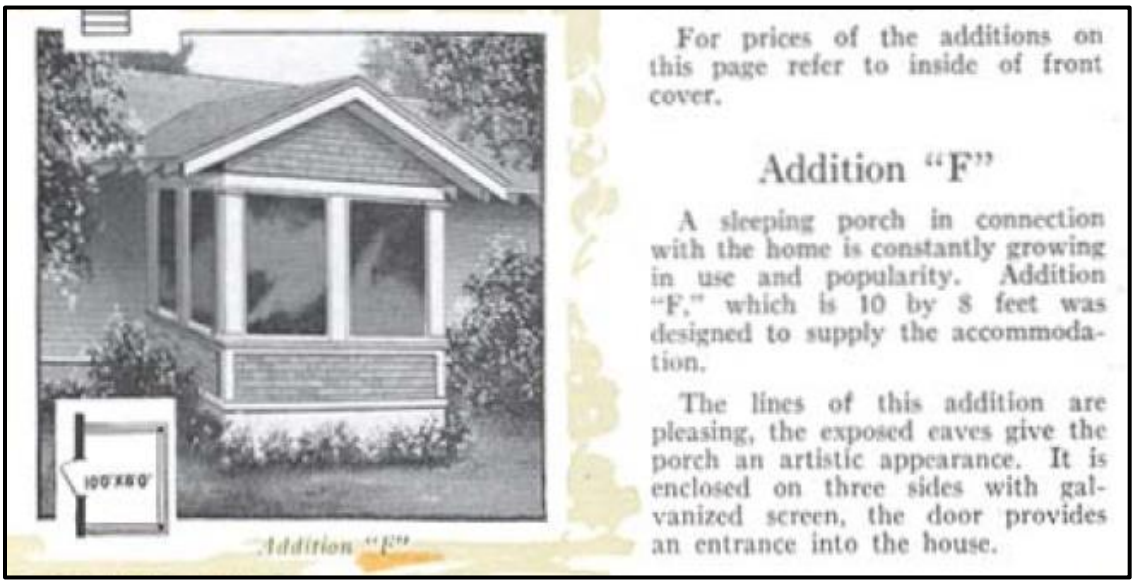


Figure 19. Addition F, *Aladdin House Catalog*, 1922.

Signifying the transition of sleeping porches from attachments to a part of the house, Addition F was promoted in the 1922 *Aladdin House Catalog*. This style of sleeping porch departed from earlier variations that were attached as second-floor additions above first-floor side porches and/or pantry areas. Measuring ten feet by eight feet, Addition F was a one-story structure mean to fill the growing need for a connected porch to the main house. As the 1922 *Aladdin House Catalog* detailed, "The lines of this addition are pleasing, the exposed eaves give the porch an artistic appearance. It is enclosed on three sides with galvanized screen, the door provides an entrance into the house."[47] Incorporating a sleeping porch into the physical space of the main house, as demonstrated in Addition F, was addressed in William Phillips Comstock's *Bungalows, Camps, and Mountain Houses*. This house design book noted,

[47] The Aladdin Company, *Aladdin House Catalog,* 1922, 116.

"It is often desirable to provide a permanent sleeping porch in connection with one or more bedrooms, for sleeping in the open air is both attractive and beneficial. A permanent sleeping porch, to be convenient, should have an entrance from a bedroom, and when possible from a hall; also proper exposure and protection from varying weather conditions."[48]

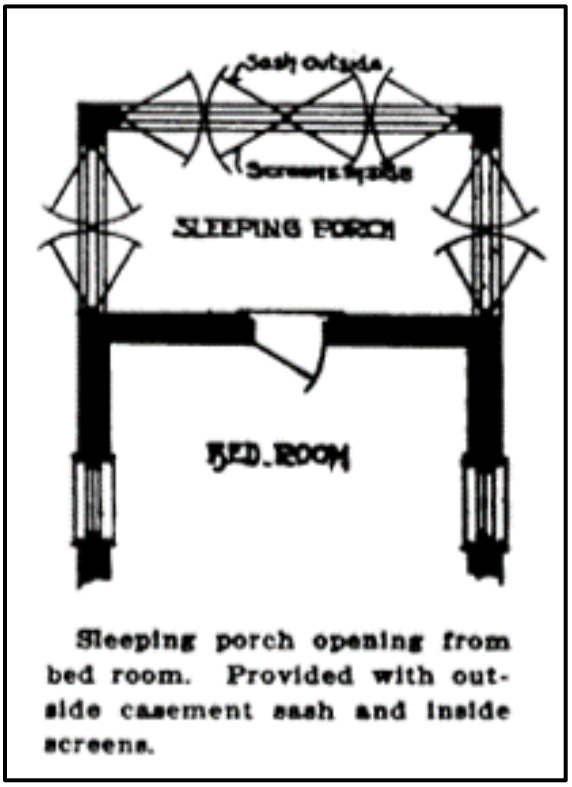


Figure 20. Sleeping Porch Opening from Bedroom,
William Phillips Comstock, *Bungalows, Camps, and Mountain Houses*, 1915.

The Lewis Manufacturing Company, also of Bay City, Michigan, sold its own individual sleeping porch kits in the 1922 catalog *Lewis Homes, Homes of Character.* Designed specifically for Lewis Homes, these sleeping porch additions came in two types similar in design to that offered by the Aladdin Company. Described as "a popular

[48] William Phillips Comstock, *Bungalows, Camps and Mountain Houses*, 1915, 18.

sleeping porch, pantry and back porch combined," Addition No.102 featured an eleven feet by six and half feet sleeping porch available also in a nine feet by five and a half feet size. The smaller size of this addition cost $195 while the larger one sold for $218. Window sashes and screens for the sleeping porch kit were sold separately, ranging between $14.50 to $15.50 for the sashes and $45 to $48 for the screens. The Lewis Manufacturing Company also advertised a ten feet by six feet sleeping porch addition large enough to accommodate a double bed or two single beds. With an initial purchase price of $86, Addition No. 103 could be outfitted with window sashes for $27 and screens for $13.[49]

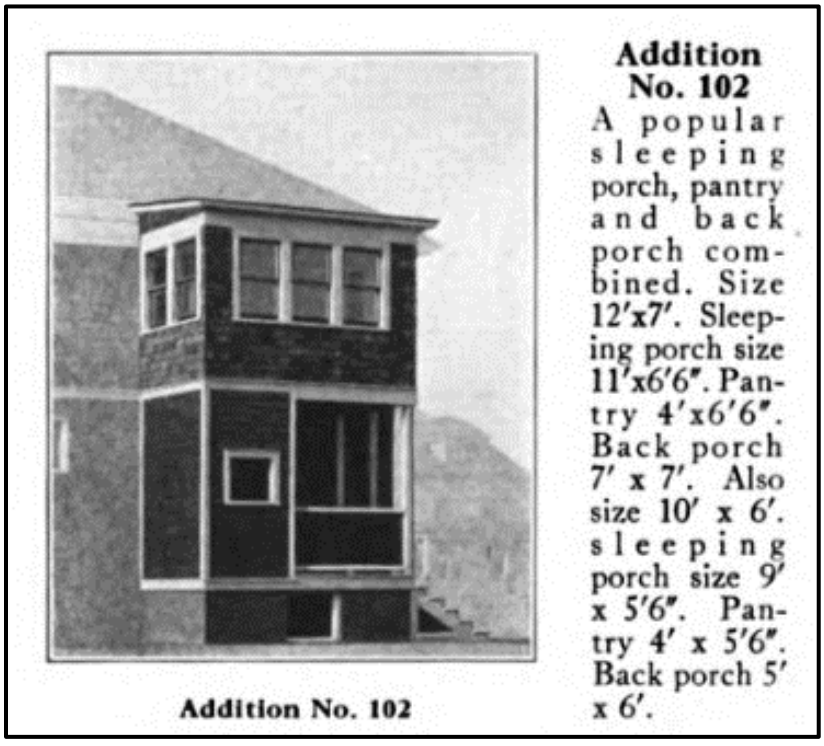


Figure 21. Addition No. 102, *Lewis Homes, Homes of Character*, 1922.

[49] Lewis Manufacturing Company, *Lewis Homes, Homes of Character*, 1922.

Figure 22. Addition No. 103, *Lewis Homes, Homes of Character,* 1922.

The popularity of sleeping porches reached such a level that mail-order catalogs advertised houses with built-in sleeping porches. These houses included the Ivanhoe and the Preston models from Sears, Roebuck, and Company. The Ivanhoe first appeared in the 1912 edition of the company's catalog. Featured through 1918, the Ivanhoe was noted to be "up to date, attractive and well arranged for good ventilation and convenience."[50] This design embodied the classic second-floor sleeping porch anchored above a first-floor veranda. The Preston, a Dutch colonial house, appeared in the 1918 and 1921

[50] Katherine Cole Stevenson and H. Ward Jandl, *Houses By Mail: A Guide to Houses from Sears, Roebuck and Company* (Washington, DC: The Preservation Press, 1986), 170.

editions of the Sears, Roebuck and Company catalog. The seven-room, one-bath house contained a second-floor sleeping porch located above the kitchen.[51] These popular models signified the awareness of housebuilders to the widespread demand for sleeping porches.

The construction boom of sleeping porches heralded in a new consumer culture for sleeping outdoors. While the climate cure had required journeying away from home to remote sanatoria, the new fresh-air cure meant Americans could take the open-air treatment in the comfort of their own homes. Galvanized by the idea that a healthy home needed sunlight and fresh air, Americans embraced verandas and sleeping porches. Prefabricated sleeping porch kits abounded during this period as Americans opted to create their own personal health retreats. Choosing to build a sleeping porch represented just the first stage of bringing the outdoors into the household. In order for a sleeping porch to serve its intended purpose, it needed to be furnished to provide comfort and meet the sanitary requirements of sleepers. Thus, the second stage of taking the open-air cure required filling a newly constructed sleeping porch with health-oriented material goods.

The National Association for the Study and Prevention of Tuberculosis provided consumptives a list of items needed to outfit a space for home treatment. In the organization's 1917 educational pamphlet, *Sleeping and Sitting in the Open Air*, an entire section outlined the "Things Needed for Sitting and Sleeping Out While Taking the Cure for Tuberculosis at Home." First of course, a sleeping porch or private room with attached sleeping porch needed to be installed. Next, the space had to be furnished with a

[51] Ibid., 249.

bed, a reclining chair, sufficient bed-clothing, blankets, and a table for medicines, books, and other amusement materials.[52]

A large market for sleeping porch goods emerged as Americans looked to furnish their new spaces. Manufacturers such as Dr. Denton Sleeping Garment Mills of Toledo, Ohio produced an array of sitting and sleeping-out garments and supplies.[53] The Aeroshade Company, based out of Waukesha, Wisconsin, developed a line of sleeping porch curtains. Intended for both improved ventilation and privacy, the curtains were constructed of basswood splints woven with cotton twine.[54] While curtains were a nice addition, a reclining chair and bed transformed an unadorned space into a sleeping porch. Thus, the cure chair, a reclining chair identified with the sanatorium experience, found its way into American homes by the mid-1910s.[55]

A. Morgan MacWhinnie, a physician in Seattle, explained the importance of beds with casters in sleeping porches to the medical profession in the April 18, 1914 edition of the *New York Medical Journal*.[56] Although MacWhinnie commended the practice of sleeping in the open air, he voiced opposition to the current conditions of porches. After investigating 100 sleeping porches in Seattle, MacWhinnie found:

> In 96 cases the sides of the sleeping balcony were partially protected from the wind and rain by a tarpaulin or some other material. Two had no protection whatever, and one was inclosed [sic] with glass windows which could be thrown

---

[52] National Association for the Study and Prevention of Tuberculosis, *Sleeping and Sitting in the Open Air* , 9 -10.

[53] Ibid., 24.

[54] Visser, 68 -69.

[55] Margaret Campbell, "From Cure Chair to 'Chaise Lounge': Medical Treatment and the Form of the Modern Recliner," *Journal of Design History* 12, no. 4 (1999): 327 – 343.

[56] A. Morgan MacWhinnie, "Cold Baths and Sleeping Porches," *New York Medical Journal* (April 18, 1914): 139 – 141.

> open horizontally at night on retiring. This was the only one that could be closed in the daytime, and had hot-water radiators connecting with the boiler in the cellar that kept the bed and its coverings as warm all day as the rest of the house. In 98 cases the bed, mattress, linen, and covers were exposed all day to the dampness of the atmosphere.[57]

Given these inferior conditions, MacWhinnie recommended that sleeping porches be protected from the elements. A simple step could ensure this: creating large doorways that allowed for beds to be kept in heated rooms and wheeled out to the porch at night.[58] Since many sleeping porches adjoined bedrooms, carpenters crafted entranceways by enlarging window openings, cutting down to the floor level, and widening the entrance enough to fit a bed on casters.[59] In 1910, a committee appointed by the Saranac Lake Society for the Control of Tuberculosis issued a set of recommendation for improved house construction. Per its recommendations, doors connecting between sleeping porches and rooms should be "at least 3 feet 8 inches in width"; furthermore, "the room and porch floor should be made flush with a hardwood door saddle, slightly rounded on top, cut in between room and porch floors."[60]

The presence of casters on furniture in the sleeping porch enabled cleanliness, permitted furniture to be moved into the main house, and therefore kept dreaded dampness from contaminating the space. Caster furniture also presented an opportunity for health seekers to arrange the sleeping porch according to sanitary advice pamphlets. As set forth by the National Association for the Study and Prevention of Tuberculosis,

---

[57] Ibid., 140.

[58] Ibid., 141.

[59] Roy L. French, *Home Care of Consumptives* (New York: The Knickerbocker Press, 1916), 81.

[60] "Improved House Construction," *Journal of the Outdoor Life* 7, no. 2 (January 1910), 396.

the optimal location for the bed situated the bed in a central position with the sleeper's head facing away from the windows.[61]

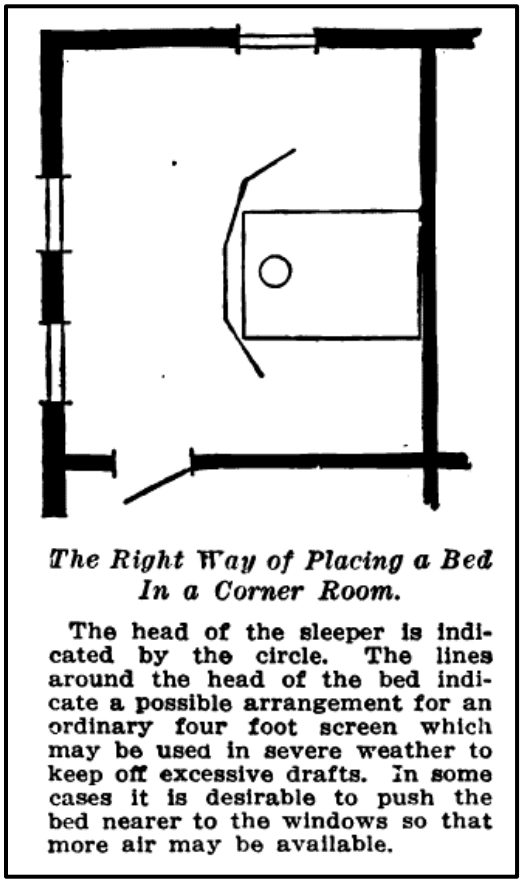


Figure 23. "The Right Way of Placing a Bed in a Corner Room," National Association for the Study and Prevention of Tuberculosis, *Sleeping and Sitting in the Open Air*, 1917.

A viable alternative to caster furniture in the sleeping porch arrived in the form of the door bed. In the 1920s, the door bed, commonly known today as a Murphy bed, offered homeowners a way of concealing furniture in smaller spaces and providing

[61] National Association for the Study and Prevention of Tuberculosis, *Sleeping and Sitting in the Open Air* (March 1917): 21.

additional sleeping quarters. Considered sanitary and easily cleaned, door beds raised vertically into closets when not in use. This lifting of the bed enabled owners to clean away dust from underneath the frame. Efficient cleaning and mobility made door beds particularly well-suited for use in sleeping porches and sunrooms.[62]

Modern views of health at the time shaped the interior decoration and arrangement of sleeping porches. Gone were the days of stuffy Victorian draperies and wallpaper that collected dust and germs. A new era of cleanliness and sanitation, instead, influenced the material culture of early twentieth century sleeping porches. Hard or painted wood was recommended over carpeting with the possible exception of small, washable rugs. Sleeping porch décor tended to be a manner of practicality and convenience. Window curtains and shades were permissible if they could be regularly washed. For the most part, only bare necessities adorned the space. Ornamentation, such as bric-a-brac, bookcases, and the like, was discouraged to minimize dust and housekeeping tasks. Roy L. French, in his 1916 *Home Care of Consumptives,* does mention that "a few cheerful pictures may be allowed" and possibly "a few treasured books may be kept."[63] This concession acknowledged that one's surroundings (not just outside, but inside the space) and leisurely activities[64] played a role in the well-being and recovery of patients.

---

[62] Henry Atterbury Smith, *500 Small Houses of the Twenties* (New York: Dover Publications, Inc., 1990), 311.

[63] Roy L. French, *Home Care of Consumptives* (New York: The Knickerbocker Press, 1916), 44.

[64] For a more detailed discussion of reading's role in tuberculosis treatment, see Jennifer J. Connor, "Prescribed Reading: Patients' Libraries in North American Tuberculosis Institutions," *Libraries and Culture* 27, no. 3 (Summer 1992): 252 – 278.

Inhabiting a dual existence as a bedroom and a sickroom, the sleeping porch stood both a part of and separate from the main house. These porches were likely to just be tacked on to boardinghouses in sanatorium communities where the stigma of disease was already present and there was not a need to hide these spaces from public view. Most American homeowners, however, attempted to blend the porch into the existing architectural scheme. The physical appearance of sleeping porches may have prevented a seamless blending when added on to homes; however, the adaptation of existing architectural elements offered a makeshift solution.

Originally viewed as a contaminated consumptive space, the sleeping porch lost enough of its cure porch association to become an accepted element of mainstream American architecture. The fresh-air, rest-cure prescribed to consumptives evolved into a recommendation for all seeking a healthy lifestyle. Historian Katherine Ott points to around the year 1910 as the time sleeping outdoors became entrenched in middle-class culture largely through the marketing and mass production of fresh-air consumer goods.[65] By the mid-1910s, mail-order sleeping porch additions and eventually entire house kits with attached sleeping porches were available for public consumption. While a patina of tuberculosis remained, the sleeping porch emerged as an architectural embodiment of the open-air treatment popularized in the early twentieth century.

The popularity of the sleeping porch faded with the advent of air conditioning, decline of the open-air treatment, and the effective drug treatment of tuberculosis. Yet the sleeping porches still dotting the American landscape hint at a specific period in American culture where climatic views, medical knowledge, and American architecture

[65] Katherine Ott, 91.

converged. Andrew H. Palmer, in a 1917 edition of *The Scientific Monthly*, summarized this phenomenon in his "Climatic Influences on American Architecture":

> Sleeping-porches are a comparatively recent invention. Their increasing use bears witness to the fact that we are wisely paying more and more attention to hygiene. For climatic reasons the sleeping-porch can be used with comfort during the summer-time in the northern portion of the United States, but elsewhere it can be used to advantage throughout the year.[66]

[66] Andrew H. Palmer, "Climatic Influences on American Architecture," *The Scientific Monthly* 5, no. 3 (September 1917): 270 – 283.

PART II

Interpreting the Forgotten Plague: Tourism, Preservation, & Public History Practice

Since the mid-twentieth century, tuberculosis has largely faded from collective memory and become a forgotten plague in the United States. Yet, with recent resurgence in drug-resistance tuberculosis, the disease is once again a subject of concern and ripe for historical analysis. In the early twentieth century, tuberculosis evoked widespread fear of contagion (i.e. phthisiophobia) and galvanized Progressive reformers to form the Anti-Tuberculosis Movement. The erection of TB boardinghouses and sanatoria offered a potential cure for those with the financial means to travel to resort areas. However, tuberculosis was not just a disease observed from afar. Katherine Ott approximates that ninety percent of consumptives opted for at-home treatment due to financial limitations, family obligations, and the stigma attached to the disease.[1] The sanatorium is by far the architectural type most closely associated with TB, but the domestic household predominantly served as the setting for tuberculosis prevention and treatment.

Tuberculosis history offers a window into how Americans operated within an era of public health reform. The turn-of-the-century crusade against tuberculosis combined elements from the antiquated miasmatic theory with the germ theory, creating what Naomi Rogers referred to as a world of dirt and disease.[2] Writing on the 1910s public health campaigns against polio, Rogers noted an overall "concern with place, not just as

---

[1] Katherine Ott, *Fevered Lives: Tuberculosis in American Culture Since 1870* (Cambridge, MA: Harvard University Press, 1996).

[2] Naomi Rogers, *Dirt and Disease: Polio before FDR* (New Brunswick, NJ: Rutgers University Press, 1992).

the source of infection but also as the means of protection from disease. Disease and victim were identified by place; a sick child's home and neighborhood were thus used to designate their probable safety from infection."[3] The Anti-Tuberculosis Movement mirrored the polio-oriented public health campaign in regards to the role that place played. Lower-class Americans, particularly the immigrant poor, were targeted as the source of tuberculosis. While reformers prioritized cleaning up slums, their motives were not strictly altruistic as there was genuine concern that the sanitation of middle-class and upper-class neighborhoods could be compromised. Beyond the aesthetic issues of dirt and foul smells, many employers worried that domestic servants carried illness into their households. Thus, domestic servants (particularly maids) found themselves in a paradigm of sanitation in which they were simultaneously entrusted with ensuring cleanliness and also scapegoated as sources of infection. A marketplace of anti-tuberculosis goods enabled homeowners to safeguard their homes. New cleaning technology ultimately spelled the end for middle-class household servants while it also raised standards for sanitation.[4]

A growing trend to embrace multi-faceted aspects of history has transformed the traditional elite, family-centric narrative at historic house museums. For example, Jennifer Pustz's *Voices from the Back Stairs: Interpreting Servants' Lives at Historic House Museums* (2010), reveals the ways in which interpreting servant life can enrich a museum. Domestic servant spaces are often no longer standing, but the household can be interpreted from the servant perspective and how they interacted within the domestic

[3] Ibid., 70.

[4] Jennifer Pustz, *Voices from the Back Stairs: Interpreting Servants' Lives at Historic House Museums* (DeKalb, IL: Northern Illinois University Press, 2010).

sphere.[5] The historic discourse regarding domestic servants and the spread of germs sets up opportunities to discuss labor, health, disease, cleanliness, sanitation, and consumerism. Buttressed by contemporary mail-order catalogs, anti-TB educational pamphlets, and other ephemera, material culture reveals deeper meanings about health and disease. In particular, open-air additions left a physical imprint on domestic architecture that convey a great deal about how Americans constructed and navigated spatial relationships within the home.

In Part II, I explore the current state of tuberculosis history interpretation and opportunities for improvement. Three case studies in Chapter 5 "Infected House: A Series of Tuberculosis Site Case Studies" illustrate the diverse sites associated with tuberculosis. Architectural spaces, whether a boardinghouse's sleeping porch, a tent cottage, or segregated sleeping pavilions, attest to a legacy of tuberculosis. The story of tuberculosis is not a singular narrative of progress and triumph; rather, it is a patchwork of interwoven stories. Constructed therapeutic spaces provided users with a two-fold sense of security that disease could be contained and that health could be obtained. Yet, these spaces and their furnishings also reinforced ideas about individual responsibility, environment, disease, health, race, and class. Preservationists charged with saving these places and museum staff working at these sites must grapple with these complicated stories. In the sixth chapter, "Interpreting Tuberculosis at Historic House Museum," I wrap up my discussion of interpretation by focusing on how the physical environment and interior furnishings can illuminate the consumptive past. This chapter concludes with practical applications of solaria at historic house museums.

[5] Ibid., 130.

CHAPTER FIVE

Infected History:
A Series of Tuberculosis Site Case Studies

Tuberculosis permeated nearly every aspect of American society in the late nineteenth and early twentieth centuries. It shaped hygienic habits, spurred public health policies, and inspired open-air trends in architecture that continued well into the 1900s. Given that approximately 90 percent of consumptives remained at home, tuberculosis directly informed the ways Americans behaved and interacted within domestic spaces. Despite the role tuberculosis played in the past, it is largely absent from the narratives presented at early twentieth-century historic sites. Tuberculosis history offers a rich opportunity to give voice to a diverse community of patients, servants, nurses, boardinghouse proprietresses, medical physicians, city officials, and Progressive reformers.

In this chapter, I examine three case studies of TB-related historic sites to highlight current interpretation and the opportunities to improve and/or build upon it. These case studies focus on three different places woven together by a common thread of tuberculosis. Asheville's Thomas Wolfe Memorial, a designated state historic site, represents the non-TB boardinghouses that operated in turn-of-the-century North Carolina. It also demonstrates the problems with isolating TB patients from the larger community when dealing with a disease not always visible in a city built on health tourism. The sleeping porches constructed at the Thomas Wolfe offer an opportunity to discuss the open-air treatment popularized in resort towns as a well as the mail-order

consumerism that brought about the construction of sleeping porches in "no-sick" boardinghouses. Another case study looks at the Highlands Tent Cottage Exhibit, a restored structure from the Highlands Tuberculosis Sanitarium in Highlands, North Carolina. The local historical society successfully applied for grants to carry out this project and the tent cottage is open to the public. The final case study focuses on Kentucky's Julius Marks Sanatorium, a semi-intact complex with a whites-only sleeping pavilion and a blacks-only sleeping pavilion, to shed light on how TB architecture reflected and reinforced racial segregation. Taken together, these three historic sites offer an interpretive window into the intersection of disease and architecture.

Case Study #1: The Thomas Wolfe Memorial, Asheville, NC

Asheville owes much of its turn-of-the-century growth to the health tourism that attracted first consumptives and then general health-seekers to the area. Dozens of boardinghouses dotted the Asheville landscape and provided home-like accommodations to middle-class tourists. In the mid-1910s, stricter health regulations divided boardinghouses into two broad categories: TB catering and "no sick" establishments. The Old Kentucky Home, the famous boardinghouse setting for Thomas Wolfe's *Looking Homeward, Angel*, fell into the latter category.

Like many other boardinghouses, the Old Kentucky Home started out as a private residence. Constructed in 1883 by banker Edwin Sluder, the house first served as a wedding present for Sluder's daughter. Over the next few years, a string of owners lived in the modest-sized house located at 48 Spruce Street. On July 13, 1889, Mrs. Alice Reynolds purchased the house for $7,500 and opened it up as a boardinghouse known as

"The Reynolds." Under the operation of Reynolds, the boardinghouse underwent an expansion to install electricity and indoor running water as well as increase the square footage. The Meyers, a couple hailing from Kentucky, purchased the boardinghouse after the July 1900 death of Alice Reynolds. The boardinghouse, rechristened as the Old Kentucky Home, remained in the hands of the Meyers for six years. In August 1906, Julia Wolfe bought the Old Kentucky Home with the stipulation that the name remain intact. At the time of the purchase, the boardinghouse had nineteen boarders paying a weekly rate of eight dollars.[1] The house, referred to as Dixieland in Thomas Wolfe's novel *Look Homeward, Angel*, "was a big cheaply constructed frame house of eighteen or twenty drafty high-ceilinged rooms: it had a rambling, unplanned, gabular appearance, and was painted a dirty yellow."[2]

Julia Wolfe undertook a large expansion at the Old Kentucky Home in 1916. This expansion extended the downstairs dining room and added several bathrooms and bedrooms upstairs. Wolfe also attached a sunroom on the first floor and three sleeping porches upstairs. Rather than contract an architect to draw up formal blueprints, Julia Wolfe developed her own designs and hired local carpenters to carry out the 1916 renovations. As described by Thomas Wolfe, "The construction was after her own plans, and of the cheapest material: it never lost the smell of raw wood, cheap varnish, and flimsy rough plastering, but she had added eight or ten rooms at a cost of only $3,000."[3]

---

[1] "The House 1880s – 1950s," *Thomas Wolfe Memorial*, http://wolfememorial.com/history/the-house-1880s-1950s/.

[2] Thomas Wolfe, *Look Homeward, Angel: A Story of the Buried Life* (New York: Random House, 1929), 104.

[3] Ibid., 161

Sanborn Fire Insurance maps document the history of 48 Spruce Street as a boardinghouse. Listed first as The Reynolds in Asheville's 1896 Sanborn Fire Insurance map, the property had at this point already undergone renovations that transformed the modest house into a more substantial boardinghouse. Open porches wrapped around the front and back of the house, providing an outdoor social space for boarders. The footprint of the house remained unchanged in the February 1901 and January 1907 maps. The moniker "Old Kentucky Home" made its first appearance in the January 1913 map.

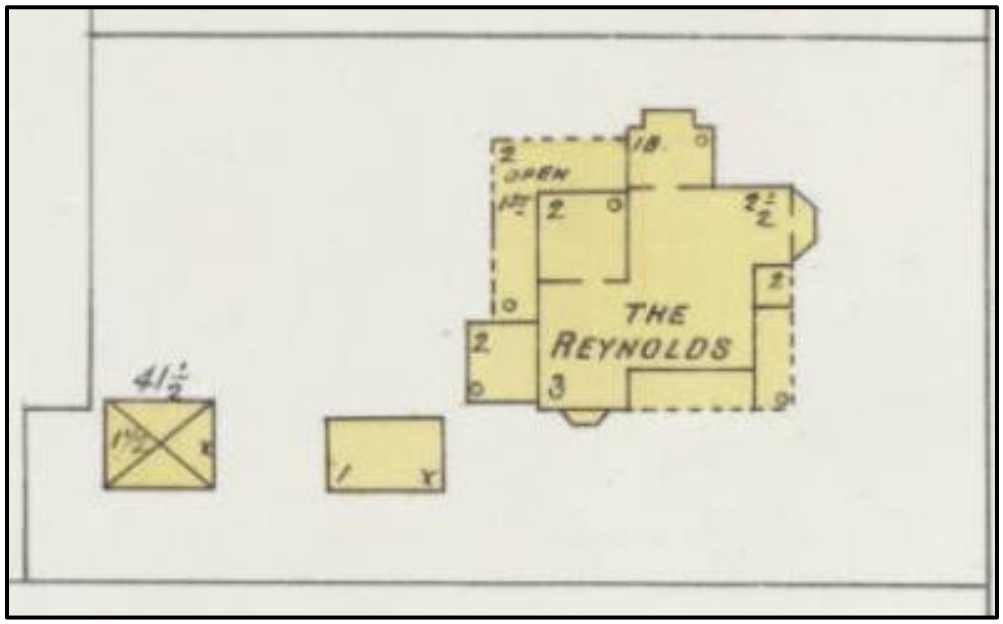


Figure 24. The Reynolds, Sanborn Fire Insurance Map, Asheville, NC, 1896.

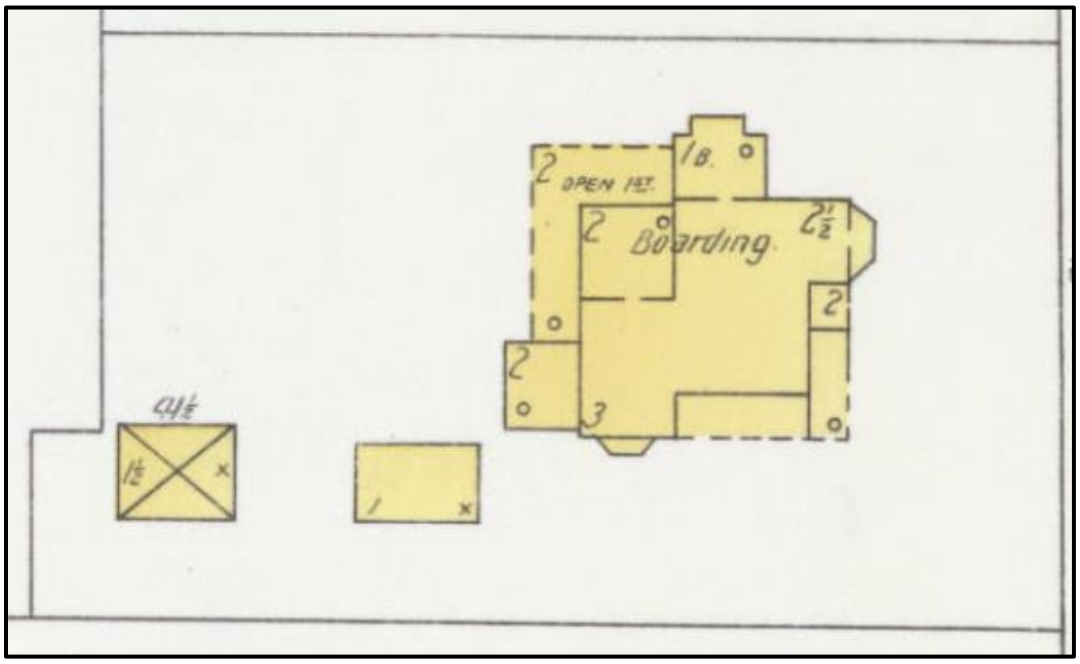


Figure 25. Boardinghouse, Sanborn Fire Insurance Map, Asheville, NC, February 1901.

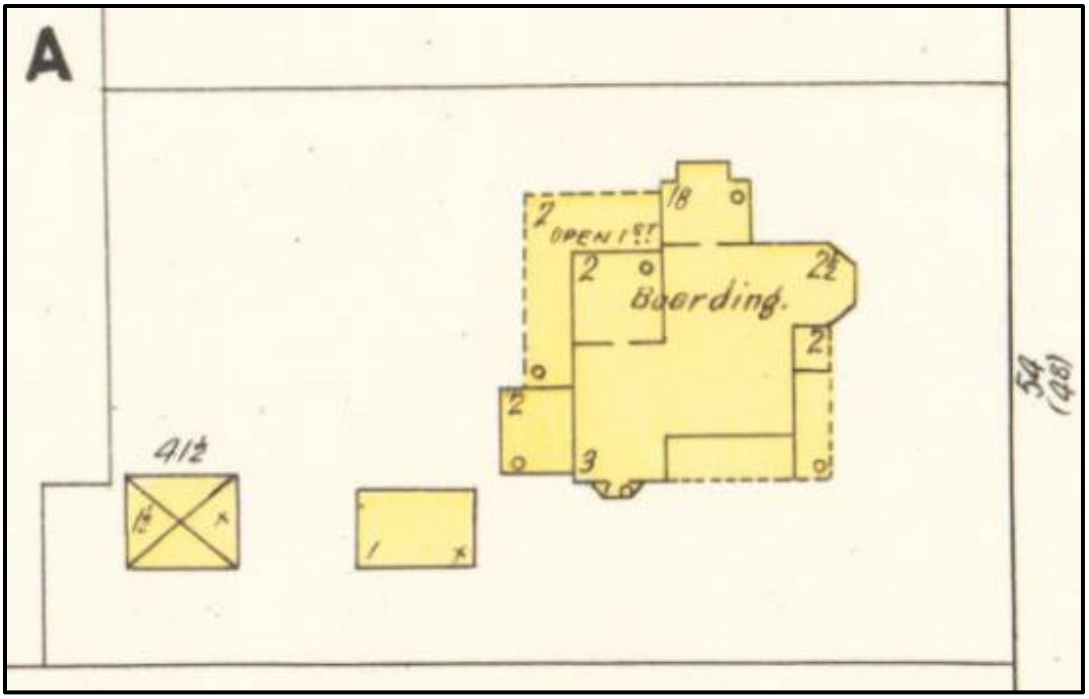


Figure 26. Boardinghouse, Sanborn Fire Insurance Map, Asheville, NC, June 1907.

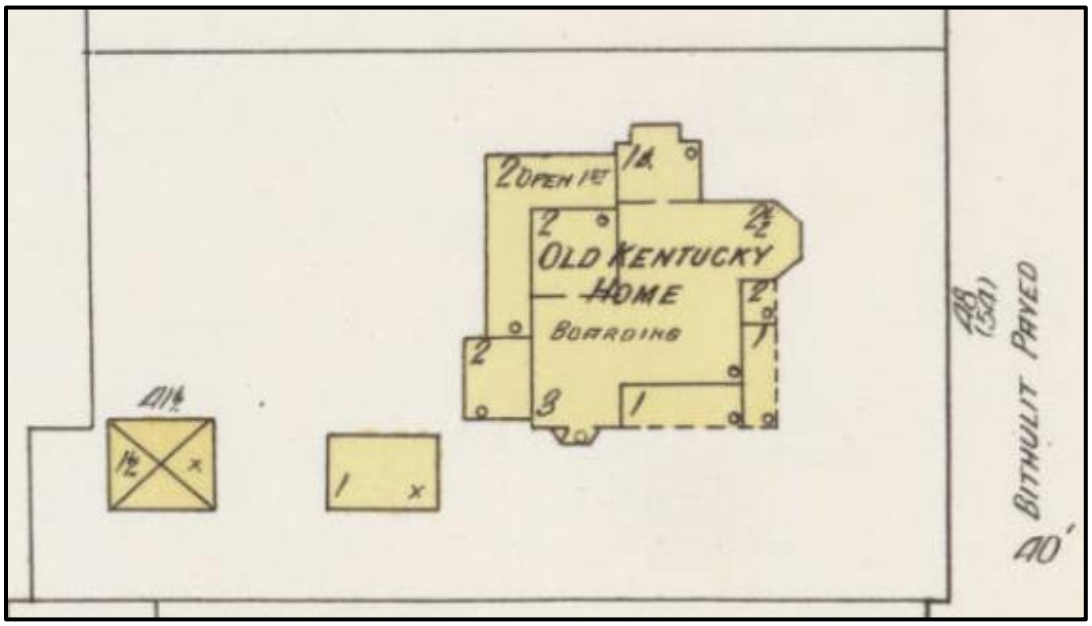


Figure 27. Old Kentucky Home, Sanborn Fire Insurance Map, Asheville, NC, January 1913.

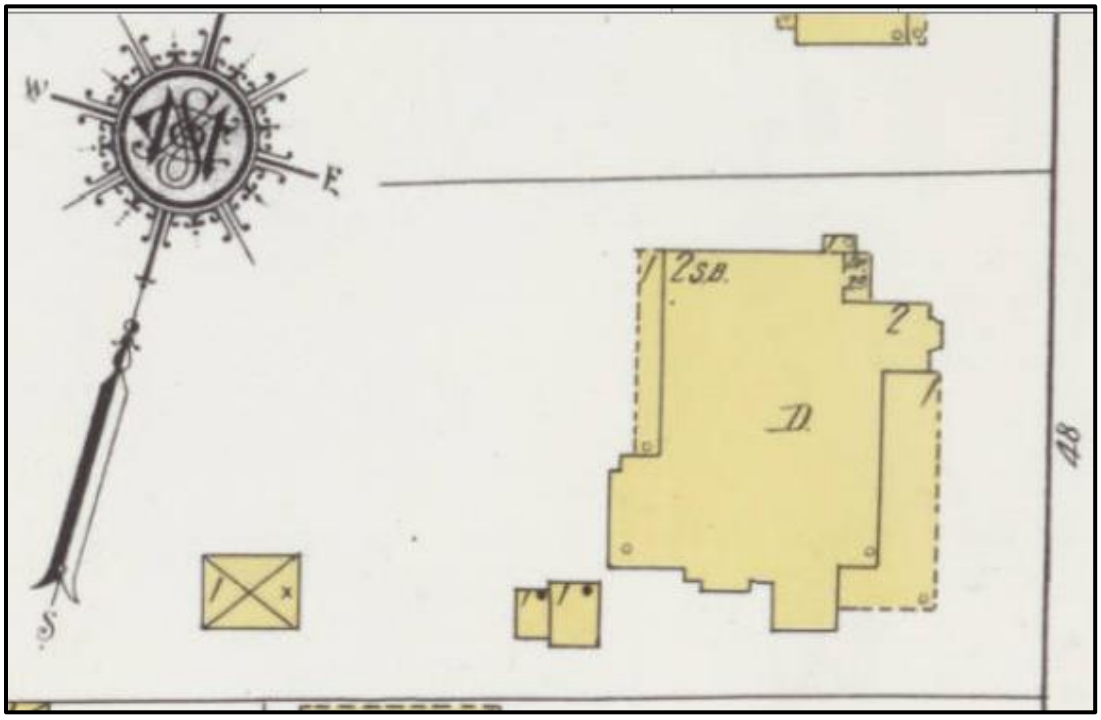


Figure 28. Boardinghouse, Sanborn Fire Insurance Map, Asheville, NC, November 1917.

In 1916, the Old Kentucky Home underwent a large expansion to accommodate a growing population of tourists in Asheville. The November 1917 Sanborn Fire Insurance map shows this newly expanded boardinghouse. In particular, the building's footprint shows the distinctive side addition of a combination first-floor sunroom and second-floor sleeping porch. Local carpenters, commissioned by Julia Wolfe, constructed the two-floor addition where part of the wraparound veranda once resided. Wolfe developed her own design plans to save money and maintain control over the additions. This produced a work of vernacular architecture that relied on local building traditions rather than adhering to an established academic architectural style category.

Thomas Carter and Elizabeth Collins Cromley, in their *Invitation to Vernacular Architecture: A Guide to the Study of Ordinary Buildings and Landscapes* (2005), classify vernacular architecture as "both a *type of architecture* and an *approach to architectural studies* that emphasizes the intimate relationship between everyday objects and culture, between ordinary buildings and people."[4] Vernacular communities possess a shared identity in behavior that is reverberated in the architecture of the area. In Asheville, the health tourism industry shaped an architectural identity based on therapeutic, open-air spaces. Sleeping porches and sunrooms became prominent features in the boardinghouse landscape. Julia Wolfe's establishment was "situated five minutes from the public square, on a pleasant sloping middleclass street of small homes and

[4] Carter, Thomas and Elizabeth Collins Cromley, *Invitation to Vernacular Architecture: A Guide to the Study of Ordinary Buildings and Landscapes* (Knoxville, TN: University of Tennessee Press, 2005), 7.

boarding-houses."[5] The architecture of the neighboring boardinghouses, including the Ozark, the Lisbon, the Colonial, the Belmont, and the Elton, served as a visual template for Julia Wolfe's designs.[6] Much of the furniture from the boardinghouse came from catalogs, so it's feasible that Julia Wolfe found inspiration for her additions in the plethora of mail-order house catalogs available at the time. The 1916 edition of the *Aladdin House Catalog*, for example, featured a two-story combination sunroom and sleeping porch similar in construction and design to that at the Old Kentucky Home.

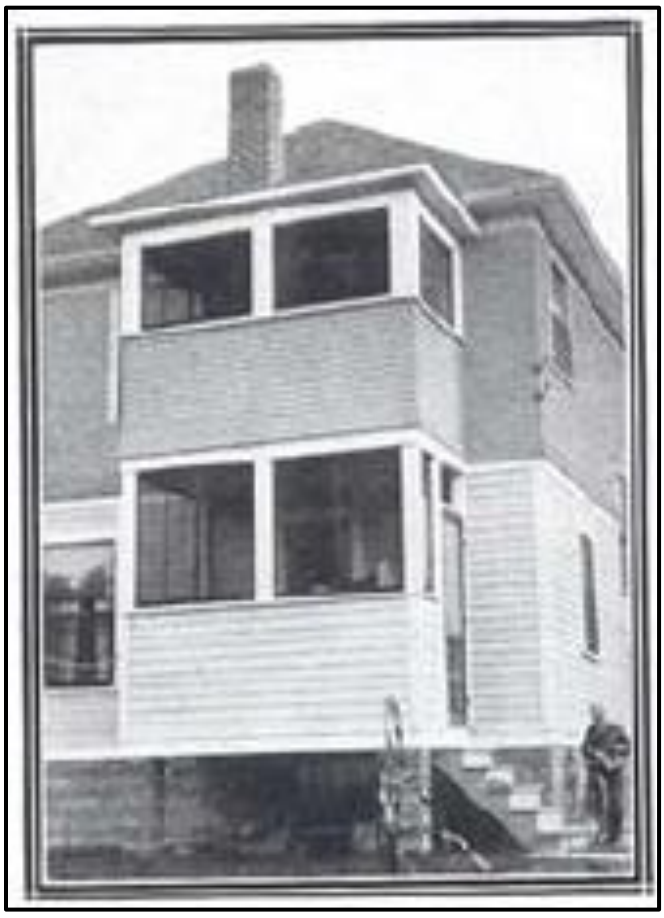


Figure 29. Addition No. 5, *Aladdin House Catalog*, 1916.

[5] Wolfe, *Look Homeward, Angel*, 104.
[6] *Sanborn Fire Insurance Map,* Asheville, NC, 1913.

Figure 30. Sleeping Porch and Sun Parlor Side Addition,
Thomas Wolfe Memorial, Asheville, NC, Photograph by Author.

The formation of the Thomas Wolfe Memorial Association in the late 1940s saved the Old Kentucky Home from the fate of other boardinghouses in the downtown area. Ownership of the house eventually passed from the Wolfe family to the City of Asheville. In 1973, the U.S. Department of Interior designated the Old Kentucky Home a National Historic Landmark for its connection to Thomas Wolfe and literary inspiration for *Look Homeward, Angel*. The operation and maintenance of the boardinghouse proved to be a financial burden for the City of Asheville; thus, on January 16, 1975, the Thomas

Wolfe Memorial became a state historic site under the new ownership of the State of North Carolina.[7]

The Old Kentucky Home stands as the last intact turn-of-the-century boardinghouse in downtown Asheville and recalls a specific period in the development of the city as a tourist industry. The current interpretation discusses how Julia Wolfe used her savvy business skills to forge a career as a boardinghouse owner and proprietress. Operating a boardinghouse was an acceptable female occupation at the time as it allowed women to remain within the domestic sphere. Asheville's health tourism industry opened up a large market for females running and working within boardinghouses. Although the Old Kentucky Home did not specifically cater to consumptives, Julia Wolfe was known to sometimes take in sick boarders. Business cards, distributed at the train station to arriving tourists, stated a "no sick" policy that was not strictly enforced. Thomas Wolfe writes that as a small child he would help "'drum up trade' among the arriving tourists at the station."[8] These cards are now handed out to site visitors at the Thomas Wolfe Memorial to discuss the business side of Mrs. Wolfe's boardinghouse.

---

[7] Wilson Angley, *Historical Research Report: Thomas Wolfe and the Old Kentucky Home* (Raleigh, NC: State of North Carolina Department of Cultural Resources, 1975), 64 – 71.

[8] Wolfe, *Look Homeward, Angel,* 187.

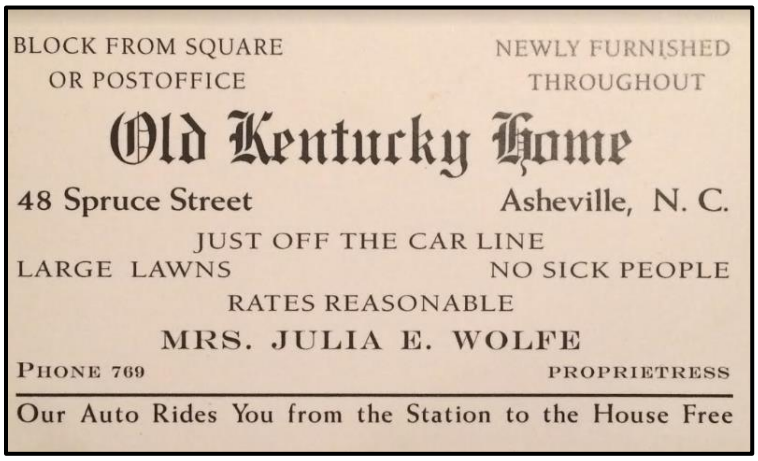


Figure 31. Sample Old Kentucky Home Business Card, Thomas Wolfe Memorial, Asheville, NC.

The sleeping porches and sun parlor at the boardinghouse offer an interpretive lens into a transitional period in Asheville's early twentieth-century health tourism. Julia Wolfe's decision to add sleeping porches and a sun parlor in 1916 reflected the growing acceptance of these open-air spaces outside the stigma of disease. Given the dearth of extant TB boardinghouses, the Old Kentucky Home offers a tangible link to Asheville's consumptive past that crafted together through city directories, Sanborn Fire Insurance maps, and local health ordinances. The boardinghouse conveys a story of spatial relationships and disease negotiations.

Interpreters emphasize Julia Wolfe's savvy, pinchpenny desire to take in as many boarders as possible. Her business approach led to a hallway being converted into a bedroom and a balcony being used as extra sleeping quarters. It also meant Julia sometimes ignored the Asheville City ordinances that required boardinghouses to be segregated as either healthy or tubercular. Given the health tourism that attracted thousands to Asheville at the turn of the century, it is no surprise that the Thomas Wolfe

Memorial staff places the boardinghouse within a larger context of Asheville tourism. Yet, despite the architectural presence of sleeping porches and a sun parlor, the site could benefit from discussing the open-air treatment, Anti-tuberculosis consumer culture, and sleeping porch building craze that swept through the nation between 1890 and 1930. In the next chapter, I delve into how material culture can be used to more effectively interpret tuberculosis history at sites such as the Thomas Wolfe Memorial.

Case Study #2: The Highlands Tent Cottage, Highlands, NC

Tent cottages developed out of the turn-of-the-century sanatorium movement. Also referred to as a sleeping shack or cure cottage, a tent cottage is a type of detached, one-story dwelling used to house one to a few tubercular patients in sanatorium communities. *The Campaign against Tuberculosis in the United State* (1908) described one-room cottages located adjacent to a main building "ventilated similarly to the plan devised by Professor Irving Fisher for tents, through the floor, cupola in the ceiling, and through windows on three sides."[9]

The cottage type of sanatorium originated to provide patients with private accommodations in the form of small cottage-like structures. As specified by *Some Plans and Suggestions for Housing Consumptives* (1909), these cottage-type structures varied in design. Cottages for well-to-do patients often included a private room, porch, and bathroom. Other cottage floorplans featured accommodations for as many as eight patients. The standard tent cottage for a single person's use followed a design first

[9] National Association for the Study and Prevention of Tuberculosis, *The Campaign against Tuberculosis in the United States (1908).*

created by Dr. Millet of the Millet Sanatorium in Massachusetts. The Millet Cottage costed approximately $200 to construct and was described in detail by the National Association for the Study and Prevention of Tuberculosis:

> The Millet Cottage…is 12 by 18 feet, supported on cedar posts, boarded and covered with shingles. The roof is laid at 'quarter pitch,' with the rise to the front. The cottage is divided by a partition into a bed-room 12 by 12 feet, open on all sides, and a dressing-room 6 by 12 feet, with two windows, heated by a stove and furnished with a stationary washstand, running water, a toilet, and wardrobe. The rear wall, 6 ½ feet high, faces the north and can be closed by wooden shutters. This cottage is constructed of wood. There is no plastering, and the floor is laid double, the upper layer of narrow, hard pine.[10]

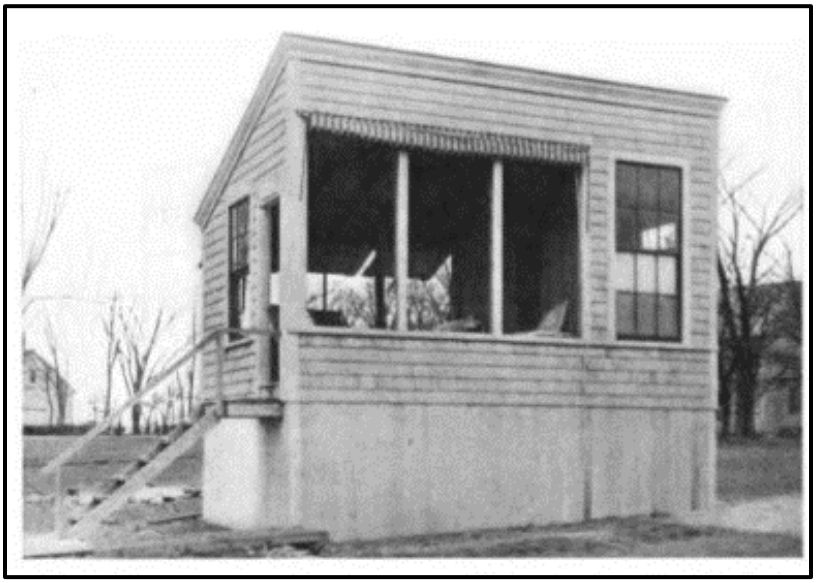


Figure 32. The Millet Cottage, Millet Sanatorium, MA,
*Some Plans and Suggestions for Housing Consumptives, 1*909.

Modifications of Dr. Millet's cottage plan increased the cost to obtain "a more substantial construction and a better interior finish." Although more costly and labor-

[10] National Association for the Study and Prevention of Tuberculosis, *Some Plans and Suggestions for Housing Consumptives* (1909).

intensive to erect, the tent cottage offered benefits over a basic tent. Sanatoria operators found that tents wore out quickly and were poorly ventilated. The tent cottage occupied a medium ground between flimsy tents and more substantial multi-room cottages. For Dr. Mary E. Lapham of the Highlands Tuberculosis Sanitarium, the decision to erect tent cottages served as an alternative to housing patients in a large, massive building.

Mary E. Lapham,[11] a Michigan native, came to Highlands, North Carolina in 1893. The local need for medical care inspired Mary Lapham to attend the Women's Medical School in Philadelphia. After a stint abroad, the newly minted Dr. Lapham resumed residence in Highlands. With her specialized training in pneumotherapy (i.e. the process of collapsing an infected lung and allowing it to recuperate), Dr. Lapham chose to establish a sanatorium to treat consumptive patients. She purchased a three-story house on North Fourth Street in 1908. To accommodate its new use as a sanatorium, Lapham added two wings to the house. Sixty frame tent cottages covered the expansive grounds of the property that came to be known interchangeably as the Highlands Tuberculosis Sanitarium, the San, and Bug Hill.[12] Dr. Lapham, appointed Town Health Officer in 1915, left the sanatorium at the outbreak of World War I to work overseas with the Red Cross. An accidental fire during the winter of 1918 destroyed the main sanatorium building and led to the official closing of the Highlands Tuberculosis Sanitarium.[13]

---

[11] The 1900 U.S. Census lists Mary Lapham as a "capitalist" and the head of a household consisting of three boarders and two servants (a cook and a chambermaid). The 1910 U.S. Census lists Mary Lapham as a "physician" living with a manager and servant all working at a private sanatorium. According to the 1920 U.S. Census, Mary Lapham was a tuberculosis physician with three boarders in her household.

[12] Local residents referred to the sanatorium as Bug Hill after the tubercle bacillus.

[13] *Highlands Historical Society Newsletter*, Spring 2008, Highlands, NC.

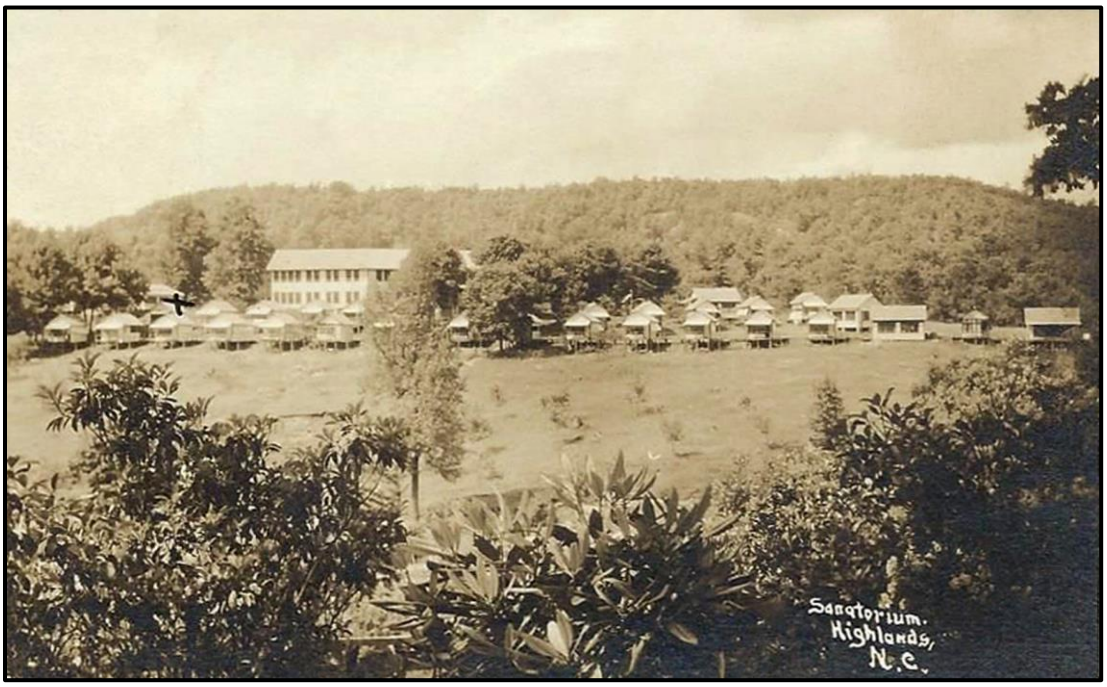


Figure 33. View of the Highlands Hill Sanitarium Main Building and Tent Cottages, Highlands, NC, Photograph by R. Henry Scadin, 1910, Courtesy of the Highlands Historical Society.

The National Association for the Study and Prevention of Tuberculosis's *A Tuberculosis Directory: Containing a List of Institutions, Associations and Other Agencies Dealing with Tuberculosis in the United States and Canada* (1911) featured the Highlands Camp Sanatorium in its sanatoria of North Carolina section. At that time, the sanatorium had a capacity for fifty patients with rates of $20 per week for "incipient and

moderately advanced cases."[14] By 1916, the tuberculosis directory noted that the weekly rate ranged from $20 to $25.[15]

HIGHLANDS

Highlands Camp Sanatorium (July, 1909):
For incipient and moderately advanced cases. *Capacity:* — 50. *Rates:* — $20.00 to $25.00 per week. *Manager:* — F. D. Coburn. *Medical Director:* — Dr. Mary E. Lapham. *Application* should be made to the Manager.

Figure 34. Highlands Camp Sanatorium, National Association for the Study and Prevention of Tuberculosis, *A Tuberculosis Directory Containing a List of Institutions, Associations and Other Agencies Dealing with Tuberculosis in the United States and Canada*, 1916.

Following the closing of the sanatorium in 1918, Bernie Durgin, a nurse at the sanatorium, relocated twenty-five of the sixty tent cottages to her family's Chestnut Street property. Nurse Durgin continued to treat consumptive patients from the cottages after the sanatorium fire.[16] Over the years, the bulk of the tent cottages disappeared from the property as it was developed as a trailer park. In 2006, local residents Dwight and Barbara Davis of the Highlands Trailer Park donated the remaining tent cottage to the Highlands Historical Society to be preserved for the community.[17]

In the Spring of 2007, a generous grant of $5,000 from the Highlands Community Fund was put "toward restoration of the one-room 'Bug Hill' cottage as an educational

---

[14] National Association for the Study and Prevention of Tuberculosis. *A Tuberculosis Directory: Containing a List of Institutions, Associations and Other Agencies Dealing with Tuberculosis in the United States and Canada*. 1911, 55.

[15] National Association for the Study and Prevention of Tuberculosis. *A Tuberculosis Directory: Containing a List of Institutions, Associations and Other Agencies Dealing with Tuberculosis in the United States and Canada*. 1916, 59.

[16] Highlands Historical Society, *Cullasaja Women's Outreach Application for 2011 Funding,* Highlands, NC.

[17] *Highlands Historical Society Newsletter,* Spring 2008, Highlands, NC.

exhibit of Highlands' historical heritage."[18] This grant funded the work of a local craftsman to restore the tent cottage to its former glory. The tent cottage was moved from its former Chestnut Street location to Recreation Park, site of the former sanatorium. On May 25, 2008, the Highlands Historical Society hosted a ribbon-cutting ceremony that formally opened the preserved tent cottage to the public.[19]

Figure 35. "Tents at Bug Hill, Sanitarium, Highlands, NC,"
Photograph by R. Henry Scadin, 1910, Courtesy of the Highlands Historical Society.

[18] Highlands Community Fund, *Grant History, Fall 1997 – Fall 2014* (March 2015), 4 -5.

[19] *Highlands Historical Society Newsletter*, Spring 2008, Highlands, NC.

Figure 36. Restored Tent Cottage Exhibit, Highlands, NC, 2006,
Photograph Courtesy of the Highlands Historical Society.

The Highlands Tent Cottage exhibit represents an example of community-based preservation. Local residents recognized the significance of the only physical structure remaining from the Highlands Tuberculosis Sanitarium and chose to return it to its former location. The Highlands Historical Society members successfully wrote a grant that was applied to the restoration of the tent cottage. The finished product is an open-air, one-room wooden cubicle with canvas siding over large banks of windows. Plaques on the façade note the construction date as "ca. 1908" and the name "Highlands Sanatorium Tent." Two panels are signage in a front window pane that contextualizes the history of the tent cottage as part of Dr. Lapham's sanatorium. Since the built environment of the

sanatorium is no longer extant, the tent cottage helps visitors understand the physical composition of an open-air tent cottage. The location of the tent cottage within the original sanatorium property evokes a sense of place. Dr. Lapham chose to set up her sanatorium in the Highlands area because she believed its climate, picturesque mountains, and natural environment were therapeutic. Although the main sanatorium building and the bulk of the tent cottages are gone, visitors can gain an appreciation for the sanatorium landscape that remains. As an interpretive exhibit on tuberculosis history, the Highlands Tent Cottage also demonstrates how to use a small space to interpret disease when the built environment is largely absent. It serves as a template for other communities interested in preserving their own consumptive past.

Case Study #3: The Julius Marks Sanatorium, Lexington, KY

In 1917, the city of Lexington opened its first tuberculosis hospital, known locally as the Blue Grass Sanatorium. Originally operated by Fayette County, the sanatorium received $125,000 from Leo Marks in 1924 and gained a new name in memory of Leo's father Julius, a former resident of Lexington. This donation allowed the sanatorium to expand into a larger complex featuring a new 60-bed hospital building and eventually a "colored patients building" to serve African American consumptives.[20]

The 1920 Sanborn Fire Insurance map shows the earliest form of the sanatorium consisting of a service building (tile stucco), a children's building (tile stucco), an office, a small auto building, a shed, and two sleeping pavilions. Located at the corner of

[20] *Julius Marks Sanatorium Records Collection*, University of Kentucky Special Collection, Lexington, KY.

Georgetown Pike and Blue Grass Avenue, the sanatorium sat 2.5 miles north of the county courthouse.[21] With the funds contributed by Leo Marks, the Julius Marks Sanatorium grew significantly to accommodate more patients. A later Sanborn map depicts this growth when compared to the 1920 version. The updated complex featured a new 60-bed hospital building and eventually a "colored patients building" to serve African American consumptives. At this time, the sleeping pavilions were segregated and referred to as the north ambulatory and south ambulatory.[22]

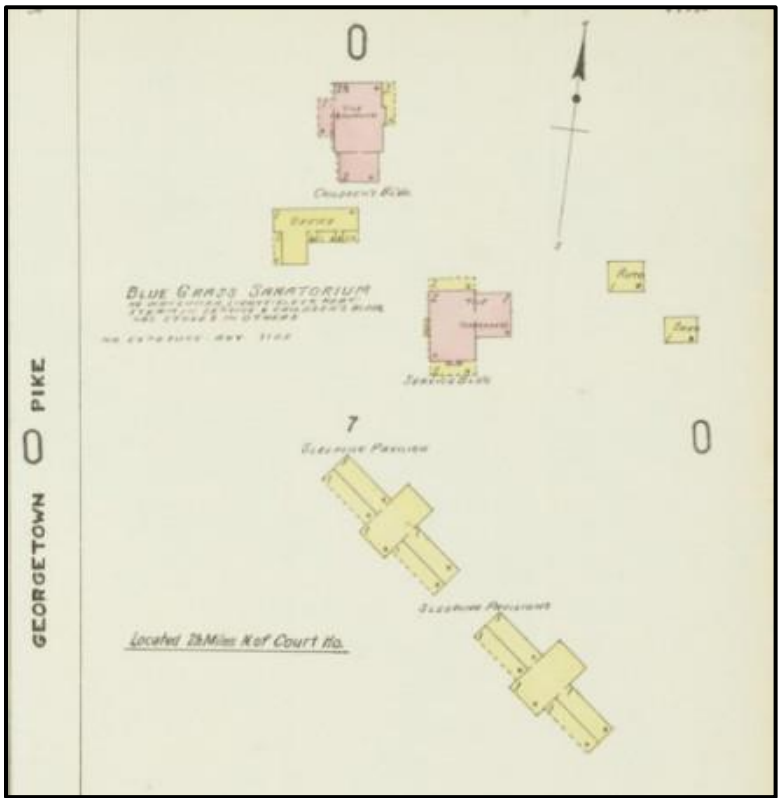


Figure 37. Julius Marks Sanatorium, Sanborn Fire Insurance Map, Fayette County, KY, 1920.

[21] Julius Marks Sanatorium, *Sanborn Fire Insurance Map*, Lexington, KY, 1920.
[22] Julius Marks Sanatorium, *Sanborn Fire Insurance Map*, Lexington, KY, ca. 1950s.

The Julius Marks Sanatorium displayed architectural elements of both the Spanish Colonial Revival and Craftsman styles.[23] Popular from the mid-1910s to 1930s in mainly California and Florida, the Spanish Colonial Revival often featured clay tile roofing, canvas awnings, and stuccoed walls like those at the Julius Marks Sanatorium. These elements were articulated alongside Craftsman design features, particularly the exposed eaves and decorative brackets of the residential buildings.[24]

Landscaping at the sanatorium reflected health knowledge of the late-nineteenth/early-twentieth century. The immaculate grounds with abundant trees and winding driveways were a throwback to the health resorts of the past that emphasized the therapeutic quality of the environment. The landscape also speaks to racial segregation at the sanatorium as it suggests that the movement of the pavilion corresponded with the construction of the African American patient building, segregated on the south side of the sanatorium complex. In addition to the 1939 construction of the African American patient building to the south of the main administration building, one of the sleeping pavilions was moved to the south side of the sanatorium complex. This sleeping pavilion came to be known as the south ambulatory, located near the African American patient building.[25] The Julius Marks Sanatorium was eventually one of just two sanatoria in Kentucky open

[23] Julius Marks Sanatorium Postcard, Fayette County, KY, ca. 1930s.

[24] Bettie L. Kerr, *Julius Marks Sanatorium, Kentucky Historic Resources Inventory Survey*, Lexington, KY, 1983.

[25] *Julius Marks Sanatorium Records Collection*. UK Special Collection. Lexington, KY.

to African American patients; the other being the 575-bed Waverly Hills Tuberculosis Sanatorium in Louisville, which contained an annex to segregate patients.[26]

The peak of the Julius Marks Sanatorium, as with other local county-operated sanatoria, finally passed with the establishment of Kentucky's tuberculosis hospitals in the late 1940s. With a declining patient base, the sanatorium transitioned into an elderly care home and transferred remaining patients to the state hospitals by the end of the 1950s. Waverly Hills followed suit in transferring patients to the state-supported Hazelwood Sanatorium, leaving only two county sanatoria in operation in 1960.[27]

In September of 1983, preservationists surveyed the property for the *Kentucky Historic Resources Inventory*. At that time, the former sanatorium was known as the Julius Marks Home, Inc. and being used as a nursing facility. The inventory found six stuccoed main buildings of Arts and Crafts architectural design dating from the 1920s – 1930s. The three-story administration building with two-story wings, constructed around 1928, had been slightly altered from its 1935 appearance. For example, the distinctive canvas awnings over the windows had been removed by the time of the 1983 survey.[28]

---

[26] Sol Schulman, "Thousands Doomed to Die Get Reprieve From the State," The Courier-Journal (August 13, 1944).

[27] *Tuberculosis Sanatoria Commission 1960-1961 Annual Report*, 7.

[28] *Julius Marks Sanatorium, Kentucky Historic Resources Inventory Survey*, 1983.

Figure 38. Administration Building, Julius Marks Sanatorium, *Kentucky Historic Resources Inventory Survey*, 1983.

Figure 39. "Colored Patients Building," Julius Marks Sanatorium, *Kentucky Historic Resources Inventory Survey*, 1983.

Figure 40. Nurse's Quarters, Julius Marks Sanatorium,
Kentucky Historic Resources Inventory Survey, 1983.

Figure 41. Building D, Julius Marks Sanatorium,
Kentucky Historic Resources Inventory Survey, 1983.

Figure 42. Superintendent's Residence, Julius Marks Sanatorium, *Kentucky Historic Resources Inventory Survey*, 1983.

Figure 43. Children's Building, Julius Marks Sanatorium, *Kentucky Historic Resources Inventory Survey*, 1983.

In September 2007, Palmer Engineering again resurveyed the property and the state historic preservation office deemed it individually eligible for the National Register of Historic Places. At that time, the sanatorium complex contained five original buildings, ca. 1918 – 1934, including the superintendent's dwelling, children's building, storage building, nurse's quarters, and a patient cottage (sleeping pavilion). Regarding the storage building, the exact function of this one-story, four-bay pyramidal roofed building is up for debate. The 2007 survey cites that the building (identified as Building D) originally stored used clothes and first appeared on the 1958 Sanborn map. Although dating to a later period, the construction materials, specifically stucco, and window design resemble that of other earlier buildings in the sanatorium complex. It was noted that the main administration building and one sleeping pavilion had been removed. According to the survey, "the 1958 map shows that one of the cottages was moved to a location south of the main hospital but this building is no longer extant."[29]

The House of God church now sits in the area once occupied by the main administration building. The sanatorium is now down to just four buildings: the nurse's quarters, the storage building, and two sleeping pavilions. While a couple of the buildings contain exterior graffiti, they remain in good condition and the grounds are well-maintained. The sleeping pavilion (south ambulatory) that was moved and believed to be razed is in fact still extant and rented out as a child daycare from the church. It appears that the KCCR (Kentucky College of Contemporary Religion) at one point used the nurse's quarters since a sign still resides outside. The children's building and

[29] Jayne Fiegel and Carrie Naas, *Julius Marks Sanatorium, Kentucky Historical Resources Inventory Survey*, Lexington, KY, 2007.

superintendent's dwelling were demolished sometime after September 2007; a small housing development now occupies the northern side of the sanatorium complex.

Figure 44. Nurse's Quarters, Julius Marks Sanatorium, 2015, Photograph by Author.

Figure 45. Storage Building (Building D), Julius Marks Sanatorium, 2015, Photograph by Author.

Figure 46. Nurse's Quarters and Storage Building, Julius Marks Sanatorium, 2015, Photograph by Author.

Figure 47. Storage Building and North Ambulatory, Julius Marks Sanatorium, 2015, Photograph by Author.

Figure 48. North Ambulatory (Sleeping Pavilion/ Patient Cottage), 2015, Photograph by Author.

Figure 49. South Ambulatory (Sleeping Pavilion/ Patient Cottage), 2015, Photograph by Author.

Figure 50. South Ambulatory (Sleeping Pavilion/ Patient Cottage), 2015, Photograph by Author.

The Julius Marks Sanatorium is not currently interpreted as a historic tuberculosis site; however, the extant built environment offers an opportunity to learn about how segregation occurred in TB sanatoria. The creation of the African American patient building and movement of the African American-designated sleeping pavilion to the south side of the sanatorium complex speaks to the physical separation of the races in public spaces. Carroll Van West, in *Tennessee's New Deal Landscape, A Guidebook* (2001), remarks on how New Deal-era public buildings in the South upheld the "status quo of Jim Crow segregation."[30] African-American designated spaces were often smaller than those established for whites. At the Julius Marks Sanatorium, the African American patient building occupied a smaller footprint than the main building and sat farther back on the south-side of the campus. The administrative documents housed in the University of Kentucky's Julius Marks Sanatorium Records Collection do not provide insights into how racial segregation impacted the patient experience at the sanatorium. Historians can piece together Sanborn Fire Insurance maps, postcards, and material evidence in the form of buildings to craft an understanding of the sanatorium. This evidence allows for a more nuanced interpretation of the sanatorium landscape. Unfortunately, a lack of firsthand accounts of the Julius Marks Sanatorium handicaps interpretive efforts. Secondary sources, such as Samuel Kelton Roberts, Jr.'s *Infectious Fear: Politics, Disease, and the Health Effects of Segregation*[31] (2009) and Andrea Patterson's "Germs and Jim Crow:

[30] Carroll Van West, *Tennessee's New Deal Landscape, A Guidebook* (Knoxville, University of Tennessee Press, 2001), 31.

[31] Samuel Kelton Roberts, Jr., *Infectious Fear: Politics, Disease, and the Health Effects of Segregation* (Chapel Hill, NC: University of North Carolina Press, 2009).

The Impact of Microbiology on Public Health Policies in Progressive Era American South"[32] (2009), illuminate the racialization of disease. In the Jim Crow South, marginalized African Americans were scapegoated as other Americans used the rhetoric of disease for social control. While public health officials based their actions on medical knowledge, they also blended ideas of racial superiority into a medicalization of racism. With its sleeping pavilions still in place, the Julius Marks Sanatorium reveals a palpable imprint of mid-twentieth-century segregated public health spaces on its landscape.

A Case for Interpreting Infected History

The treatment of tuberculosis had a profound impact on early twentieth-century architecture. Disease and health informed the design, construction, and use of a host of architectural spaces from boardinghouses and tent cottages to sanatoria. Extant sites of tuberculosis history provide insights into private and public health initiatives to prevent the spread of disease and find a cure. The Old Kentucky Home and the Highlands Tent Sanatorium, both located in mountain resort towns of North Carolina, speak to the health tourism industry that developed for consumptives with the financial means for travel and board. The communal nature of the boardinghouse diverged from the private, single-occupancy tent cottages, showing the textured consumptive community even in the same mountain resort region. The Julius Marks Sanatorium, in Lexington, Kentucky, illuminates how the sanatorium landscape was shaped by racial segregation. These three site studies have reflected on current interpretation and opportunities for improvement,

[32] Andrea Patterson, "Germs and Jim Crow: The Impact of Microbiology on Public Health Policies in Progressive Era American South," *Journal of the History of Biology* 42, no. 3 (Fall 2009): 529 – 559.

setting the stage for the next chapter's more thorough look into tuberculosis interpretation at historic house museums.

CHAPTER SIX

Interpreting Tuberculosis at Historic House Museums

"Domestics constantly handle things of every kind and description, and with soiled hands they contaminate everything they handle."

- Lawrence F. Flick (1903)

In his 1903 *Consumption, a Curable and Preventable Disease: What a Laymen Should Know About It*., Dr. Lawrence F. Flick explored "The Spread of Tuberculosis by Consumptive Servants."[1] Consumptive domestic servants allegedly posed a palpable threat to the health of their upper-crust employers that surpassed any other pressing servant issue. The well-to-do's houses tended to be "well situated, large, well ventilated, and clean," attributes that seemingly prevented the spread of contagion.[2] The mobility of domestic servants from poorer neighborhoods into wealthier households, thus, endangered the perceived healthiness of these spaces. Medical beliefs circulated that domestics and their fellow working class members possessed a higher susceptibility to diseases such as tuberculosis. Domestic servants, in the view of Flick, had the ability to gain admittance into the elite's homes, mingle in close proximity to family members, and contaminate the interior as well as furnishings.

The turn-of-the-century crusade against tuberculosis raised an awareness of household safety and in turn spawned a mass consumer marketplace for anti-tuberculosis goods. These consumer products ranged from personal hygiene items such as spittoons to

---

[1] Lawrence F. Flick, *Consumption, a Curable and Preventable Disease: What a Laymen Should Know About It* (Philadelphia: David McKay, 1903).

[2] Ibid., 148.

detailed architectural additions like sleeping porches and solaria. Mail-order catalogs facilitated this burgeoning marketplace and allowed Americans to take the cure within the confines of their own homes. Concerns about disease increasingly emphasized household cleanliness and sanitation. Operating within what Nancy Tomes coined a "Gospel of Germs,"[3] Americans flexed their buying power to guard themselves against disease. The properly furnished middle-class household, upheld as a beacon of sanitation, served as both an aspirational symbol for the lower classes and an obtainable goal for those with the financial means. Yet, despite the view of the middle-class household, the fact remained that the home was still vulnerable to contamination as specified in Dr. Lawrence F. Flick's infected house theory. The house, thus, occupied a dual role as both a potential source of contagion and a sanitized space if given the right amount of cleaning. In this chapter, I examine how the Anti-Tuberculosis Movement shaped the middle-class household of the early twentieth century. Material culture, particularly furnishings and architecture, can be used to discuss disease history specifically at historic house museums; thus, I introduce literature on historic house museum interpretation to set up the chapter. At the end of the chapter, a practical application section displays the ways in which material culture can aid in interpreting health and disease at these sites.

A product of the Progressive Era, the Anti-Tuberculosis Movement focused on regulating the health habits of the masses to improve the lives of Americans. Legislation, whether aimed at preventing spitting or boardinghouse health violations, called on everyday Americans to assume a personal responsibility for their own hygienic practices.

---

[3] Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life* (Cambridge, MA: Harvard University Press, 1998).

Jeanne E. Abrams, in "'Spitting is Dangerous, Indecent, and against the Law!' Legislating Health Behavior during the American Tuberculosis Crusade" (2013), argues that the anti-spitting campaign stemmed from both a "medical need to decrease potential contagion from those with active TB and the social and cultural desire to eliminate the 'despicable' habit of spitting, even when it posed no real health threat (since not all those who spit were consumptive."[4] Anti-spitting became the public posterchild of the crusade against tuberculosis with anti-spitting ordinances in 150 cities and three states by 1911.[5] The habit of spitting was not practiced by a specific class. Georgina D. Feldberg, in *Disease and Class: Tuberculosis and the Shaping of Modern North American Society* (1995), notes,

> The spittoon, like the cigar, was an emblem of refined masculinity, and, positioned beside the potted palm, it enjoyed pride of place in public areas. The lace-edged linen handkerchief, which so discreetly preserved tubercle bacilli, was an equally powerful emblem of genteel femininity.[6]

Public health reformers pointed to "careless consumptives" lacking self-control and personal responsibility as public nuisances. The poor inevitably became targets as reformers connected disease with squalor and unhealthy living/working conditions.[7] In the early 1900s, a shift in medical practice occurred that prioritized disease prevention

---

[4] Jeanne E. Abrams, "'Spitting is Dangerous, Indecent, and Against the Law!'": Legislating Health Behavior during the American Tuberculosis Crusade," *Journal of the History of Medicine and Allied Science* 68, no. 3 (July 2013), 424 – 425.

[5] Georgina D. Feldberg, *Disease and Class: Tuberculosis and the Shaping of Modern North American Society* (New Brunswick, NJ: Rutgers University Press, 1995), 86.

[6] Ibid., 87.

[7] Ibid.

over infection and resulted in "the promotion of those public and private behaviors that enabled the host to resist disease."[8]

In addition to monitoring public behavior, health officials and reformers also advocated for changes in the domestic sphere. A properly keep household could shield against disease. Medical manuals of the time advised on how to prevent the collection of dust, believed to harbor infectious dried sputum. A July 1914 public health bulletin entitled "Tuberculosis and Its Control" remarked on the merits of sunlight and air ventilation in combating diseased dust particles:

> The bacteria of this disease choose to ride about on the motes in the air, which can be seen in a ray of sunshine coming through a window, but we now know that exposure to sunshine kills them in seven minutes. Likewise fresh air, that is oxygen, dis-agrees with them; they like the shade, particularly if damp, and being heavier than air gradually sink downward.[9]

Washing linens, sweeping floors, opening windows, and letting in fresh air all encompassed ways for housekeepers to maintain a safe, domestic space.[10] During the Progressive Era, domestic house reform focused on the American home as an individually-owned, civilizing force. A main tenet of this movement promoted the adoption of middle-class domestic styles by the working-class and immigrant populations. Concerns over cleanliness and sanitation informed attitudes toward spatial use and decoration. For example, the working-class favored using the kitchen as both a social gathering and work space while Progressives emphasized the importance of using

---

[8] Ibid., 89.

[9] C.S. Mahood, "Tuberculosis and Its Control," *The Public Health Journal* 5, no. 7 (July 1914): 439 – 440.

[10] Feldberg, 120.

the kitchen solely for work and replacing the parlor with a functional dining room.[11] According to Patricia West, "reformers battled to persuade the working class to dispose of their treasured parlor fittings, especially upholstery, carved furniture, curtains, and wallpaper, on the basis that such decorations, and therefore the workers themselves, were collecting dirt and germs."[12] The model early twentieth-century home avoided ornamental pieces in favor of simple, easy-to-clean furnishings. Thus, the historic house museum serves an interpretive laboratory for addressing issues of health and disease in the early twentieth-century tubercular era.

Spread across communities throughout the United States, historic house museums are ubiquitous in American heritage tourism. Notable works, specifically Patricia West's *Domesticating History: The Political Origins of America's House Museums* (1999) and Jessica Foy Donnelly's *Interpreting Historic House Museums* (2002), chart out the early history and interpretation at historic house museums. The origins of the historic house museum are rooted in the nineteenth-century efforts to preserve the homes of founding fathers. Spearheaded by elite white females, the first historic house museums were treated as shrines and "used to promote specific values or ideologies, most often patriotism or appropriate roles for women."[13] William Sumner Appleton and the Society for the Preservation of New England Antiquities "emphasized a more scientific approach to preservation based on connoisseurship, photographic documentation, and measured

---

[11] Patricia West, *Domesticating History: The Political Origins of America's House Museums* (Washington, DC: Smithsonian Institution Press, 1999), 78 – 81.

[12] Ibid., 80.

[13] Jennifer Pustz, *Voices from the Back Stairs: Interpreting Servants' Lives at Historic House Museums* (DeKalb, IL: Northern Illinois University Press, 2010), 15-16.

drawings."[14] Motivated by the antiquarian passion to save regional history in the wake of industrialization, Appleton embraced the idea of adaptive reuse for historic houses as long as the architectural character was maintained. These private endeavors were eventually joined by federal and state preservation initiatives, especially after the passage of the Historic Sites Act of 1935.[15]

Patrick H. Butler III's "Past, Present, and Future: The Place of the House Museum in the Museum Community" (2002) calls into question the viability of Ann Pamela Cunningham's style of historic house museum preservation in the twentieth-first century. Cunningham's successful campaign to save Mount Vernon set the tone for a generation of largely women volunteering their time and effort to preserve homes across the United States.[16] At a time when historic house museums must justify their existence, many preserve a slice of domestic history yet fail to be relevant to today's society. As Butler noted, "There is little or no interpretation of issues of work, education, religion, social activity outside the household, and the many nondomestic aspects of life that make the domestic environment possible or needed."[17] The modern house museum is a far cry from that first established at Mount Vernon and interpretation should reflect that change to serve the community's need.[18]

The historic house museum as a shrine model has been altered by the new social history and the need to look beyond the great man's story to that of lesser known

---

[14] Ibid., 16.

[15] Ibid.

[16] Patrick H. Butler III, "Past, Present, and Future: The Place of the House Museum in the Museum Community," in Jessica Foy Donnelly, ed., *Interpreting Historic House Museums* (Walnut Creek, CA: AltaMira Press, 2002), 22.

[17] Ibid., 40.

[18] Ibid., 41.

characters. The need to attract new audiences and be socially relevant has been the driving force behind changes in interpretation at historic house museums. In the past at these museums, the themes of health and disease were typically presented in terms of family deaths and illnesses. Based on the high turn-of-the-century rate of tuberculosis, the disease receives mention as a cause of death or illness at many sites. This produces a very narrow interpretation of tuberculosis that continues to privilege the family narrative over that of others working within the household. Given the stigma attached to domestic servants operating within a middle to upper class domestic sphere, a more complex interpretation of disease and health could incorporate the servant experience. Turn-of-the-century domestic servants, charged with cleaning and maintaining households of the well-to-do, paradoxically found themselves stigmatized as health threats.[19] A growing trend to interpret servant life offers an opportunity to also explore the themes of health and disease beyond just a recitation of family illnesses and deaths. Domestic servants connected middle-class and upper-class households to the working-class neighborhoods in communities. Progressive Era public health reformers expressed concern over the role of servant movement in the spread of diseases, such as tuberculosis. This fear of contagion fed into what was known as the "servant problem" (i.e. the difficulty in securing and retaining good servants that met the expectations of the mistress of the household).

In the late nineteenth century, the ability to employ a domestic servant symbolized entrance into the middle class; however, this upward mobility was steeped in

[19] Abrams, 421.

cultural expectations for what constituted a desirable servant. A well-groomed, healthy, attractive young servant became the ideal servant for domestic households. As many young, native-born females in service left for factory work, new immigrants and African Americans filled their servant positions. Magazine advertisements featuring the perfect servant, a decorative ornament in a cap and apron, heightened a sense of nostalgia for a mythical golden age of servants. The average domestic servant in 1900 "was likely to be female, white, an immigrant or first-generation American, under twenty-five, and single."[20] World War I immigration restrictions changed the composition of the servant class from heavily foreign-born to African American. With the shift in demographics, romanticized views of the perfect domestic servant (i.e. white, native-born) inspired efforts to recruit individuals into service and away from factories and department stores.[21]

Tasked with the upkeep of the household, turn-of-the-century domestic servants navigated a complicated role in the paradigm of health and disease. Their working-class roots grounded them in the poorer neighborhoods where lung blocks and infected houses were considered commonplace. Ideas about germs and illness perpetuated the theory that domestic servants could contaminate elite spaces. Thus, while domestic servants were considered necessary for a household's middle-class status, they were simultaneously deemed a threat to the security and wellbeing of the household. In the early twentieth century, the introduction of new household technology (e.g. vacuum cleaners) promised a solution to the servant problem for middle-class homes but inadvertently increased

[20] Pustz, 79.
[21] Ibid.

expectations for cleanliness. Domestic servants, however, remained fixtures in upper-class households.[22]

Servant life interpretation at historic house museums has traditionally been isolated to servant work and living quarters. The kitchen stands out as the most common space interpreted for servants. Service areas, such as kitchens, highlights sanitary issues. Jennifer Pustz, in *Voices from the Back Stairs: Interpreting Servants' Lives at Historic House Museums* (2010), finds that "in some cases, the modern cleanliness of restored house museum kitchens creates an interpretive problem, since these rooms were hardly comfortable for servants engaged in work that involved heat and dirt."[23] By assessing the physical materials and furnishings of these spaces, interpretive staff can describe the labor it took to maintain clean working areas. Tour flow within the house drastically impacts the visitor experience. Rather than privileging the homeowner families by greeting visitors at the main entrance, guides can create traffic patterns that emphasize the "downstairs" domestic side before the "upstairs" opulence.[24]

Historic house museums are evolving as sites of engagement, rather than antiquated shrines to wealthy families. Critics over the years have lamented about the docent-led tours pointing out furniture without contextualizing their significance. Despite this often cited criticism, material culture tangibly connects the past to the present and offers a rich, albeit underutilized, interpretive approach at house museums. Household objects possess multi-layered meanings. Given the varied meanings associated with objects, interpreters have the power to influence the visitor experience by encouraging

[22] Ibid., 80.
[23] Ibid., 127 – 128.
[24] Ibid.

visitors "to look closely at objects, to think about meanings, and to relate these meanings to their own lives."[25] Given the power placed on objects by visitors, guides can use both the homeowner's possessions and mass produced household objects to emphasize the amount of work it took to maintain them. This technique allows for a larger conversation about industry, technology, immigration, and ethnicity that brings modern relevance to a historic house museum's storied past.[26]

House tours have historically placed great importance on furnishings. Yet, rather than falling into the interpretive trap of just pointing out the oldest pieces in a room, guides should strive to research into the history and traditions embodied in furniture pieces and other household objects.[27] This helps museums negotiate a balance between visual descriptions and meanings rooted in relationships and choices. Anti-tuberculosis goods present an opportunity to educate about how disease and health impacted everyday life in early twentieth century America. Furthermore, tuberculosis history offers a way for historic house museums to branch out past traditional narratives and be more inclusive. House museums tend to be elite spaces associated with middle to upper class as more modest establishments were not seen suitable for preservation and are no longer extant. Discourse about tuberculosis, its prevention, and its spread connected these spaces.

Knowledge of tuberculosis allows for a fuller interpretation of everyday life at historic house museums. Architecture provides a tactile lens into the ways Americans

---

[25] Rosemary Troy Krill, *Early American Decorative Arts, 1620 – 1860: A Handbook for Interpreters, Revised and Enhanced* (Lanham, MD: AltaMira Press, 2010), ix.

[26] Pustz.

[27] Krill.

understood both health and disease. Buildings are not static; rather, they change and adapt to meet new needs as well as to satisfy the whims of current occupants. Americans actively constructed sleeping porches and solaria as spaces devoted to the open-air treatment. Historic house museums often recreate and interpret a specific time in history, a date that might precede these open-air structures. Stewart Brand, in *How Buildings Learn: What Happens after They're Built* (1994), advocates for treating buildings as a series of layers reflecting adaptation and construction. Rather than privileging the original architectural intent, this approach acknowledges that buildings change over time.[28] Concerns over health and disease drove homeowners to construct sleeping porches and solaria. These sun-filled spaces attest to the practical ways in which Americans approached at-home medical treatments and sought to maintain a germ-free domestic environment. In the following section, I illustrate how the sunroom can be interpreted as a constructed space at historic house museum. This practical application presents a brief history, architectural overview, décor description, and interpretive recommendations for the sunroom through an assortment of contemporary house catalogs and domestic manuals.

Practical Applications for the Sunroom

The open-air movement that birthed the sleeping porch spawned other contemporary architectural spaces devoted to embracing the outdoors. The sun parlor, also known as the sunroom or solarium, emerged as a popular house feature around 1910

[28] Stewart Brand, *How Buildings Learn: What Happens after They're Built* (New York: Penguin Books, 1994).

and immediately praised for its adaptability to most architectural styles. As described in Glenn L. Saxton's 1914 *The Plan Book of American Dwellings: Moderately Priced Bungalows, Cottages, Residences,*

> It [the sun parlor] is really the most valuable asset of the entire home on account of its light, sunshine and fresh air. It is converted into a pleasant porch in the summer time and is the most delightful room throughout the winter, being supplied with heat the same as the rest of the house.[29]

The sunroom found use in both the northern and southern climates, but it was largely popular in the South where it could be enjoyed year round.

Sun parlors and sleeping porches represent a specific class of architectural space in which homeowners willingly brought the outdoors into their houses. Unlike the sleeping porch, the sunroom functioned as a public space for social interaction. Defined as a parlor, the sunroom never carried the tuberculosis stigma so closely associated with the early sleeping porch. This difference in public perception can largely be attributed to the early development of sun parlors and sleeping porches. Whereas sleeping porches were mainstays of sanatorium design adopted into mainstream architecture, sunrooms developed simultaneously in sanatorium and domestic architecture. This allowed for the sunroom to be seen as a health space, one that embodied the early 1900s open-air movement more so than a consumptive sickroom. The culture of sleeping in the open air was deeply embedded in American society. A 1921 catalog went as far as to note that

[29] Glenn L. Saxton, *The Plan Book of American Dwellings: Moderately Priced Bungalows, Cottages, Residences* (1914), 11.

"the benefits of sleeping in the open air- improved health, vitality, refreshed feeling in the morning – are so well known that only passing comment is necessary."[30]

Early twentieth-century sunrooms tended to be vernacular creations, reflecting local craftsman traditions rather than formal architectural designs. In 1916, Julia Wolfe of the Old Kentucky Home boardinghouse took it upon herself to design a sun parlor without employing a professional architect. F.E. Palmer, in *Milady's House Plants: The Complete Instructor and Guide to Success with Flowers and Plants in the Home, including a Remarkable Chapter on the Ideal Sun Parlor* (1917), remarked on this lack of formal designs for sunrooms:

> It seems at first sight a simple proposition that anyone desirous of building into, or onto, his house a small, practical plant room, could easily do so. All the elements are readily available the willingness to pay, easy access to the fundamental requirements in design and necessary materials, yet to obtain the sympathetic co-operation of an intelligent architect seems almost an impossibility. One would almost think, judging from the stubbornness of architects in this respect, that there is a natural antagonism between their art and that of horticulture; or is it failure on their part to recognize the growing importance of the latter in the domestic life of the nation?[31]

The availability of piecemeal parts in mail-order catalogs allowed homeowners the opportunity to create a customized sunroom. The 1921 Morgan Woodworking Organization's *Building with Assurance* catalog noted that new woodwork patterns could be arranged in variety of combinations and adapted to fit any style or size.[32] In light of

---

[30] *Homes and Interiors of the 1920s, a Restoration Design Guide.* Originally published as *Building with Assurance, 2nd ed.* (Chicago, IL: Morgan, 1921), 362.

[31] F.E. Palmer, *Milady's House Plants: The Complete Instructor and Guide to Success with Flowers and Plants in the Home, including a Remarkable Chapter on the Ideal Sun Parlor* (New York: A.T. Delamare Company, Inc., 1917), 153 – 154.

[32] *Homes and Interiors of the 1920s,* 362; 166.

the add-on and piecemeal nature of sunrooms, home design guides emphasized the importance of harmonizing the sunroom space with the rest of the building.

F.E. Palmer set forth an entire chapter on the components of the ideal sun parlor. As specified by Palmer, a sun parlor should consist of walls with three to four feet tall main windows and one and a half to two feet tall transom windows for proper ventilation. To protect against cold weather, the entire structure needed to be insulated with storm windows to achieve a double-glazed effect. Palmer noted that this

> makes an absolutely frost-proof double wall of glass and saves its first cost in economy of fuel in an incredibly short time; it allows the plants to grow close up the glass, even to touching it without chilling them, and the glass is always clear, never being covered by frost even in coldest weather.[33]

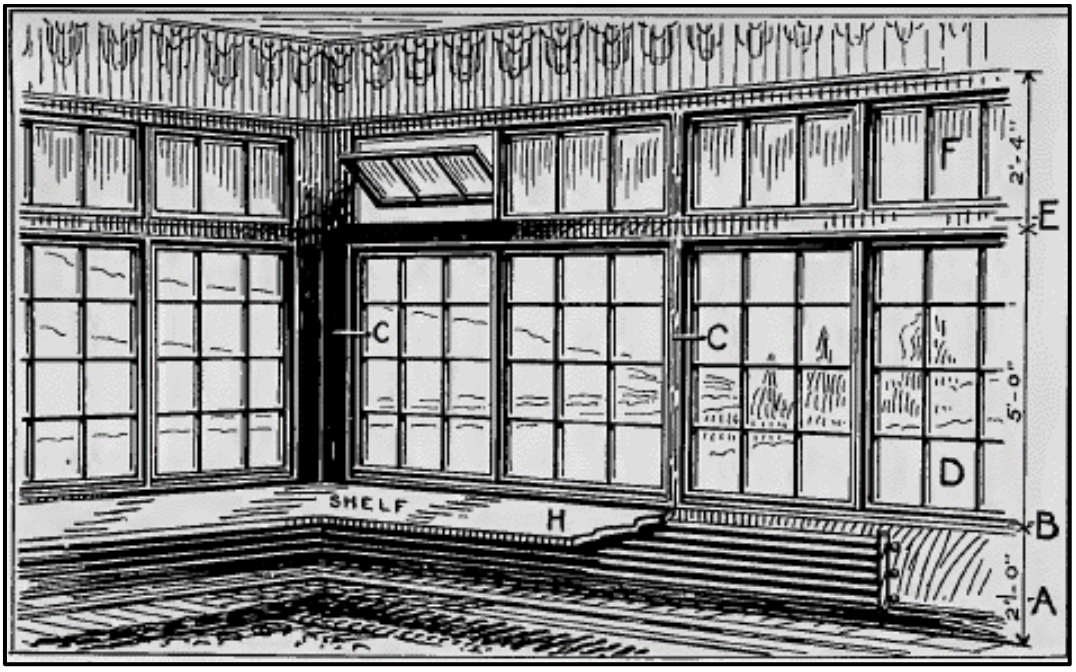


Figure 51. Diagram of Interior of a Sun Parlor or Conservatory, Palmer, F.E. *Milady's House Plants*, 1917.

[33] Palmer, 162.

Sunlight and wind exposure also dictated where to attach the sun parlor. It was recommended that the addition be located on the "south, east or west side of the house" and "project from the house so as to have three of its sides exposed to the light and air."[34]

Historic house museums are physical buildings in which architecture and spatial relationships reveal social and cultural meanings. Sun parlors, as their name suggests, were social gathering spaces that merged the outdoors with the indoors. Paired with sash windows to maximize sunlight, the presence of plants in the sunroom fostered an outdoors, health-inducing atmosphere. Sunrooms, although architecturally similar to sleeping porches, were not linked to sickness and disease; thus, the sunroom existed as a sanitized version of the sleeping porch.

At Asheville's Thomas Wolfe Memorial, the sun parlor addition is attached beneath a sleeping porch on the south-facing side of the Old Kentucky Home boardinghouse. The layout of the sun parlor follows closely those specified by F.E. Palmer's 1917 guide to the ideal space. Comprised of the three walls of glass windows, the sunroom features both a doorway into the main house as well as a side entrance to the veranda. These two entrances enabled "easy access to the out of doors so that plants, etc., may be handled without disturbing the rest of the house; also for complete shutting off from the rest of the house when necessary for purposes of fumigation."[35] Although groups traditionally enter the sunroom space via the interior entrance, the presence of the veranda entrance allows for an alternative experience. Jennifer Pustz's recommendation

[34] Ibid., 154 – 156.
[35] Ibid.

for rerouting house tours to explore the domestic servant's view could be adapted for the Wolfe's sun parlor.[36]

Figure 52. Sun Parlor, Thomas Wolfe Memorial, Asheville, NC, 2013, Photograph by Author.

Figure 53. Sun Parlor, Thomas Wolfe Memorial, Asheville, NC, 2013, Photograph by Author.

[36] Pustz.

The décor of the early twentieth-century sunroom focused on foliage and flowering plants and maneuverable furnishings. Household plants, aided by abundant sunlight and fresh air, were a staple of the sunroom and reflected a therapeutic effort to bring the outdoors into the home. Homeowners often opted for light, wicker furniture pieces, such as those illustrated in the 1921 *Building with Assurance* catalog, which could be easily moved by themselves and/or domestic servants for cleaning purposes. Boardinghouse proprietress Julia Wolfe outfitted her sun parlor with caster furniture so the space could be cleaned with ease. The caster furniture found throughout the house served a two-fold purpose: ease of cleaning and rearranging to accommodate boarders.[37] The furnishings of the Old Kentucky Home's sun parlor tell a great deal about health and sanitation ideals of the time.

Figure 54. Sun Porch M-398, Morgan Woodworking Organzation, *Building with Assurance*, 1921.

[37] Thomas Wolfe Memorial, *Tour Information* (Asheville, NC).

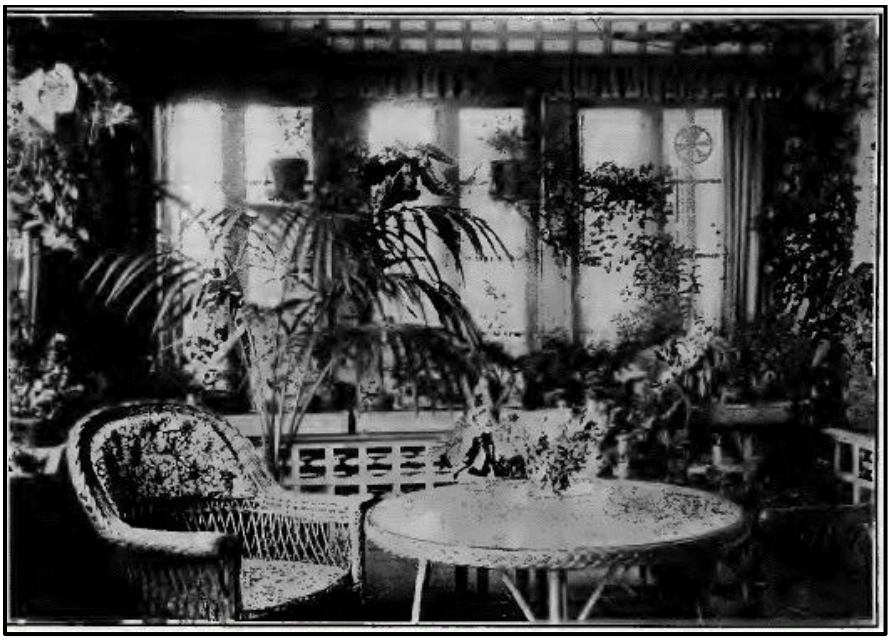


Figure 55. "The Evolution of the Home Conservatory, at present in the Sun Parlor Stage," F.E. Palmer, *Milady's House Plants: The Complete Instructor and Guide to Success with Flowers and Plants in the Home, including a Remarkable Chapter on the Ideal Sun Parlor*, 1917.

The interior layout and furnishings of houses reveal deeper meanings about how occupants used architectural spaces. For example, the orientation of the sunroom allowed for maximum sunlight. Three walls of windows helped the space stay well-ventilated in the era before air-conditioning. The décor emphasized the importance of cleanliness and health. Finally, the overall vernacular design of the space attested to the significance placed on the open-air treatment. Americans were willing to tack on these additions to their homes and risk upsetting the harmony of the architecture in pursuit of their own health and wellness. Interpreting the architecture and furnishing of sunrooms, thus, opens up new avenues of discourse about health and disease at historic house museums. The 1921 Morgan Woodworking Organization's catalog boasted that "the value of a sun

porch is too apparent to need comment."[38] By reading these spaces, museum staff have the ability to illustrate the value that was so apparent in the 1920s as well as how those spaces have evolved over the years. .

[38] *Homes and Interiors of the 1920s*, 166.

CONCLUSION

Beyond the Stigma of Tuberculosis

"The object of the anti-tuberculosis campaign is the eradication of tuberculosis…the simplest and most direct method of controlling this disease is through the segregation – the voluntary segregation – of the distributor, and that to remove the patient from an environment where he is dangerous to one where he is harmless."

- Ellen LaMotte, *The Tuberculosis Nurse* (1915)

Medical historian Charles E. Rosenberg wrote, "disease does not exist until we have agreed that it does, by perceiving, naming, and responding to it."[1] The rise of germ theory and the sanatorium system positioned tuberculosis as a communicable, yet curable disease. American society sublimated fear of infection into a system of care that alleviated, but not quite prevented, the disease from spreading. Early twentieth-century views about tuberculosis reflected the world in which consumptives lived. Fears about class conflict, immigration, slum living conditions, and contagion impacted the perception of tuberculosis. A bevy of actors, from TB boardinghouse and sanatorium operators to patients and caregivers, negotiated a world of germs, dirt, and disease as they dealt with tuberculosis. Associated with stuffy, crowded interiors, tuberculosis became known as a disease of the slums with the potential to infiltrate middle and upper class neighborhoods. Anti-tuberculosis rhetoric, thus, focused on the cleansing of infected spaces in an effort to prevent the disease's spread across class lines.

[1] Charles E. Rosenberg and Janet Golden, *Framing Disease: Studies in Cultural History* (New Brunswick: Rutgers University Press, 1992).

The image of infected houses pervaded early twentieth-century medical discourse regarding tuberculosis prevention and treatment. Fueled by concerns over contamination, Dr. Lawrence F. Flick's infected house theory perpetuated the idea that consumptives contaminated the spaces they inhabited.[2] Therefore, consumptive spaces were inevitably infected places in need of sanitization. The process of fumigating and cleaning an infected house was more an effort of reassurance for concerned communities rather than a true solution to germ eradication. Nurse Ellen LaMotte, in *The Tuberculosis Nurse: Her Function and Qualifications* (1915), called into question the actual value of fumigating an infected house:

> "Under the best conditions, its efficacy is not a hundred per cent. – far from it – while under unfavourable conditions, when poorly done, its efficacy is so low as to be almost nil. The house whose cracks have been improperly stopped, and the old house, with open chimneys, loose windows, and apertures which cannot be closed, are not made safe by this process. Under such conditions, fumigation not only fails to remove the danger, but it produces a false sense of security…We ought to stop teaching that fumigation along will clear up these infected housed and make them safe for future habitation. The public has been misled as to the value of this measure, and allowed to place far more reliance upon it than has been justified by experience.[3]

LaMotte recommended vigorous house-cleaning and the burning of infected articles in lieu of fumigation.[4]

This dissertation has explored how the stigma of tuberculosis affected the construction, adaptive reuse, and razing of anti-tuberculosis architecture. Grounded in

---

[2] Lawrence F. Flick, *Consumption, a Curable and Preventable Disease: What a Laymen Should Know About It* (Philadelphia, PA: David McKay, 1903).

[3] Ellen LaMotte, *The Tuberculosis Nurse: Her Function and Qualifications. A Handbook for Practical Workers in the Tuberculosis Campaign* (New York: The Knickerbocker Press, 1915), 172 – 173.

[4] Ibid.

architectural history and public history, this study examined different types of TB architecture. Tuberculosis lends itself well to a material culture approach since public health officials linked both the disease's origins and prevention to the built environment. The tubercular era, spanning from the end of the nineteenth century through the mid-twentieth century, witnessed a shift in medical beliefs from miasmas to germs and ideas in how to contain disease. Many TB boardinghouses and sanatoria were razed from the landscape to make way for new construction free from the stigma of tuberculosis. Other spaces were adaptively reused. The open-air movement adopted elements from the sanatorium movement, such as sleeping porches and solaria, and repurposed them for mass consumption as health-inducing spaces. The histories of TB-related architectural sites, such as Julia Wolfe's Old Kentucky Home and the Julius Marks Sanatorium, reveal a complicated past in which medical knowledge informed and shaped physical space. Contextualizing the signification of the tubercular era involves more than presenting a single narrative of medical progress over a disease. The Anti-Tuberculosis Movement sought to educate the public on matters of personal hygiene and disease prevention; yet, it also framed tuberculosis in such a way that victimized certain groups already susceptible to discrimination. In addition to the physical construction of TB sanatoria institutions, this campaign produced a wealth of material goods that allowed good health to be purchased.

Advocating for the preservation of TB architecture means confronting a contested past that many might otherwise chose to be forgotten. Constructed to isolate the sick from the healthy, TB sanatoria were both places of healing and suffering. Even the more ubiquitous sleeping porch was originally designed as a sickroom and strategically located

away from the streetside for privacy. Housing a consumptive, albeit a family member or a boarder, carried a stigma so consumptive spaces were largely supposed to be hidden from public view. The intermingling of the sick and the healthy of course happened in communities and belied strict public health ordinances aimed at segregating the consumptives. No matter the amount of fumigation and cleaning, contaminated spaces and sanitized spaces were ultimately the same physical entities. A reflection of changing ideas about dirt and disease, the dichotomy of unhealthy-healthy spaces served to reassure the public that tuberculosis could be wiped clean. It also positioned public health officials and local health departments as authorities and places of power and influence.

Decades after the tubercular era, the historical study of tuberculosis may seem antiquated. The truth is that tuberculosis has never been fully eradicated and drug-resistant tuberculosis rates continue to soar worldwide. While the discovery of effective drug therapy once spelled the end for American sanatoria, there may one day be a renaissance for these types of institutions. Knowledge of the American tubercular era can well serve both medical historians and professionals in the twentieth-first century.

BIBLIOGRAPHY

Abel, Emily K. *Tuberculosis and the Politics of Exclusion: A History of Public Health and Migration to Los Angeles*. New Brunswick, NJ: Rutgers University Press, 2007.

Abrams, Jeanne E. "'Spitting Is Dangerous, Indecent, and against the Law!' Legislating Health Behavior during the American Tuberculosis Crusade," *Journal of the History of Medicine and Allied Sciences* 68, no. 3 (2012): 419 – 450.

Adams, Annmarie. *Medicine by Design: The Architect and the Modern Hospital, 1893 – 1943.* Minneapolis, MN: University of Minnesota Press, 2008.

The Aladdin Company. *Aladdin "Built In A Day" House Catalog, 1917*. New York: Dover Publications, Inc. 1995.

---. *Aladdin House Catalog*. Bay City, MI: 1916 – 1922.

American Medical Association, "Sanatorium Fire," *JAMA: The Journal of the American Medical Association* 65 (1915).

Angley, Wilson. *Historical Research Report: Thomas Wolfe and the Old Kentucky Home*. Raleigh, NC: State of North Carolina Department of Cultural Resources, 1975.

Asheville Board of Trade. *Asheville, North Carolina: America's Beauty Spot in the Land of the Sky*. Asheville, NC: 1911. Pack Memorial Library Special Collections.

---. *Asheville, North Carolina: The Land of the Sky*. Asheville, NC: 1907. Pack Memorial Library Special Collections.

Asheville City Directory. *Ancestry.com.* 1904 – 1915 editions.

Asheville, Nature's Sanitarium. Asheville, NC: 1899. Pack Memorial Library Special Collections.

Asheville, NC: Tuberculosis Control of Regulation of Sanatoria (Reg. Joint Board of Health, Feb. 7, 1913), *Public Health Reports (1896 – 1970)* 29, no. 3 (Jan. 16, 1914): 153 – 155.

Baldwin, Peter C. "How Night Air Became Good Air, 1776 – 1930." *Environmental History* 8, no. 3 (July 2003): 412 – 429.

Bates, Barbara. *Bargaining for Life: A Social History of Tuberculosis, 1876*-1938. Philadelphia, PA: University of Pennsylvania Press, 1992.

Brand, Stewart. *How Buildings Learn: What Happens after They're Built*. New York: Penguin Books, 1994.

Butler, Patrick H., III. "Past, Present, and Future: The Place of the House Museum in the Museum Community." In *Interpreting Historic House Museums*, edited by Jessica Foy Donnelly, 18 – 42. Walnut Creek, CA: AltaMira Press, 2002.

Caldwell, Mark. *The Last Crusade: The War on Consumption, 1862-1954*. New York: Atheneum, 1988.

Campbell, Margaret. "From Cure Chair to 'Chaise Lounge': Medical Treatment and the Form of the Modern Recliner." *Journal of Design History* 12, no. 4 (1999): 327 – 343.

---. "What Tuberculosis did for Modernism: The Influence of a Curative Environment on Modernist Design and Architecture." *Medical History* 49, no.4 (2005): 463 – 488.

Carter, Thomas and Elizabeth Collins Cromley. *Invitation to Vernacular Architecture: A Guide to the Study of Ordinary Buildings and Landscapes*. Knoxville, TN: University of Tennessee Press, 2005.

Claytor, Ernest. "Hospital Will Serve 22 West Counties." *Madisonville Messenger* (Madisonville, KY). September 27, 1950.

Comstock, William Phillips. *Bungalows, Camps, and Mountain Houses*. New York: Comstock, 1915.

Connolly, Cynthia A. *Saving Sickly Children: The Tuberculosis Preventorium in American Life, 1909-1970*. New Brunswick, NJ: Rutgers University Press, 2008.

Connor, Jennifer J. "Prescribed Reading: Patients' Libraries in North American Tuberculosis Institutions." *Libraries and Culture* 27, no. 3 (Summer 1992): 252 – 278.

Cromley, Elizabeth Collins. "A History of American Beds and Bedrooms." *Perspectives in Vernacular Architecture* 4 (1991): 177 – 186.

Daniel, Thomas M. *Captain of Death: The Story of Tuberculosis*. Rochester, NY: University of Rochester Press, 1997.

D'Enville, C.M. "Sleeping Outdoors for Health: Outdoor Sleeping for the Well Man." *Country Life in America* 16 (May 1909): 43 – 46.

"The 'Elbermar.'" *New Outlook*. Outlook Publishing Company, Inc., 1894.

Feldberg, Georgina D. *Disease and Class: Tuberculosis and the Shaping of Modern North American Society*. New Brunswick, NJ: Rutgers University Press, 1995.

Fiegel, Jayne and Carrie Naas. *Julius Marks Sanatorium, Kentucky Historical Resources Inventory Survey*. Lexington, KY: 2007.

First Biennial Report of the Kentucky Tuberculosis Commission. Frankfort, KY: January 1914.

Flick, Lawrence F. *Consumption, a Curable and Preventable Disease: What a Layman Should Know about It*, 6th Edition. Philadelphia, PA: Peter Reilly Publisher, 1903.

Foster, A.D. "Interstate Migration of Tuberculous Persons: Its Bearing on the Public Health, with Special References to the States of North and South Carolina." *Public Health Reports (1896 – 1970)* 30, no. 11 (Mar. 12, 1915): 745 – 774.

Frazer, Thomas. "The Financial Aspect of the Sick Leaving Home in Search of a Beneficial Climate." *Public Health Reports (1896 – 1970)* 29, no. 38 (Sep. 18, 1914): 2433 – 2436.

Frazier, Kevan D. "Outsiders in the Land of the Sky: City Planning and the Transformation of Asheville, North Carolina, 1921 – 1929." *Journal of Appalachian Studies* 4, no. 2 (Fall 1998): 299 – 316.

French, Roy L. *Home Care of Consumptives*. New York: The Knickerbocker Press, 1916.

Freund, Daniel. *American Sunshine: Diseases of Darkness and the Quest for Natural Light*. Chicago: University of Chicago Press, 2012.

Gassan, Richard H. *The Birth of American Tourism: New York, the Hudson Valley, and American Culture, 1790-1830.* Amherst: University of Massachusetts Press, 2008.

Gillig, J. T., F. J. Hartstern, and J. F Wilson. *Specifications for Nurses' Residence, Staff Residence, Director's Residence, Boiler House, Laundry and Shop for the State Tuberculosis Hospital Sanatoria.* Commonwealth of Kentucky, Department of Finance, Frankfort, KY. 1946.

Graham, Johan. *Ashland Tuberculosis Hospital*. *Kentucky Historic Resources Abbreviated Survey Form*. Frankfort, KY: Kentucky Heritage Council, 2007.

---. *Ashland Tuberculosis Hospital. National Register of Historic Places Registration Form*. Frankfort, KY: Kentucky Heritage Council, 2007.

Hailey, Charlie. "From Sleeping Porch to Sleeping Machine: Inverting Traditions of Fresh Air in North America," *Traditional Dwellings and Settlements Review* 20, no. 2 (Spring 2009): 27 – 44.

Hansley, Richard. *Asheville's Historic Architecture*. Charleston, SC: The History Press, 2011.

Hartstern, Fred J. *Report on Sites for the Tuberculosis Sanatoria Commission of Kentucky*. January 1945.

Highlands Community Fund. *Grant History, Fall 1997 – Fall 2014.* Highlands, NC: March 2015.

Highlands Historical Society Newsletter. Highlands, NC: Spring 2008.

Homes and Interiors of the 1920s, a Restoration Design Guide. Originally published as *Building with Assurance, 2nd ed*. Chicago, IL: Morgan, 1921.

"The House 1880s – 1950s," *Thomas Wolfe Memorial*, http://wolfememorial.com/history/the-house-1880s-1950s/.

Hunter, William M. *Paris Tuberculosis Sanatorium. Kentucky Individual Buildings Survey Form*. 2011.

"Improved House Construction." *Journal of the Outdoor Life* 7, no. 2 (January 1910): 396.

Julius Marks Sanatorium. *Sanborn Fire Insurance Map*. Fayette County, KY, 1920 – 1950.

Julius Marks Sanatorium Records Collection. University of Kentucky Special Collection. Lexington, KY.

Kerr, Bettie L. *Julius Marks Sanatorium, Kentucky Historic Resources Inventory Survey*. Lexington, KY, 1983.

Kidner, T.B. "Notes on Tuberculosis Sanatorium Planning." *Public Health Reports* (1896-1970) 36, no. 24 (June 17, 1921): 1371 – 1395.

Krill, Rosemary Troy. *Early American Decorative Arts, 1620 – 1860: A Handbook for Interpreters, Revised and Enhanced*. Lanham, MD: AltaMira Press, 2010.

LaMotte, Ellen. *The Tuberculosis Nurse: Her Function and Qualifications. A Handbook for Practical Workers in the Tuberculosis Campaign*. New York: The Knickerbocker Press, 1915.

"The Land of the Sky." *The Daily Picayune*. May 23, 1882.

Lewis Manufacturing Company. *Lewis Homes, Homes of Character*. 1922.

MacWhinnie, A. Morgan. "Cold Baths and Sleeping Porches." *New York Medical Journal* (April 18, 1914): 139 – 141.

Mahood, C.S. "Tuberculosis and Its Control." *The Public Health Journal* 5, no. 7 (July 1914): 439 – 443.

Myers, J. Arthur. *Tuberculosis: A Half Century of Study and Conquest*. St. Louis, MO: Warren H. Green, Inc., 1970.

Nash, Linda. *Inescapable Ecologies: A History of Environment, Disease, and Knowledge*. Berkeley: University of California Press, 2006.

National Association for the Study and Prevention of Tuberculosis. *The Campaign against Tuberculosis in the United States*. New York: Charities Publication Committee, 1908.

---. *Directory of Sanatoria, Hospitals and Day Camps for the Treatment of Tuberculosis in the United States*. 1905.

---. *Sleeping and Sitting in the Open Air*. 1917.

---. *Some Plans and Suggestions for Housing Consumptives*. 1909.

---. *A Tuberculosis Directory: Containing a List of Institutions, Associations and Other Agencies Dealing with Tuberculosis in the United States and Canada*. 1911.

---. *A Tuberculosis Directory: Containing a List of Institutions, Associations and Other Agencies Dealing with Tuberculosis in the United States and Canada*. 1916.

"Notes on Tuberculosis Sanatorium Planning." *Public Health Reports (1896-1970)* 36, no. 24 (June 17, 1921): 1371.

Nutting, M. Adelaide. "The Tuberculosis Exposition, Baltimore." *The American Journal of Nursing* 4, no. 7 (April 1904): 497 – 499.

Ott, Katherine. *Fevered Lives: Tuberculosis in American Culture Since 1870*. Cambridge, Mass.: Harvard University Press, 1996.

Palmer, Andrew H. "Climatic Influences on American Architecture." *The Scientific Monthly* 5, no. 3 (September 1917): 270 – 283.

Palmer, F.E. *Milady's House Plants: The Complete Instructor and Guide to Success with Flowers and Plants in the Home, including a Remarkable Chapter on the Ideal Sun Parlor*. New York: A.T. Delamare Company, Inc., 1917.

Paterson, Robert G. "The Evolution of Official Tuberculosis Control in the United States." *Public Health Reports (1896 – 1980)* 62, no. 10, Tuberculosis Control Issue No. 13 (Mar. 7, 1947): 336 – 341.

Patterson, Andrea. "Germs and Jim Crow: The Impact of Microbiology on Public Health Policies in Progressive Era American South." *Journal of the History of Biology* 42, no. 3 (Fall 2009): 529 – 559.

Polk's Medical Register and Directory of North America. Detriot, MI: R.L. Polk & Company, 1912.

Pustz, Jennifer. *Voices from the Back Stairs: Interpreting Servants' Lives at Historic House Museums*. DeKalb, IL: Northern Illinois University Press, 2010.

Riley, Phil M. "The Sleeping Porch Problem: A Modern Necessity and an Architectural Bugaboo – How a Number of Leading Architects have Conquered the Difficulty." *House Beautiful* (February 1917).

Roberts, Samuel Kelton, Jr. *Infectious Fear: Politics, Disease, and the Health Effects of Segregation*. Chapel Hill: University of North Carolina Press, 2009.

Rodgers, Naomi. *Dirt and Disease: Polio before FDR*. New Brunswick, NJ: Rutgers University Press, 1992.

Rosenberg, Charles E. and Janet Golden. *Framing Disease: Studies in Cultural History*. New Brunswick: Rutgers University Press, 1992.

Rothman, Sheila M. *Living in the Shadow of Death: Tuberculosis and the Social Experience of Illness in American History*. New York: Basic Books, 1994.

Sanborn Fire Insurance Company. *Sanborn Fire Insurance Maps.* Asheville, NC: 1891 – 1921.

Sanitary Advice for Keepers of Summer Resorts. 1912.

Saxton, Glenn L. *The Plan Book of American Dwellings: Moderately Priced Bungalows, Cottages, Residences*. Minneapolis, MN: Glenn L. Saxton, 1914.

Schlereth, Thomas J. *Victorian America, Transformations in Everyday Life, 1876-1915.* New York: HarperCollins Publishers, 1991.

Schulman, Sol. "Thousands Doomed to Die Get Reprieve From the State." *The Courier-Journal* (Louisville, KY). August 13, 1944.

Smith, Henry Atterbury. *500 Small Houses of the Twenties*. New York: Dover Publications, Inc., 1990.

"Southern Health Resorts." *Worcester Daily Spy*. December 24, 1893.

Speir, Robert F., M.D. *Going South for the Winter*. New York: Edward O. Jenkins, 1870.

Starnes, Richard D. "'A Conspicuous Example of What Is Termed the New South': Tourism and Urban Development in Asheville, North Carolina, 1880-1925." *The North Carolina Historical Review* 80, no. 1 (2003): 52-80.

Stevenson, Katherine Cole and H. Ward Jandl. *Houses By Mail: A Guide to Houses from Sears, Roebuck and Company*. Washington, DC: The Preservation Press, 1986.

Stout, Jenna. *Kentucky Tuberculosis Hospitals*. National Register of Historic Places Multiple Property Submission Form. Frankfort, KY: Kentucky Heritage Council, 2016.

Thomas, C.C. *With Their Dying Breaths: A History of Waverly Hills Tuberculosis Sanatorium.* CreateSpace Independent Publishing Platform, 2012.

Tomes, Nancy. *The Gospel of Germs: Men, Women, and the Microbe in American Life.* Cambridge, MA: Harvard University Press, 1998.

Tour Information. Thomas Wolfe Memorial. Asheville, NC.

"Tuberculosis Hospital Dedication Section." *The Glasgow Times* (Glasgow, KY). Thursday, August 24, 1950.

Tuberculosis Sanatoria Commission Annual Reports. 1950 – 1970. Kentucky Sanatoria Commission Records Collection. Kentucky Department of Libraries and Archives. Frankfort, KY.

"Twenty-fifth Annual Report of the Executive Committee of the Hartford Hospital Training School for Nurses for the year ending September 20, 1902." *Public Documents of the State of Connecticut, Volume 3, Part 2, Connecticut Order of the General Assembly*, 1903.

Visser, Thomas Durant. *Porches of North America.* Hanover, NH: University Press of New England, 2012.

Von Ruck, K. "Winyah House, Asheville, N.C.," *New York Herald-Tribune*. November 13, 1888.

West, Carroll Van. *Tennessee's New Deal Landscape, A Guidebook.* Knoxville, TN: University of Tennessee Press, 2001.

West, Patricia. *Domesticating History: The Political Origins of America's House Museums.* Washington, DC: Smithsonian Institution Press, 1999.

Wolfe, Thomas. *Look Homeward, Angel: A Story of the Buried Life*. New York: Random House, 1929.